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Navigating Siemens' Landscape: A Comprehensive Equity Analysis

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Abstract

This report provides a thorough analysis and a price target on Siemens AG's stock, a multinational conglomerate headquartered in Germany. The report starts by covering the different segments in which Siemens operates, linking them to macroeconomic variables for financial forecasting purposes. The report then covers different sum-of-the parts valuation methods—APV and multiples—and also tests the sensitivity of the yielded implied share prices with respect to different variables and scenarios. The price target is estimated at €234, yielding an expected return of 41%, thereby rendering a BUY recommendation

Keywords:

Siemens AG; Industrial: Equity research; Valuation

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This report is part of the *Navigating Siemens' Landscape* report (annexed), developed by Francisco Fortes and João Alves, and should be read has an integral part of it.

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Introduction

The purpose of the joint report is to provide a holistic view over Siemens AG and everything that surrounds it – ranging from the macroeconomic environment Siemens-specific operational and financial – in order to allow us to estimate the fair value of Siemens AG stock twelve months from this report publishing date, and issue a BUY, SELL, or HOLD recommendation accordingly. In addition, it provides investors with all the relevant information and different scenarios so that investors can form their own opinion on Siemens AG's stock valuation based on their perspective of the company, the sector, and the market in general.

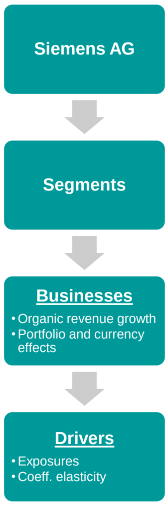
The joint report is divided into two major parts. A first part, covered by my pair more descriptive and informative; which sets the current macroeconomic landscape and future outlook and how it is impacting and may impact Siemens' operating segments in the future.

A second part, more analytical, covered by myself. Firstly, using the information from the first part to define drivers for Siemens' different segments and businesses, both financial and non-financial. Then, by making a link between these drivers and the company's financial figures, based on which Siemens' future financial statements are forecasted. These figures then feed into our baseline valuation framework and serve as the basis for our recommendation. Different scenarios and other valuation methods are also formulated to stress-test baseline assumptions and provide investors additional insights to make a more informed investment decision.

Business Drivers & Financial Forecasts

To allow for a refined and granular forecasting process—and thereby a more accurate valuation of Siemens AG stock—the company's historical consolidated financial statements were broken down and allocated across its various segments.[1] These segments comprise (i) Siemens AG's Industrial Business (Digital Industries, Smart Infrastructure, Mobility, and Siemens Healthineers); (ii) its financial subsidiary (Siemens Financial Services); (iii) a self-defined segment named Portfolio Companies, Corporate Center & Eliminations (which encompasses Siemens' portfolio companies, its corporate center, and eliminations of intersegment transactions); (iv) its non-core business; and (v) its financing activites (equity, debt, and debt-like items).

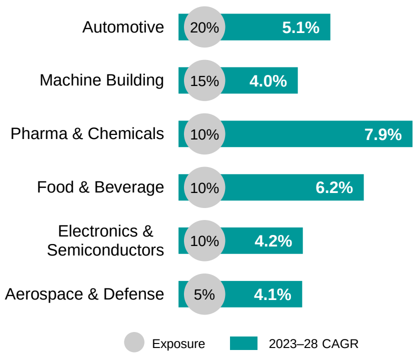
Exhibit 1. Industrial segments revenue estimation process



Source: Analyst estimates

For revenue-forecasting purposes of Industrial Business segments, historical revenue growth rates for each segment's businesses were split into (i) organic revenue growth and (ii) portfolio and currency effects,[2] based on Siemens-reported information and own estimates. To forecast future organic revenue growth, different drivers were selected for each business, tailored to their specific characteristics and trends. For each driver, a specific exposure was estimated (either disclosed by Siemens or self-estimated), with each business drivers' exposures totalling 100%; additionally, an elasticity coefficient of the business's organic revenue growth relative to the driver's growth was also estimated, based on historical analysis, to assess how each driver translates in economic value for Siemens. Portfolio and currency effects on revenue growth are assumed to be nil from FY2024 onwards.

Exhibit 2. Digital Industries' Relevant Markets



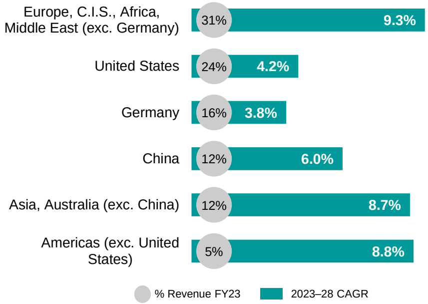
Source: Analyst estimates; Siemens; Statista; GlobalData

Digital Industries

Digital Industries' revenue is expected to closely correlate with the economy, given its significant exposure to industries that are highly sensitive to economic fluctuations. The Automotive market is the most important for Digital Industries, accounting for 20% of its revenue exposure. Following a 12.4% downturn in 2020 due to the pandemic, the global automotive manufacturing market rebounded with a 2020–23 CAGR of 7.9% as supply chain conditions normalized, and is forecasted to grow at a 2023–27 CAGR of 5.3% (GlobalData Sector Reports 2023). It is followed by the Machine Building market, which was negatively impacted in the past two years due to less favourable investment conditions caused by rising

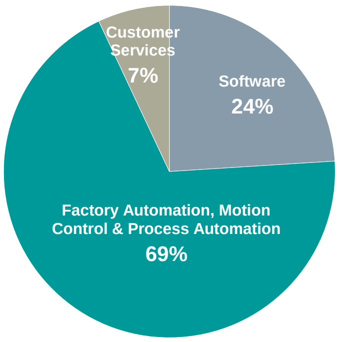
[1] Based on Siemens-disclosed information (parent, subsidiaries, and associates), or on specific drivers believed to be the most appropriate for the line items in question where no information is disclosed. The management report and notes to the accounts were also parsed to identify and adjust for any one-off gains or losses included in the segments' Siemens-reported profit.
[2] Also accounting for effects of rapid COVID-19 antigen tests on Siemens Healthineers' Diagnostics business.

Exhibit 3. Siemens Relevant Geographies Nominal GDP Growth



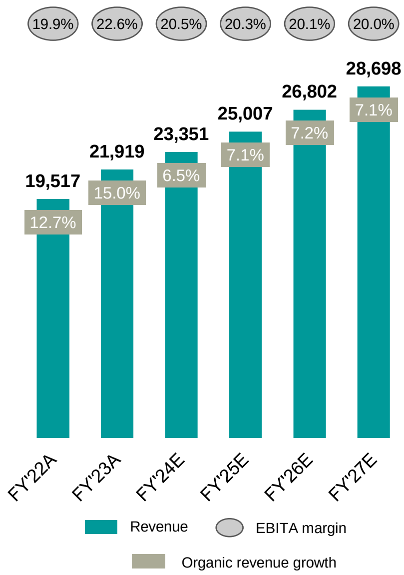
Source: Analyst estimates; IMF; Siemens

Exhibit 4. Digital Industries' FY2022 Revenue Breakdown by Business



Source: Siemens

Exhibit 5. Digital Industries' Revenue and EBITA margin *(in EUR millions)*



Source: Analyst estimates; Siemens

interest rates. The global machinery market is projected to grow at a 2023–26 CAGR of 4.4% (GlobalData Market Analyzer 2023) as the interest rate environment and investment conditions are expected to stabilize. Other relevant markets for Digital Industries—including Pharma & Chemicals, Food & Beverage, and Electronics & Semiconductors—and their respective growth perspectives are displayed in Exhibit 2.

Collectively, these industries account for 70% of Digital Industries' revenue exposure, as reported by Siemens. The remaining 30% are assumed to move in line with the growth of the economy (measured by real GDP growth and inflation) in Siemens' relevant geographies. After the disruptions caused by the pandemic and the war in Ukraine, real GDP growth in the coming years is expected to stabilize slightly below 2% in the United States and Europe, while in China it is projected at around 4%. Inflation is expected to slow down in all regions—in developed economies towards the 2% central banks' target, and in developing economies ranging from 4% in Asia-Pacific to 10% in Africa (IMF 2023).

The Factory Automation, Motion Control & Process Automation businesses—which accounted for 69% of Digital Industries' revenue in FY2022—are projected to move in line with the aforementioned industry and economy dynamics. These businesses' revenue is forecasted to grow at a FY2023-28 CAGR of 7.4%.

The Software business started transitioning towards a Software as a Service (SaaS) model within its Portfolio Lifecycle Management (PLM) offerings in FY2022, marking a significant shift from upfront revenue recognition to more predictable and recurring revenue streams. Despite its forward-looking benefits, the transition is tempering short-term revenue growth. The Software business's organic revenue FY2021–23 CAGR was 4.9%, below that of the combined Digital Industries businesses over the same period, which was 13.8%. Siemens has not specified a timeline for the completion of the SaaS transition; however, drawing parallels from other major corporations' SaaS transitions, such as Adobe's four-and-a-half-year transition period,[3] Siemens' SaaS transition is projected to be complete by FY2026-end. Consequently, Software revenue growth is forecasted to trail behind that of Factory Automation, Motion Control & Process Automation businesses until FY2026. Post-transition, Software business revenue growth is expected to align with that of other Digital Industries' businesses.

Customer Services' revenue has historically represented approximately 7.5–8% of the combined revenue from Factory Automation, Motion Control & Process Automation and Software businesses. This ratio is expected to remain steady at 7.6% from FY2024 onwards.

[3] https://www.launchnotes.com/blog/how-they-launched-it-adobes-cloud-transformation

In total, Digital Industries' combined revenue is forecasted to grow at a FY2023–28 CAGR of 6.9%.

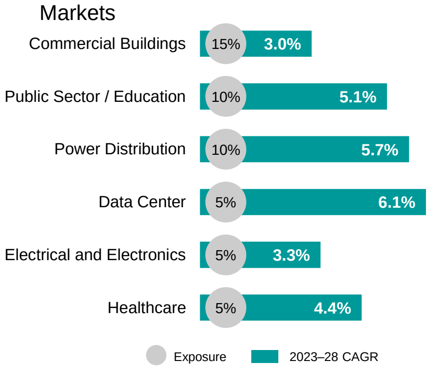
Digital Industries' EBITA margin has improved in the past three years, attributed to a decrease in cost of sales and SG&A expenses as a percentage of revenue. On the other hand, R&D expenses have remained stable at approximately 13% of revenue. Digital Industries' EBITA margin is hence forecasted at 20–20.5%, aligning with FY2021–22 levels.

Capital expenditures have been at 1.6–2.0% of revenue in the past three years, and are forecasted within this range going forward.

Smart Infrastructure

Similarly to Digital Industries, Smart Infrastructure's revenue is anticipated to be impacted by the growth dynamics of the various industries it serves. The Commercial Buildings market—the most significant for Smart Infrastructure, accounting for 15% of its revenue exposure—is forecasted to grow at a 2023–28 CAGR of 3.0% (Statista Market Insights 2023). It is followed by Public Sector / Education, projected to grow at a 2023–26 CAGR of 6.3% (GlobalData Market Analyzer 2023), and Power Distribution, forecasted to grow at a 2023–30 CAGR of 5.9% (Statista 2022). Other relevant markets for Smart Infrastructure—including Data Center, Electrical and Electronics, and Healthcare—and their respective growth perspectives are displayed in Exhibit X.

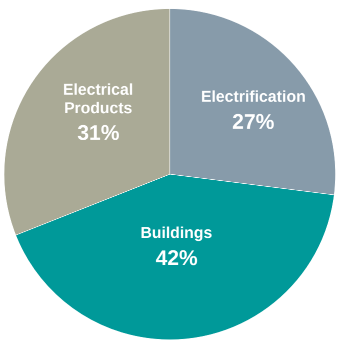
Exhibit 6. Smart Infrastructure's Relevant Markets



Source: Analyst estimates; Siemens; Statista; GlobalData

In aggregate, the above-outlined industries represent 50% of Smart Infrastructure's revenue exposure, as per Siemens' disclosure. The remaining 50% are assumed to be driven by metrics specific to Smart Infrastructure's distinct businesses—Buildings, Electrical Products, and Electrification. In FY2022, these industries accounted for 42%, 31%, and 27% of Smart Infrastructure revenue, respectively.

Exhibit 7. Smart Infrastructure's FY2022 Revenue Breakdown by Business

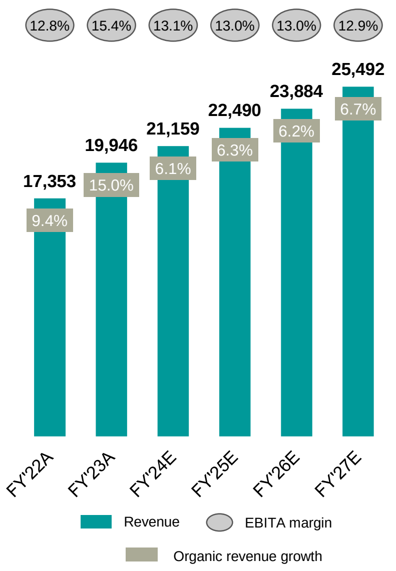


Source: Siemens

The Buildings business selected driver is growth in global urban population, as demographic changes—and urbanization in particular—are driving demand for smarter, more human-centric, and sustainable buildings. The world population is expected to increase by 14.4% until 2040 (United Nations 2022), while the global urban population is projected to rise by 28.3% over the same period—raising the urbanization rate from 56.9% in 2022 to 64.5% in 2040 (United Nations 2019). This urbanization surge presents Siemens with opportunities to address emerging infrastructure needs in building development, with the Buildings business revenue forecasted to grow at a FY2023–28 CAGR of 5.8%.

Growth in value added in the global Electrical Products market is the chosen driver for Electrical Products. After a 15.4% decline in 2020 due to the pandemic, value added in the global Electrical Products market rebounded with a 2020-23 CAGR

Exhibit 8. Smart Infrastructure's Revenue and EBITA margin *(in EUR millions)*



Source: Analyst estimates; Siemens

of 5.7% and is expected to grow at a 2023–28 CAGR of 2.4% amid increasing global demand and automation and digitalization investments (Statista Market Insights 2023). The revenue for Siemens' Electrical Products business is projected to grow at a FY2023–28 CAGR of 6.2%.

For the Electrification business, the selected driver is the growth in global renewable electricity generation, grounded on the fact that the energy transition from fossil fuels to renewables and the rising demand for energy efficiency are leading to accelerated electrification. Global renewable electricity generation saw a 2018–23 CAGR of 7.1% and is projected to grow at a 2023–27 CAGR of 7.3%, with renewables set to overtake coal as the primary energy source for global electricity generation by 2025 and account for nearly 40% of global electricity output by 2027. In contrast, the shares of all other energy sources—namely coal, natural gas, nuclear, and oil—are expected to decline over the same period (International Energy Agency 2022). Siemens is well-positioned to benefit from this trend, as the accelerating renewable energy integration is likely to drive growth in areas such as electric transportation and digitalization, thereby increasing electricity demand. The Electrification business revenue is forecasted to grow at a FY2023–28 CAGR of 7.2%.

Overall, the revenue from Smart Infrastructure's combined businesses is forecasted to grow at a FY2023–28 CAGR of 63%.

Similarly to Digital Industries, Smart Infrastructure's EBITA margin has shown an upward trend—with a significant increase to 15.4% in FY2023—driven by decreasing cost of sales and SG&A expenses as a percentage of revenue, while R&D expenses have remained stable at approximately 4% of revenue. Smart Infrastructure's EBITA margin is therefore estimated at approximately 13%, in line with FY2022.

Capital expenditures have been at 1.2–1.4% of revenue in the past four years, and are expected to maintain this level in the future.

Mobility

Siemens Mobility's revenue is projected to move in line with global demand trends in train travel and transport, spanning both passenger train travel and freight train transport. This demand serves as a crucial driver for infrastructure investment, providing Siemens with ample opportunities to capitalize on market developments.

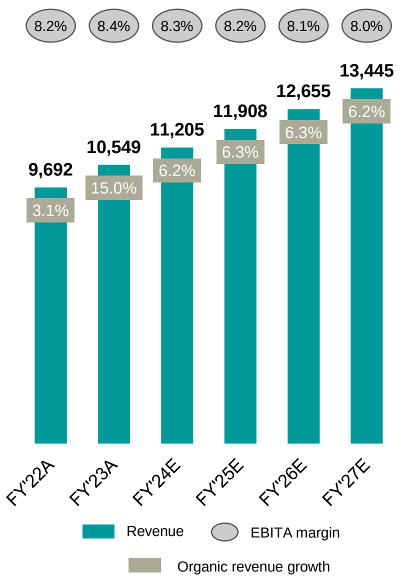
Demand forecasts are expressed in passenger-kilometres and tonne-kilometres for passenger travel and freight transport, respectively. To estimate Mobility's exposure to passenger travel versus freight transport, an analysis is made to compare the economic value of one passenger-kilometre to that of one tonne-kilometre, respectively. The EU-28 average infrastructure costs in 2016 for electric

Exhibit 9. Mobility's Revenue Exposure

		Passenger (pkm)	Freight (tkm)
Average infrastructure costs	Electric	145	30
	Diesel	270	32
% Rail transport activity	Electric	85%	55%
	Diesel	15%	45%
Economic value split 1 pkm vs. 1 tkm		84%	16%
Train demand split pkm vs. tkm		~ 33%	~ 67%
Siemens Mobility revenue exposure 1 pkm vs. tkm		~ 73%	~ 27%

Source: European Commission; International Transport Forum

Exhibit 10. Mobility's Revenue and EBITA margin *(in EUR millions)*



Source: Analyst estimates; Siemens

and diesel passenger trains were €145 and €270 per 1,000 passenger-kilometres, respectively, whereas the costs for electric and diesel freight trains were €30 and €32 per 1,000 passenger-kilometres, respectively (European Commission 2019).[4] Additionally, the share of rail transport activity on electric trains is estimated at 85% for passenger and 55% for freight trains, with the remaining activity occurring on diesel trains (International Energy Agency 2023). The combination of these factors yields an 84–16 split for the economic value of a passenger-kilometre versus that of a tonne-kilometre, respectively. This split, weighed by the projected demand from OECD's International Transport Forum, suggests an average revenue exposure for Mobility of 74% to passenger train travel and 26% to freight train transport.

Global passenger train travel demand—encompassing urban, regional, and international and intercity travels—is anticipated to grow at a 2022–30 CAGR of 4.8% and to increase by 145% until 2050, fueled by international and intercity travels, with their share of the total passenger train travel demand expected to rise from 21% in 2022 to 44% in 2050, largely at the expense of regional travels (International Transport Forum 2023). Similarly, global freight train transport demand, comprising both domestic and international transports, is projected to grow at a 2022–30 CAGR of 2.5% and to increase by 150% until 2050 (International Transport Forum 2023).

For Mobility revenue-estimation purposes, a time-lag is considered between infrastructure investment decisions—primarily from public and state-owned companies, which are Siemens Mobility's main customers—and the projected future demand for passenger train travel and freight train transport. Based on this methodology and on the train demand outlook, Siemens' Rolling Stock and Rail Infrastructure businesses are estimated to grow at FY2023–28 CAGRs of 5.7% and 7.1%, respectively. Customer Services' revenue has historically represented approximately 18–20% of the combined revenue from Rolling Stock and Rail Infrastructure businesses; this ratio is expected to remain steady at 18.8% from FY2024 onwards. In the aggregate, Mobility's revenue is forecasted to grow at a FY2023–28 CAGR of 6.2%.

Contrasting with Digital Industries and Smart Infrastructure, Mobility's EBITA margin has been on a downward trend over the last five years, due to an increase in cost of sales and SG&A expenses as a percentage of revenue. R&D expenses have been marginally declining as a percentage of revenue, however its impact is minor at around 4% of revenue. The EBITA margin is thus projected to be slightly above 8%, in line with the past two years.

[4] 2016 price level, PPS adjusted

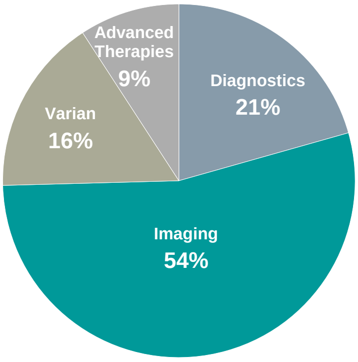
Capital expenditures have been at 1.8–2.0% of revenue in the past four years, and are estimated within this range for the future.

Siemens Healthineers

Siemens Healthineers' revenue is forecasted to move in line with both general healthcare industry trends and specific drivers affecting its various businesses.

A key trend shaping the healthcare sector, and Siemens Healthineers in particular, is the growing and ageing global population, with its impact being measured through an analysis of the growth in world population aged 65 and above. The share of this age group in total population rose from 8.2% in 2014 to 9.8% in 2022, and is anticipated to reach 11.8% by 2030. While the overall world population is expected to grow 8.8% over the next decade, population aged 65 and above is projected to see a 37.2% increase over the same period (World Bank 2023; United Nations 2022).

Exhibit 11. Siemens Healthineers' FY2023 Revenue Breakdown by Business



Source: Siemens Healthineers

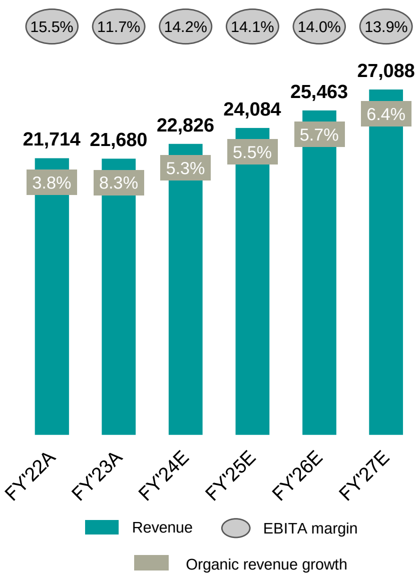
Another important indicator for assessing growth in the healthcare sector is the global GDP share of health expenditure, which rose from 9.4% in 2014 to 9.8% in 2019, surging in 2020 to 10.9% due to Covid-19-related expenditure;[5] as of 2022, it stood at 10.7%. As the impacts of Covid-19 in the economy phase-out, the global GDP share of health expenditure is expected to stabilize, being projected at 10.8% in 2028 (Statista 2023).

Siemens Healthineers' Imaging business is projected to move largely in line with the global Diagnostic Imaging Devices market. After a 7.4% decrease in 2020 due to the Covid-19 pandemic—which led to fewer patients and delayed treatments—the worldwide Diagnostic Imaging Devices market rebounded with a 2020–23 CAGR of 5.1%, and is projected to grow at a 2023–28 CAGR of 4.7% (Statista Market Insights 2023), with Siemens Imaging business revenue projected to grow at a FY2023–28 CAGR of 5.8%.

The Diagnostics business portfolio consists of in-vitro diagnostics, which encompasses both laboratory and point-of-care diagnostics. The latter includes rapid COVID-19 antigen tests, which accounted for approximately 70% of Diagnostics' abnormal revenue growth in FY2021 and FY2022, and for 91% of the revenue decline in FY2023. The global In-Vitro Diagnostics market exhibited a 2016–19 CAGR of 6.8% and is projected to grow at a 2023–28 CAGR of 2.0% (Statista Market Insights 2023).[6] Drawing on this, the Diagnostics business is estimated to grow at a FY2023–28 CAGR of 2.2%.

[5] For historical analysis and subsequent forecasting purposes, years after 2019 have not been considered as they heavily account for Covid-19-related expenditure.
[6] For historical analysis and subsequent forecasting purposes, years post-2019 have not been excluded as they heavily account for Covid-related impacts

Exhibit 12. Siemens Healthineers' Revenue and EBITA margin *(in EUR millions)*



Source: Analyst estimates; Siemens Healthineers

Siemens Healthineers' Varian business is driven by the rising global incidence of cancer, with new cancer cases projected to increase 2.0–2.5% YoY until 2040 (International Agency for Research on Cancer nd). Another driver selected for Varian is the global spending on oncology medicines, which experienced a 2018–23 CAGR of 11.1% and is antecipated to grow at a 2023–27 CAGR of 14.5% (IQVIA 2023). Given these trends, the Varian business is forecasted to grow at a FY2023–28 CAGR of 9.5%.

The Advanced Therapies business's main products are Angiography Systems and Mobile C-Arms, accounting for 80% and 20% of revenue in FY2023, respectively. The global market for Angio Suites and C-Arms is projected to grow at 2023-25 CAGRs of 6.6% and 4.6% (GlobalData Market Analyzer nd), respectively. In light of these factors, Advanced Therapies business is projected to grow at a FY2023–28 CAGR of 4.9%.

Collectively, Siemens Healthineers businesses' revenue is forecasted to grow at a FY2023–28 CAGR of 5.7%.

Siemens Healthineers' EBITA margin, which ranged from 14.9% to 15.8% in FY2020-22, had a substantial decline to 11.7% in FY2023, largely due to lower earnings contributions from rapid COVID-19 antigen tests in the Diagnostics business. As a percentage of revenue, cost of sales has increased successively in the last five years, whereas SG&A and R&D expenses have displayed stable and decreasing patterns, respectively. The EBITA margin is therefore forecasted at approximately 14%.

Capital expenditures have been at 3.7–4.0% of revenue in the past five years, and are expected to maintain this level in the future.

Siemens Financial Services

At the core of Siemens Financial Services (SFS)'s offerings are the financing solutions provided to its Industrial Business customers. As of FY2023-end, receivables from loans and finance leases stand at 30% and 7% of Industrial Business revenue, respectively; these ratios are assumed to remain at these levels going forward. As a financial institution, SFS adheres to certain leverage ratios—namely the debt-to-capital ratio, which has remained stable at 90.1% to 90.5% over the last five years. This ratio is projected at 90.2% for the future, unchanged from its FY2023-end level. Other balance sheet items of lesser significance include other financial assets and liabilities, assumed to remain constant, and net working capital, projected to move in line with the level of business activity.

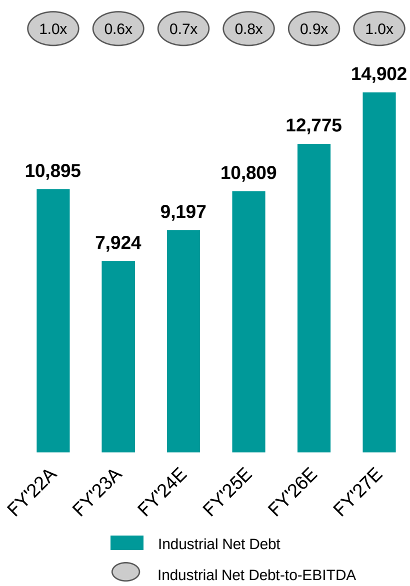
From an income statement standpoint, SFS's most important items are interest income and expenses, given the financial nature of its operations. Our estimated SFS's interest rate spread for the past four years is at 3.2–3.9%. This spread is assumed at 3.5% going forward, in line with our estimate for FY2023. Interest income and expenses are expected to track the balances of loans and finance leases receivables and financial debt, respectively, and correlate with changes in the Euro area annualized policy rate, which was 3.57% in Q3 2023 and is projected to be 2.55% by Q3 2028 (IMF 2023). Revenue and SG&A expenses, forecasted as a percentage of loans and finance leases receivables, have shown a downward trend, with future ratios estimated at 2.0% and 2.8%, respectively.

Portfolio Companies, Corporate Center & Elim.

Portfolio Companies, Corporate Center & Eliminations encompasses Siemens' portfolio companies, centrally carried expenses, and other reconciling items such as eliminations of intersegment transactions. The rationale for defining this segment stems from the lack of information regarding Siemens' portfolio companies and from the pattern observed over the past five years, where, following the allocation of revenues and operating expenses across the segments, the reconciliation of these items to the consolidated financial statements is consistently negative. Hence, this segment is formulated so it can be forecasted and included in Siemens's valuation—as omitting it would lead to an overvaluation of the stock.

The forecasting of this segment's figures does not follow any specific drivers, being estimated based on historical ratios of the corresponding captions in Siemens' operating segments. The impact of this segment on Siemens AG's valuation is detailed in the Valuation section.

Exhibit 13. Siemens AG Financial Leverage *(in EUR millions)*



Source: Analyst estimates; Siemens

Capital Structure

Siemens AG targets its leverage through its defined Industrial Net Debt-to-EBITDA,[7] with the company reporting that it aims to maintain this ratio at a maximum of 1.5x. However, it has remained well below this target historically, except during COVID-impacted FY2020–21, when it reached 1.3x and 1.5x, respectively. As of FY2023, Siemens-defined Industrial Net Debt-to-EBITDA stands at 0.6x and is forecasted to increase by 0.1x annually until FY20xx, stabilizing at 1.2x in perpetuity.

The dividend payout ratio is projected to remain at the FY2023 level—approximately 47%. Share issuances/repurchases act as the model's 'plug' variable, with Siemens forecasted to engage in share repurchases, supported by the estimated increase in leverage.

[7] Industrial Net Debt comprises financial debt not allocated to Siemens Financial Services and other debt-like items. Siemens definition differs from our defined Industrial Net Debt for valuation purposes—as outlined in the Valuation section—as the latter does not include pension provisions, credit guarantees, and operating cash.

Other Items

Regarding taxation, no major changes in governments' tax policies are expected—statutory tax rates are assumed to remain unchanged and other tax effects are estimated based on historical analysis, leading to a projected effective tax rate of 23% for the foreseeable future. Items whose valuation is not cash flow-based are forecasted solely for future consolidated financial statements projection purposes, and do not impact the stock valuation.[8]

Valuation

The Adjusted Present Value (APV) is selected as the primary valuation method for Siemens AG's core business operations, due to the firm's strategy of aligning its financial leverage with its target Industrial Net Debt-to-EBITDA ratio. The fluctuation of debt based on EBITDA, rather than on Enterprise Value, renders APV a more suitable method than the traditional DCF.

All cash flow-based valuations follow the mid-year discounting convention, i.e., each fiscal year's (FY) cash flow is discounted under the assumption that it takes place at the midpoint of the FY rather than at FY-end. This approach mirrors the real-life dispersion of cash flows throughout a FY—contrasting with a single cash flow at FY-end—thereby more accurately reflecting the actual timing of cash flows. Moreover, since the valuation reference date falls within FY2025—and following the assumption of FY2025's cash flow to be evenly spread throughout the FY—the cash flow spanning the start of FY2025 to the reference date is excluded from the valuation, and the expected cash flow from the reference date to FY2025-end is assumed to occur at the midpoint of these dates for discounting purposes.

Siemens AG's core business operations are valued through a sum-of-the-parts (SOTP) intrinsic cash flow-based valuation. Industrial business segments are valued through their respective free cash flows discounted at each segment's specific unlevered cost of equity, while Portfolio Companies, Corporate Center & Eliminations is discounted at a weighted average unlevered cost of equity.[9] Siemens Financial Services, given its financial nature, is valued through the Flow-to-Equity (FTE) method, i.e., equity cash flows discounted at the levered cost of equity. Given Siemens' leverage policy wherein the Industrial Net Debt is not permanent nor predetermined—i.e., it moves in tandem with the level of business activity, as measured by EBITDA—the risk associated with tax shields is assumed equivalent to the risk of the firm's assets. Therefore, non-SFS interest tax shields

[8] Income statement items forecasted either nil, at historical averages, or based on consensus; and balance items forecasted as FY2023-end unchanged book value.
[9] Industrial Business segments' unlevered cost of equity weighted by each segment's estimated FCF-value as of this report's publishing date.

are discounted at the unlevered cost of equity,[7] rather than at the cost of debt. Other assets, liabilities, and claims against the company's Enterprise Value—including investments in other companies, minority interests, and nonoperating provisions—are valued autonomously at each item's appropriate valuation method, detailed later in this section.

Cost of Capital & Core Business Value

Each segment's operating cash flows are discounted at a segment-specific cost of capital, as different segments have different underlying systematic risks. To estimate the cost of capital for each core business segment, a set of comparable publicly traded companies was selected, based on competitors' information provided by Siemens and financial databases such as Bloomberg and Refinitiv. Equity/levered betas for these firms were retrieved and subsequently unlevered—taking into account each company's capital structure—using the Harris–Pringle equation.[10] Subsequently, each Industrial Business segment's unlevered cost of equity was estimated through the Capital Asset Pricing Model (CAPM) equation, taking as inputs (i) a risk-free rate of xx%, corresponding to the yield of Germany 20-year government bonds; a market risk premium of xx% (Fernandez, García, and Acin 2023); and (iii) the unlevered betas estimated for each segment. For Siemens Financial Services, which is valued at Flow-to-Equity, the unlevered beta was relevered using the peer group's median capital structure to estimate the levered cost of equity.

Exhibit 14. Siemens AG Cost of Capital Inputs

Market inputs

		Source:
Risk-free rate	2.27%	Germany 20-Year Government Bond
Market risk premium	5.70%	Fernandez, García, and Acin 2023

Segment inputs

	Unlevered Beta[1]	Unlevered cost of equity	Terminal growth rate
Digital Industries	1.06	8.3%	2.3%
Smart Infrastructure	0.87	7.2%	2.5%
Mobility	0.72	6.4%	2.1%
Siemens Healthineers	0.70	6.2%	3.0%
Siemens Financial Services[2]	1.00	8.0%	2.8%
Portf. Comp., Corp. Center & Elim.	n/a	7.2%	2.5%
Non-SFS Interest Tax Shield	n/a	7.2%	2.5%

[1] Peers' median (based on five-year monthly stock returns)
[2] Relevered beta and unlevered cost of equity; assuming peers' median unlevered beta of 0.19 and market Net Debt-to-Enterprise Value of 85%, and tax rate of 22.4%

The unlevered cash flows of the Industrial Business segments and Portfolio Companies, Corporate Center & Eliminations are then discounted at the respective unlevered cost of equity, while Siemens Financial Services' equity cash flows are discounted at the levered cost of equity.

Exhibit 15. Siemens AG Core Business Valuation Buildup as of 19-Dec-24 *(in EUR millions)*

Digital Industries Value [U]	77,528
Smart Infrastructure Value [U]	56,855
Mobility Value [U]	18,794
Siemens Healthineers Value [U]	80,722
Industrial Business Value [U]	**233,900**
SFS Equity Value	11,590
PC, CC & Elim. Value [U]	(30,189)
Core Business Value [U]	**215,301**

[U] Unlevered

Source: Analyst estimates

To determine the terminal value for the segments, a terminal growth rate was estimated for each segment, ranging from 2% to 3%, in line with long-term GDP growth. Siemens Healthineers is assumed to have the highest long-term growth rate, as it benefits from stable growth in the healthcare industry and persistent advancements in medical technology. It is followed by Smart Infrastructure and Digital Industries with long-term growth rates of 2.5% and 2.3%, respectively. While both segments are clearly expanding, Digital Industries is expected to reach market saturation at an earlier stage. Mobility is mainly driven by public spending and its terminal growth is therefore projected more conservatively at 2%. The remaining segments are driven by the Industrial segments, and hence their

10 Assuming the debt beta equals zero and that the risk of each company's tax shields is equal to that of its assets; slightly modified to account for minority interests in the capital structure, and assuming its beta equals that of equity.

respective terminal growth rates, displayed in Exhibit 14, are an output of the model

Core Business Value-to-Implied Share Price Bridge

Exhibit 16. Siemens AG's At-Equity Investments and Minority Interest Book vs. Market Value *(in EUR millions)*

	Book Value	Market Value	Val. Method
At-equity investments			
Siemens Energy AG	1,779	2,213	**Market Cap**
Other associates	1,235	3,071	**P/E**
Minority interests			
Siemens Healthineers AG	4,341	16,513	**DCF**
Other subsidiaries	929	3,746	**P/E**

Source: Analyst estimates; Bloomberg

Exhibit 17. Siemens Healthineers Proforma Valuation Buildup as of 19-Dec-24 *(in EUR millions exc. shares in millions and share price in EUR)*

		Valuation Method
Core Business Value [L]	82,468	**DCF**[1]
At-equity investments	44	**P/E**
Other Non-Core Assets (Liabilities)	1,912	**Book V.**
Enterprise Value [L]	**84,424**	
Net Debt	(14,821)	**Book V.**
Nonoperating provisions	(172)	**Book V.**
After-tax pension provisions	(393)	**Book V.**
Minority interests	(234)	**P/E**
Equity Value[2]	**68,804**	
(÷) # Diluted shares outstanding	1,124	
Implied Share Price *(in EUR)*	**61.24**	
Share price as of 19-Dec-23	*53.74*	

[L] Levered

[1] Employing the same unlevered cash flows and cost of capital inputs as in Siemens Healthineers segment valuation, assuming a 3.7% cost of debt, a target Net Debt-to-Enterprise Value of 22%, and a tax rate of 23%

[2] Assuming no transactions with shareholders in the next twelve month, and thus Siemens AG stake unchanged

Source: Analyst estimates

Siemens AG's stake in Siemens Energy AG—at-equity accounted in the company's financial statements—is valued by multiplying Siemens Energy's market capitalization of €8,818 million by Siemens AG's ownership interest of 25.1%. Other equity-accounted associates and joint ventures are valued at a 18.0x P/E multiple,[11] applied to Siemens AG's share of profit from these entities in FY2023. Other non-core assets and liabilities—including deferred taxes and non-debt financial assets and liabilities—are added at book value to arrive at Siemens AG's Unlevered Enterprise Value. To this figure, the value of non-SFS interest tax shields is added to arrive at Siemens AG's Levered Enterprise Value of €220,656 million.

The Levered Enterprise Value is then deducted by the various claims against it that have priority over the interests of Siemens AG's shareholders. These claims include the projected book value of Industrial Net Debt as of December 2024, after-tax pension provisions, nonoperating provisions, off-balance sheet contingent liabilities, and minority interests. Minority interests in Siemens Healthineers AG are valued through Discounted Cash Flow,[12] multiplied by the 24% of ownership interests not held by Siemens AG. Other minority interests are valued at a 18.0x P/E multiple,[10] applied to Siemens AG's net income attributable to these minorities in FY2023.

Exhibit 18. Siemens AG Core Business Value-to-Implied Share Price Bridge as of 19-Dec-24 *(in EUR millions exc. shares in millions and share price in EUR)*

Core Business Value [U]	**215,301**
Investment in Siemens Energy AG	2,213
Other at-equity investments	3,071
Other Non-Core Assets (Liabilities)	(702)
Unlevered Enterprise Value	**219,883**
Non-SFS Interest Tax Shield Value	772
Levered Enterprise Value	**220,656**
Industrial Net Debt	(9,390)
Nonoperating provisions	(2,078)
After-tax pension provisions	283
Minorities - Siemens Healthineers AG	(16,513)
Minorities - Other subsidiaries	(3,746)
Contingent liabilities	(6,559)
Equity Value	**182,653**
(÷) # Diluted shares outstanding	750
Implied Share Price	**243.58**

[U] Unlevered

Source: Analyst estimates

Finally, the resultant projected fair Equity Value as of December 2024, estimated at €182,653, is divided by the number of diluted shares anticipated to be outstanding in December 2024 (deducted of projected shares to be repurchased over the next twelve months), thereby yielding an implied share price of €243.58.

Scenario Analysis

The scenario and valuation buildup outlined in the preceding sections constitute our base case. Complementing this are two additional scenarios—an upside case and a downside case—grounded on Siemens' guidance for organic revenue growth and EBITA margins within its Industrial segments for the next five years,[13] with all other assumptions kept constant. Items whose valuation is neither cash flow-based nor cash flow-impacted remain unchanged across the three scenarios. These alternate scenarios are intended to help investors gauge the fair share price

[11] The P/E multiple applied is a weighted average of the Industrial Business segments' P/E multiples, excluding Siemens Healthineers.

[13] For FY2024, as per Siemens' guidance in its FY2023 annual report. For FY2025-28, as per Siemens Financial Framework—Siemens-defined *"targets over 3–5 year cycle"*.

that would be expected should Siemens' guidance range upper or lower bounds materialise, and to provide a critical assessment of the reasonableness of Siemens' guidance. However, it is important to note that these scenarios should be taken with caution, as they are provided by Siemens and thus subject to potential bias, and also because they were introduced in 2021. However, their continued reference in Siemens' annual reports and earnings presentations justifies their inclusion in our analysis.

Exhibit 19. Siemens AG Scenario Analysis' Inputs

	Base case	Siemens Guidance: Upside case	Siemens Guidance: Downside case
Digital Industries			
Org. revenue gr.	6.9%	6.2%	4.0%
EBITA margin	20.2%	23.0%	17.6%
Smart Infrastructure			
Org. revenue gr.	6.3%	6.8%	4.6%
EBITA margin	13.0%	16.2%	11.8%
Mobility			
Org. revenue gr.	6.2%	8.6%	5.6%
EBITA margin	8.1%	12.4%	9.6%
Siemens Healthineers			
Org. revenue gr.	5.7%	7.8%	5.8%
EBITA margin	14.0%	21.0%	17.0%

Organic revenue CAGR FY2023–28
Average EBITA Margin FY2024–28

Source: Analyst estimates; Siemens

In the case of Digital Industries, base case forecasts for organic revenue growth exceed Siemens' guidance upper bound, influenced by the segment's performance over the past three years, which saw growth rates from 13% to 15%. The base case EBITA margin falls at the midpoint of Siemens' guidance.

For Smart Infrastructure, our base case projects organic revenue growth towards the higher end of Siemens' guidance. Similarly to Digital Industries, this is impacted by the above-average growth rates of 8% to 15% observed over the past three years. The base case EBITA margin falls in the lower spectrum of Siemens' guidance.

Exhibit 20. Siemens AG Valuation Buildup by Scenario as of 19-Dec-24 *(in EUR millions exc. shares in millions and share price in EUR)*

	Base case	Siemens Guidance: Upside case	Siemens Guidance: Downside case
Digital Industries Value [U]	77,528	77,011	65,872
Smart Infrastructure Value [U]	56,855	60,194	51,337
Mobility Value [U]	18,794	22,964	18,868
Siemens Healthineers Value [U]	80,722	98,678	83,487
Industrial Business Value [U]	**233,900**	**258,848**	**219,564**
SFS Equity Value	11,590	12,026	10,971
PC, CC & Elim. Value [U]	(30,189)	(31,470)	(29,206)
Core Business Value [U]	**215,301**	**239,404**	**201,329**
Investment in Siemens Energy AG	2,213	2,213	2,213
Other at-equity investments	3,071	3,024	3,029
Other Non-Core Assets (Liabilities)	(702)	(702)	(702)
Unlevered Enterprise Value	**219,883**	**243,939**	**205,869**
Non-SFS Interest Tax Shield Value	772	843	732
Levered Enterprise Value	**220,656**	**244,782**	**206,601**
Industrial Net Debt	(9,390)	(11,883)	(9,631)
Nonoperating provisions	(2,078)	(2,078)	(2,078)
After-tax pension provisions	283	283	283
Minorities - Siemens Healthineers AG	(16,513)	(20,888)	(17,161)
Minorities - Other subsidiaries	(3,746)	(3,716)	(3,721)
Contingent liabilities	(6,559)	(6,559)	(6,559)
Equity Value	**182,653**	**199,941**	**167,734**
(÷) # Diluted shares outstanding	750	732	742
Implied Share Price	**243.58**	**273.26**	**225.97**
	vs. base case	*+12.2%*	*-7.2%*

Source: Analyst estimates; Siemens

Regarding Mobility, base case forecasts for organic revenue growth fall in the lower end of Siemens' guidance, while the base case EBITA margin is below Siemens' guidance lower bound. In our view, Siemens is being overly optimistic regarding its margin, considering its downward trend and a peak EBITA margin of only 9.2% in the past four years.

For Siemens Healthineers, both the projected organic revenue growth and EBITA margin in our base case fall below Siemens' guidance threshold. This stems from our projection of a slowdown in growth for Imaging and Advanced Therapies businesses, coupled with weak growth in Diagnostics. The EBITA margin forecast below Siemens guidance reflects the fact that the highest margin achieved in the past four years was only 15.8%.

Following the FY2023–28 period, the assumptions for organic revenue growth and EBITA margin are the same across the three scenarios, with differences in assumptions during this period yielding a share price of €276.26 in the upside case, 12.2% above our base case, whereas the downside case suggests a share price of €225.97, 7.2% below the base case.

Sensitivity Analysis

Exhibit 21. Siemens AG Stock Price Sensitivity Analysis

Discount rate	Terminal growth rate: -1.0%	-0.5%	Baseline	+0.5%	+1.0%
-2.0%	338	386	461	605	1,110
-1.0%	261	**284**	**315**	**360**	430
Baseline	213	**226**	**244**	**265**	295
+1.0%	180	**189**	**199**	**212**	228
+2.0%	156	162	169	177	187

To complement and stress-test our baseline valuation, we conducted a sensitivity analysis on Siemens' stock price, which shows the sensitivity of Siemens stock price with respect to increments in the terminal growth rate and discount rate (applicable to all segments).

Relative Valuation

Similarly to the approach employed in our baseline valuation framework, Siemens AG's relative valuation also entails a sum-of-the-parts valuation. This methodology is fitting given the heterogeneity of Siemens AG's segments in terms of their operational and financial profiles. Thus, valuing each segment at its specific multiple leads to a more accurate stock valuation than applying a single multiple for the entire company. This relative valuation is based on forward multiples from comparable companies[14]. The selected valuation multiples are Enterprise Value-to-Revenue and Enterprise Value-to-EBITDA.[15] The median of these multiples sets the baseline for our relative valuation, complemented by the 25th and 75th percentile multiples to yield a range of possible share prices based on Siemens AG's peers. It should be noted, however, that the standalone value of each segment and the bottom line are not comparable on a one-to-one basis to those in the baseline valuation framework due to differences in the Enterprise Value calculation formula. For instance, in our relative valuation buildup, minority interests are valued at book value, which can significantly differ from their fair market value—as with Siemens Healthineers AG—potentially leading to material distortions.

Exhibit 22. Siemens AG Relative Valuation Buildup *(in EUR millions exc. shares in millions and share price in EUR)*

Enterprise Value-to-Revenue

	Applicable Siemens AG Figure[1]	Applicable Multiple: Median	Applicable Multiple: 75th Percentile	Applicable Multiple: 25th Percentile	Valuation: Median	Valuation: 75th Percentile	Valuation: 25th Percentile
Digital Industries Value	23,765	2.5x	4.4x	1.9x	58,863	104,357	45,820
Smart Infrastructure Value	21,492	2.5x	2.8x	2.0x	53,318	60,150	43,619
Mobility Value	11,381	1.3x	2.0x	0.8x	15,080	22,359	8,705
Siemens Healthineers Value	23,141	3.0x	4.0x	1.7x	69,579	93,319	39,322
Industrial Business Value					**196,839**	**280,185**	**137,465**
SFS Equity Value[2]	462	8.1x	9.8x	5.9x	3,754	4,516	2,708
PC, CC & Elim. Value[3]	3,600	2.5x	3.5x	1.7x	8,883	12,645	6,204
Enterprise Value					**209,477**	**297,346**	**146,377**
Industrial Debt					(17,839)	(17,839)	(17,839)
Cash and equivalents					10,084	10,084	10,084
Minority interests					(5,270)	(5,270)	(5,270)
Equity Value					**196,452**	**284,321**	**133,352**
(÷) # Diluted shares outstanding[4]					750	750	750
Implied Share Price					**261.98**	**379.15**	**177.83**

Enterprise Value-to-EBITDA

	Applicable Siemens AG Figure[1]	Applicable Multiple: Median	Applicable Multiple: 75th Percentile	Applicable Multiple: 25th Percentile	Valuation: Median	Valuation: 75th Percentile	Valuation: 25th Percentile
Digital Industries Value	5,159	12.7x	18.8x	11.6x	65,455	96,929	60,093
Smart Infrastructure Value	3,084	12.0x	13.8x	11.4x	37,106	42,666	35,137
Mobility Value	1,081	8.5x	10.3x	8.1x	9,221	11,152	8,802
Siemens Healthineers Value	4,329	11.9x	15.5x	9.1x	51,442	67,143	39,376
Industrial Business Value					**163,224**	**217,890**	**143,409**
SFS Equity Value[2]	462	8.1x	9.8x	5.9x	3,754	4,516	2,708
PC, CC & Elim. Value[3]	(655)	12.0x	16.0x	10.5x	(7,834)	(10,458)	(6,883)
Enterprise Value					**159,143**	**211,948**	**139,233**
Industrial Debt					(17,839)	(17,839)	(17,839)
Cash and equivalents					10,084	10,084	10,084
Minority interests					(5,270)	(5,270)	(5,270)
Equity Value					**146,118**	**198,923**	**126,208**
(÷) # Diluted shares outstanding[4]					750	750	750
Implied Share Price					**194.86**	**265.27**	**168.30**

[1] Figure for 2024 calendar year; includes 3/4 of figure estimated for FY24 and 1/4 of figure estimated for FY25
[2] Valued at P/E
[3] Valued at Industrial segments' weighted average multiple
[4] Number of diluted shares estimated to be outstanding in December 2024 in the baseline valuation, for implied share price comparability purposes across valuation methods

Source: Analyst estimates; Bloomberg

The Enterprise Value-to-Revenue valuation yields a share price of €261.98, 7.5% above our baseline valuation. In addition to the above-mentioned comparability limitations, further constraints arise from a segment perspective since Portfolio

[14] Using the same companies as for the cost of capital estimation.
[15] Given the financial nature of its operations, SFS is always valued at Price-to-Earnings in these multiples' valuation buildup.

Companies, Corporate Center & Eliminations has a positive value, in contrast with the baseline valuation framework, distorting the comparability of the other segments. The Enterprise Value of both methods is identical, with the primary difference lying in the valuation of minority interests, mainly due to Siemens Healthineers AG, causing differences in the Equity Value.

The Enterprise Value-to-EBITDA renders a share price of €194.86, 20% below our baseline valuation. Despite the comparability limitations, all segments have a substantially lower value compared to the baseline cash flow-based valuation. Peers' multiples are relatively uniform in the Smart Infrastructure and Mobility segments, with small variation in the 75th and 25th percentile valuations relative to the median baseline valuation, and Digital Industries' median multiple near the 25th percentile; on the other hand, Digital Industries' 75th percentile multiple is 48% higher than the median. Finally, Siemens Healthineers' peers' multiples are rather widespread, with the 75th percentile 30.5% above the median and the 25th percentile 23.5% below the median, introducing some uncertainty in this segment's Enterprise Value-to-EBITDA valuation.

Price Target & Recommendation

Based on the valuation methodologies applied and described above, we weight the different implied share prices yielded by the different methods according to the ones we believe to be the most accurate given Siemens AG's complexity as a conglomerate from a valuation perspective. We attribute a 70% weight to our baseline valuation framework, as it is the one that involved a more detailed and granular process from an analytical perspective. We attribute a weight of 20% to the Enterprise Value-to-EBITDA as it shows slight to moderate volatility between the median and 75th and 25th percentile valuations, hence showing less uncertainty than Enterprise-to-Revenue, for instance. Finally, we attribute a weight of 5% to the upside case and 5% to the downside case. As these scenarios are based on Siemens guidance, we decide to include them with a minimal weight as they may be subject to potential bias from Siemens management.

Valuation Summary

Valuation Framework	Implied Share Price	Weight
SOTP APV - Base case	EUR 243.58	**70%**
SOTP APV - Upside case	EUR 273.26	**5%**
SOTP APV - Downside case	EUR 225.97	**5%**
SOTP EV-to-Revenue	EUR 261.98	**0%**
SOTP EV-to-EBITDA	EUR 194.86	**20%**

This yields a price target of €234 for December 2024, added of an already announced dividend of €4.70 relative to FY2023's results, resulting in an expected capital gain of 39.3% and a dividend yield of 2.8%. Therefore, we issue a BUY recommendation. We see Siemens has having upside potential and the market to price-in this outlook.

MASTER IN FINANCE

SIEMENS AG

COMPANY REPORT

INDUSTRIAL

20 DECEMBER 2023

FRANCISCO FORTES / JOÃO ALVES

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Navigating Siemens' Landscape

- Based on our FY24 estimated target price of 234€ with a total return of 42.1%, we strongly issue a BUY recommendation for Siemens AG's stock.
- We expect Siemens to record above-consensus revenue growth in Digital Industries and Smart Infrastructure, as we project Siemens to have organic revenue growth around 7% in these segments following 10%+ in the past two years
- The end of the rapid covid-19 antigen tests-related revenue poses challenges for Siemens Healthineers' diagnostics business, which will have to reinvent itself to prevent from stalling.
- Siemens Energy AG recent issues may be a cause for uncertainty and should be tracked closely

Company description

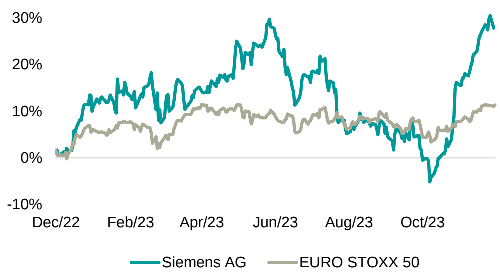
Siemens AG is a technology conglomerate established in 1847 in Germany, which forefronts innovation across the industry, infrastructure, transportation, and healthcare sectors to enhance customers daily life. Its commitment to sustainability and progress in electrification, automation, and digitalization makes it sustain a leading market position in both European and global markets.

Recommendation:	**BUY**
Price Target 19-Dec-24:	**EUR 234.00**
Price (as of 19-Dec-23)	**EUR 167.98**

Source: Bloomberg

52-week range (€)	121.20-167.98
Market Cap (€m)	133,056
Outstanding Shares (m)	792

Source: Bloomberg



Source:

(Values in € millions)	2023A	2024E	2025E
Revenues	77,769	82,861	87,890
Gross margin	38.1%	37.0%	37.0%
EBITDA margin	18.2%	16.9%	16.2%
Net income	8,529	8,599	9,043

Source: Siemens AG

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Company Overview

Company Description

320,000 employees
Founded in 1847
by Werner von Siemens
headquartered in Munich, Germany
Operates in 200+ countries
Market Value: €134,46B

71,000 employees
Founded in 1847
by Werner von Siemens
headquartered in Erlanger, Germany
Operates in 200+ countries
Market Value: €134,46B

Siemens is a technology group that is active in nearly all countries of the world, focusing on the areas of automation and digitalization in the process and manufacturing industries, intelligent infrastructure for buildings and distributed energy systems, smart mobility solutions for rail transport, and medical technology and digital healthcare services (Siemens 2023). The Siemens' group comprises Siemens Aktiengesellschaft (Siemens AG), a stock corporation under the Federal laws of Germany, as the parent company, and its subsidiaries.

From being founded in 1847 as an electrical engineering 10-man startup producing electrical telegraphs (responsible for the invention of the pointer telegraph), and eventually broadening its scope to include telegraph lines, constructing the world's first electric streetcar line, to start expanding internationally in the 1850s and becoming a global giant synonymous with innovation, quality, reliability and technology force over the years. Siemens' extensive product and service portfolio is designed to enhance the efficiency and productivity of industrial processes, energy generation and distribution, medical imaging, and urban infrastructure. The company's commitment to technological excellence, sustainability, and engineering prowess has solidified its position as a global powerhouse.

Siemens acquired and combined with various other companies to increase its capabilities, expanding its specializations into the various sectors in which it operates today. Its diverse operational landscape is segmented into distinct, strategically aligned units, each playing a crucial role in the comprehensive business model. These are: Digital Industries, Smart Infrastructure, Mobility and Siemens Healthineers, which together form the "Industrial Business" and Siemens Financial Services (SFS), which not only augments the activities of Industrial Business but also independently engages with external customers. Furthermore, results are reported for Portfolio Companies, which encompasses distinct businesses managed independently to optimize performance and market positioning, focusing on operational excellence and strategic growth. All reportable segments and Portfolio Companies often engage in inter-segment transactions, resulting in internal orders and revenue that are systematically eliminated at the Group level to ensure clarity and accuracy in financial reporting.

Business Model and Segments

Siemens' Digital Industries segment epitomizes innovation in automation and digitalization for discrete and process industries. This segment offers a comprehensive array of products and systems, including factory automation software, numerical control systems, drives, inverters, and integrated automation for machine tools. Key offerings also encompass process control systems, machine-to-machine communication products, a variety of sensors, and RFID systems.

In the realm of software, Digital Industries excels with its production and product lifecycle management (PLM) software, complemented by simulation and testing software for mechatronic systems. The segment's prowess extends to electronic design automation (EDA) software and the Mendix low-code development platform, enhancing app development efficiency. Additionally, Digital Industries provides lifecycle and data-driven services, fostering optimization across product design, development, production, and post-sale services. This comprehensive suite of offerings aids customers in transitioning to a "Digital Enterprise," boosting production flexibility, efficiency, and reducing time-to-market.

Digital Industries serves pivotal markets like automotive, machine-building, pharmaceuticals, chemicals, food and beverage, and the electronics and semiconductor industry. Its sales strategy is tailored to customer and industry needs, ensuring broad access across all channels. However, market fluctuations, especially in standard products, can cause significant short-term variability in profitability. The segment faces competition from multinational corporations with broad portfolios and smaller, regionally focused firms.

Trends shaping its business include the need for modernizing production capacity in a digital environment, offering vertical solutions and services, and adapting to regionalization and varied regulatory requirements, as it is sensitive to macroeconomic cycles. Innovations in AI, edge computing, Software as a Service (SaaS), and software-defined control are central to its R&D efforts.

Despite a downturn in orders due to customer destocking, revenue grew across all businesses, particularly in factory and process automation, aided by improved component availability. Geographically, revenues increased in all regions, with the most significant contributions from Europe, C.I.S., Africa, and Middle East.

Siemens AG's Smart Infrastructure segment stands at the forefront of guiding the global transition towards renewable energy sources and the development of smarter, more sustainable buildings and communities. This versatile division offers a wide array of products, systems, solutions, services, and software, all aimed at enhancing the efficiency and resilience of infrastructures and urban landscapes.

At the heart of Smart Infrastructure's offerings is a robust buildings portfolio that caters to the comprehensive needs of operators, owners, and users. This includes everything from integrated building management systems and software to HVAC controls, fire safety, security systems, and energy performance services. Meanwhile, the electrification portfolio is reshaping power grids, making them more resilient and efficient with advanced grid simulation, substation automation, and innovative medium-voltage switchgear, including environmentally friendly F-gas-free options. Additionally, the electrical products portfolio is tailored to both industrial and building applications, featuring an array of low-voltage switching, measuring, and control equipment.

Smart Infrastructure's customer and end-user base is as diverse as its offerings. It encompasses infrastructure developers, construction companies, contractors, operators of public and commercial buildings like hospitals and data centers, process industries such as oil and gas, discrete manufacturing industries including automotive, and utilities and power grid operators. The segment approaches its vast market through various channels, including direct sales organizations, distributors, and partners such as panel builders, OEMs, and value-added resellers. For more complex customer requirements, dedicated sales forces are deployed within the country organization. Moreover, e-commerce platforms and digital marketplaces, particularly Siemens Xcelerator, are becoming increasingly crucial for Smart Infrastructure, strengthening its digital omni-channel marketing and e-commerce presence.

In a competitive landscape dominated by large multinational corporations and emerging smaller manufacturers, Smart Infrastructure also contends with local players like system integrators and facility management firms. The demand within this segment is notably influenced by macroeconomic cycles, with a more immediate impact on electrical and building products, while changes in systems and solutions offerings tend to follow with a time lag.

Underpinning Smart Infrastructure's success are major global trends like urbanization, demographic changes, decarbonization, and digitalization. These trends are driving the need for intelligent, human-centric buildings and more sustainable energy infrastructures, including the rapid growth in electric mobility. Siemens' R&D efforts are focused on sustainable, decarbonizing solutions for buildings, utilities, and industrial customers. Innovations in digital offerings, such as cloud solutions using field data from controllers and IoT devices, along with advancements in AI, are enhancing Smart Infrastructure's capabilities in managing electricity distribution with a higher share of renewables.

Fiscal 2023 was a period of robust performance for Smart Infrastructure, with marked increases in orders and revenue across all businesses, especially from the electrification and electrical products sectors. This growth was primarily driven by large contract wins and was most pronounced in the Americas region..

Siemens AG's Mobility segment is a comprehensive division dedicated to transforming rail passenger and freight transportation. This segment integrates all of Siemens' businesses in this domain, delivering a wide range of offerings that cater to the intricate needs of modern rail transport. Within its rolling stock business, Mobility's portfolio includes a variety of vehicles and components for urban, regional, intercity, and long-distance transport. This encompasses metro systems, trams, light rail, commuter trains, high-speed rail, and passenger coaches. Additionally, it provides locomotives and automated transportation solutions, such as automated people movers. The rail infrastructure business of Mobility extends to products and solutions for rail automation, including automatic train control systems, interlocking, operations control, telematic systems, digital station solutions, and railway communication systems. This segment also covers electrification needs with AC and DC traction power supply, contact lines, and network control.

Mobility's service business is pivotal, offering maintenance and digital services for rolling stock and rail infrastructure across their lifecycles. Furthermore, in its turnkey business, Mobility combines consulting, planning, financing, construction, service, and operation of complete mobility systems. The software business within Mobility is expansive, featuring train planning systems, trip planning, mobile ticketing, Mobility as a Service (MaaS) platforms, on-demand transportation, fleet management, data analytics, and inventory and reservation management.

The primary customers of Mobility are public and state-owned companies in the transportation and logistics sectors, with markets primarily driven by public spending. These customers typically have multi-year planning and implementation horizons, making their contract tenders less susceptible to short-term economic trends. Large contracts in rolling stock and rail infrastructure are often bundled with service contracts, which start generating revenue only after the products and solutions are operational, which can take several years post-award.

Mobility faces stiff competition from multinational companies and is impacted by industry consolidation, which could increase competitive pressures and reduce sourcing options for rail customers. The segment is driven by key parameters such as urbanization, decarbonization, and digitalization. The rising need for daily mobility in urban centers, combined with the challenges of reducing CO2 emissions, noise, and transportation costs, is continuously increasing the pressure on mobility providers. Digital solutions are becoming essential for improving availability, connectivity, and sustainability of rail infrastructures. For analysis context, we see Alstom SA, CRRC Corp Ltd and Stadler Rail AG as its main competitors.

Mobility's R&D strategy focuses on reducing lifecycle costs, securing system availability, increasing network capacity, optimizing rail operator processes, and enhancing passenger experience. Major R&D areas include the development of efficient vehicle platforms, eco-friendly power supplies, the Railigent X suite for rail asset maintenance, smart connected products, cloud-enabled signaling, automatic train operation, safe AI for driverless trains, air-free brake systems, 5G technology, and cybersecurity.

FY23 was a remarkable year for Mobility, with order intake exceeding previous levels, highlighted by significant contracts in India, Egypt, and Germany. Revenue growth was bolstered by improved component availability and was strongest in the rolling stock business. Geographically, revenue grew across all regions, despite some portfolio effects impacting volume development.

Order intake at Mobility exceeded the record level a year earlier on sharply higher volume from large orders. Contract wins in fiscal 2023 were highlighted by an order worth €2.9 billion for locomotives and associated maintenance in India, a €2.5 billion order for the first line of a turnkey rail system in Egypt and a €2.1 billion order for suburban trains in Germany. Order intake a year earlier included among others an order worth €1.5 billion for high-speed trains in Germany.

Siemens Healthineers

Siemens holds a majority stake, just over 75%, in Siemens Healthineers AG, a publicly listed global provider of healthcare products, solutions, and services. Siemens Healthineers is renowned for developing, manufacturing, and selling a diverse range of diagnostic and therapeutic products and services to healthcare providers, complemented by clinical consulting services, and an extensive range of training and service offerings. This comprehensive portfolio supports customers throughout the entire care continuum, from prevention and early detection to diagnosis, treatment, and follow-up care. Healthineers' customer base of is broad and varied, encompassing public and private healthcare providers, including hospitals and hospital systems, clinics, laboratories, universities, physicians, public health agencies, health insurers, pharmaceutical companies, and clinical research institutes. In the imaging business, Siemens Healthineers provides cutting-edge products and solutions in magnetic resonance imaging, computed tomography, X-ray, molecular imaging, and ultrasound. The diagnostics business offers in-vitro diagnostic products and services for laboratory and point-of-care diagnostics. The Varian business focuses on multi-modality cancer care technologies for oncology departments, while the advanced therapies business delivers products and solutions for minimally invasive treatments in fields like cardiology, interventional radiology, and surgery.

Competition in these domains mainly comes from a few large multinational companies, while the diagnostics market is more fragmented with global and regional players. Its markets are generally stable but can experience fluctuations due to macroeconomic and health political developments, such as changes in health policy, regulation, or reimbursement systems. A significant portion of Siemens Healthineers' revenue is recurring, providing a stable foundation for growth. Four major trends shape the markets of Siemens Healthineers: demographic changes, including the growing and aging global population; economic development in emerging countries; increasing non-communicable diseases; and the transformation of healthcare providers driven by societal and market forces. These trends are leading to the consolidation of healthcare providers into networks, driving demand for standardized, scalable systems, solutions, and new business models. GE HealthCare Technologies Inc and Koninklijke Philips NV. Its R&D investments are focused on innovative and sustainable solutions in diagnostics and therapy, with artificial intelligence, sensors, and robotics being key areas. Those are mainly directed towards expanding manufacturing and technical capabilities, particularly in the U.S. and China, while improving operational efficiency.

Fiscal 2023 saw a decrease in orders for Siemens Healthineers, with revenue on par with the previous year. Growth in imaging and Varian businesses offset a decline in the diagnostics business. Profit was affected by lower revenue from rapid coronavirus antigen tests and transformation charges in diagnostics, as well as impairments in the advanced therapies business. The order backlog at the end of the fiscal year stood at €34 billion, with €11 billion expected to be converted into revenue in fiscal 2024.

Siemens Financial Services (SFS) offers vital financing solutions to both Siemens' customers and external entities, integrating deep financing expertise with specialized knowledge in Siemens' business domains. Its services include leasing, lending, working capital, and structured financing for a range of equipment and projects. SFS also enhances Siemens' industrial operations by providing financial advisory and risk management services, and collaborates on digital business model development, especially in sustainable technologies.

In fiscal 2023, SFS saw increased earnings in the debt business despite a volatile credit market. This improvement was a shift from the previous year, which included charges related to the sale of operations in Russia. Its equity business also performed strongly, benefiting from sales of equity investments and favorable market conditions. Its current cashflows from operations and investing activities were negative, due to significant investments and changes in financing receivables, partly offset by solid free cash flow. Despite a rise in financing activities, total assets decreased, largely due to currency effects. SFS's focus is closely aligned with Siemens' core areas like Digital Industries, Smart Infrastructure, and Mobility, and is influenced by the market dynamics of these sectors as well as broader economic factors like inflation and recession risks. With a diversified portfolio across industries and a strong presence in investment-grade countries, primarily the U.S., SFS is strategically positioning itself to capitalize on the growth in select Asian markets, maintaining its role as a key financial component within Siemens' expansive business ecosystem.

Siemens AG's Portfolio Companies encompasses a range of businesses offering specialized products, software, solutions, systems, and services across diverse industries, including oil and gas, chemicals, mining, cement, logistics, energy, marine, water, and fiber. These businesses are managed independently, with a focus on unlocking their unrealized potential through measures such as internal reorganization, digitalization, cost improvements, and optimization of procurement, production, and service processes. Upon reaching specific performance targets, these businesses may undergo strategic transformations, including integration with other businesses, sales, formation of external private equity partnerships, or public listings.

Nowadays, the segment is primarily consisted of three independent units. Large Drives Applications specializes in electric motors, converters, and mining solutions. Siemens Logistics is focused on sorting technology and solutions, particularly for baggage and cargo handling at airports. Siemens Energy Assets includes certain regional activities of the former Gas and Power segment, retained by Siemens due to regulatory or economic reasons during the Siemens Energy carve-out. The industries served by Portfolio Companies often show a delayed response to overall economic changes, with financial results closely tied to customer investment cycles in their respective sectors. Particularly in commodity-based industries like oil and gas or mining, these cycles are more influenced by commodity price fluctuations than production volume changes. Catering to a heterogeneous industrial customer base, Portfolio Companies employ a dedicated sales approach that leverages a deep understanding of industry-specific needs and customer requirements, utilizing diverse sales and marketing channels to effectively reach and serve their clients.

Macroeconomic Overview and risks

In 2023, the global economy faced numerous challenges, including the lingering impacts of COVID-19, geopolitical tensions, notably the war in Ukraine, inflationary pressures, and financial market volatility. Despite these headwinds, global GDP growth was resilient, expected at 2.6%. Key trends included the normalization of consumer spending patterns and a shift back to services from goods, alongside businesses reducing inventory levels built up during supply chain disruptions.

The Chinese economy, initially buoyant post-COVID-19 lockdowns, faced a slowdown due to its real estate crisis, with GDP growth projected at 5%. The U.S. economy, however, outperformed expectations despite monetary tightening, with robust consumption and investment driving a 2.5% GDP growth. The EU struggled with energy price hikes and inflation, leading to minimal GDP growth.

Looking ahead to 2024, global GDP growth is expected to decrease to 2.3%. However, the EU is projected to see a slight increase in GDP growth, while the U.S. is anticipated to experience a deceleration, with potential for a mild recession. China's growth is also expected to moderate. Global trends suggest a gradual normalization in consumer spending and inventory policies, with a modest uptick in global goods demand, trade, and industrial production.

Siemens' and its industries outlook for fiscal 2024 are shaped by these macroeconomic conditions, with expectations of productivity improvements and price adjustments to offset wage and raw material cost increases. The company faces currency translation risks, particularly involving the U.S. dollar, British pound, and Chinese yuan. Despite global currency market volatility, Siemens' diversified production and natural hedging strategies aim to mitigate these impacts.

Risk management remains a key focus for Siemens, addressing strategic, operational, financial, and compliance risks. The company's risk management policy, guided by its Managing Board, integrates into business planning and execution, with a comprehensive enterprise risk management approach. Key risks include economic, political, and geopolitical conditions, cybersecurity threats, supply chain management challenges, and the evolving regulatory landscape. Siemens' risk mitigation strategies involve continuous monitoring, adaptation to changing conditions, and leveraging insurance coverage where feasible. Despite the identified risks, no single or combined threat endangers Siemens' ongoing viability. The company anticipates benefiting from high order backlogs and easing supply chain constraints. The infrastructure sector is also expected to gain from stimulus programs. Additionally, Siemens plans to manage cost pressures by improving productivity and adjusting prices.

Recently, the German government has halted significant green initiative and industry support spending due to a constitutional court ruling, which impacted its budget by creating a €60 billion shortfall. This ruling could also influence Germany's fiscal responses to future crises and shape its fiscal policy going forward. This may impact the Infrastructure's segment.

Helthineers' 2023 outlook is predicated on several assumptions: the management of the COVID-19 pandemic won't adversely affect product and service demand, and the war in Ukraine won't significantly impact business operations. This forecast considers the current macroeconomic climate and exchange rates, excluding portfolio activities and legal, tax, or regulatory charges, based on the number of shares at the end of fiscal 2022.

Market dynamics in FY23 saw clear growth in sectors served by Smart Infrastructure, influenced by post-COVID-19 recovery, improved supply chains, and price inflation, despite challenges like rising interest rates, especially in the U.S., and weaker-than-expected recovery from lockdowns in China. The war in Ukraine and high energy prices significantly impacted Europe.

Competitive landscape

Siemens operates in industries that require significant capital investment, technological expertise, and established brand recognition. As many of Siemens' markets are mature, which can limit the influx of new competitors but can also lead to more intense competition among established players. These factors create substantial barriers for new entrants. Siemens relies on various suppliers for components and raw materials. However, its size and purchasing power give it leverage in negotiations. Also, global supply chain complexities can affect bargaining power, especially if specialized or rare materials are involved. From a customers' perspective, especially large industrial clients, can exert significant bargaining power due to the high value and custom nature of many of Siemens' products. In more standardized product areas, customers may have more options, increasing price sensitivity and buyer power.

In several of the group's operating sectors, like energy and healthcare technology, there are viable substitutes available. This threat varies depending on the specialization and differentiation of Siemens' products. Additionally, there is the threat of rapid technological changes which can lead to the emergence of new, innovative substitutes that could disrupt Siemens' market position. Siemens faces intense competition from global companies like General Electric, ABB, and Honeywell. This competition is fierce in areas like industrial automation, energy, and healthcare technology. As the company operates in mature markets, competition is often about gaining incremental market share, which can lead to aggressive marketing, innovation races, and even price wars.

All in all, Siemens must continuously innovate to retain its market share and avoid the risk of products becoming obsolete. Siemens' commitment to innovation is evident in its focus on autonomous robotics, blockchain, additive manufacturing, e-mobility, cyber security, and AI. This dedication is backed by approximately 45,000 patents and substantial R&D investment (€6,183 million in FY2023), representing 7.9% of its revenue. (On November 3rd Siemens announced an investment, as part of a €2 billion global investment strategy to boost growth, innovation and resilience, of US$150 million in a new high-tech manufacturing plant in Dallas-Fort Worth to support high-growth markets like data centers, batteries, semiconductors, EV charging and rail transportation and accelerate artificial intelligence adoption) As a global leader in energy-efficient technologies, infrastructure solutions, and medical imaging equipment, Siemens holds a strong position across multiple industries. In FY2023, the company showed an impressive growth, with revenues increasing to €77,769 million (8% increase) and net income rising to €7,950 million. Siemens also pursuits collaborative innovation whether through recent acquisitions, like BuntPlanet and HMH, s.r.o., or new partnerships with Intel and M42 on digitalization and sustainability, highlighting its strategic enhancement of its technological portfolio while simultaneously strengthening its market position by following latest market trends. The projected surge in Europe's renewable electricity capacity (IEA) aligns with Siemens' strengths in sustainable technologies, presenting significant growth opportunities. Nonetheless, its dependence on global supply chains and the compliance with environmental and safety regulations, particularly in its manufacturing operations, could increase costs and operational complexities. In addition, the decline in cash and equivalents (from €10,465 million to €10,084 million) raises concerns about short-term liquidity and potential reliance on external financing.

Historical Performance and Ratios

Shareholder structure

FY23 was another very successful year for Siemens. We achieved excellent financial results in a volatile market environment, which on the one hand included destocking by customers and distributors following previously proactive purchasing, particularly in our short-cycle businesses, and on the other hand included improved supply chain conditions, which accelerated revenue conversion from our high order backlog. We raised our outlook during the fiscal year after the first and the second quarters. We then reached or exceeded all the targets set for our primary measures for fiscal 2023. Revenue was higher in nearly all our industrial businesses and rose to €77.8 billion, up 8% year-over-year. Smart Infrastructure and Digital Industries contributed double-digit growth with all businesses posting increases. Excluding currency translation and portfolio effects, revenue for Siemens rose 11%. Profit Industrial Business exceeded the record high of a year earlier and rose 11% to €11.4 billion. The profit margin of our Industrial Business rose to 15.4%, up from 15.1% a year earlier, reaching its highest level ever. Net income nearly doubled year-over year to a historic high of €8.5 billion and corresponding basic earnings per share (EPS) more than doubled to €10.04. Free cash flow from continuing and discontinued operations for fiscal 2023 was €10.0 billion, reaching a record high.

Siemens AG's financial foundation is robust, with a stock capital of €2.550 billion distributed across 850 million registered shares held by approximately 840,000 shareholders. Its diverse ownership profile includes 66% institutional investors and 22% private individuals, with the Siemens family itself holding 6.38%, including family members and family-founded foundations, and the remaining being unidentified investors. Notable shareholders include BlackRock Institutional Trust Company with 6.58%, The Vanguard Group claims 3.09%, and the Government of Qatar owns 2.98% of Siemens AG. These investors portfolio extends to other ventures within the same industries as Siemens' operational segments. Geographically, the shareholding spread is broad, with 29% based in Germany, 28% in the US, and the remaining distributed across the UK, France, Switzerland, and other regions. The shareholding comes with equal rights and duties as mandated by the German Stock Corporation Act. Yet, certain shares like treasury shares and those distributed under employee share programs, notably the Share Matching Plan, have voting right limitations, ensuring no single shareholder has disproportionate influence. This strategic distribution of ownership and investment reflects Siemens AG's commitment to growth and corporate responsibility, ensuring stability and equitable shareholder representation.

A notable shift occurred on June 28, 2023, when Siemens AG reduced its stake in Siemens Energy by transferring 6.8% to Siemens Pension-Trust e.V., marking a new stake of 25.1%. Siemens indicated before the spin-off as well as in conjunction with the public listing of Siemens Energy – and has since consistently stated – that it would further reduce its investment in Siemens Energy depending on the conditions. Most recently, on June 28, 2023, Siemens transferred a 6.8 percent stake to Siemens Pension-Trust e.V.

With this move, Siemens is executing its previously announced plans to further reduce its investment in Siemens Energy. By transferring the shares to Siemens Pension-Trust e.V., Siemens is strengthening its pension assets in Germany.

Siemens Energy's problems at its onshore wind turbine business could cost the company up to 4.5 billion euros. Siemens Energy shocked markets in late June when it announced several problems at Siemens Gamesa, one of the world's biggest wind turbine makers, just weeks after it fully acquired the business it had only partly owned.

Siemens and Siemens Energy shape solution to provide stability and accelerate separation in India as Siemens intends to acquire 18% in Siemens Ltd. India for a purchase price of €2.1B. Simplification of corporate setup in one of the fastest growing and strategically important markets. Siemens has agreed with Siemens Energy indirect financial measures totalling one €1B to allow third parties to arrange guarantees for Siemens Energy. This would increase Siemens’ stake in the publicly listed Siemens Ltd. India from 51% to 69%, while Siemens Energy’s stake would decrease from 24% to 6%. Siemens will provide no new guarantees to Siemens Energy. Siemens has agreed with Siemens Energy indirect financial measures totaling one billion euro to allow third parties to arrange guarantees for Siemens Energy. Firstly, Siemens allows Siemens Energy to use its 5% shareholding in Siemens Ltd. India, worth 750 million euro, as collateral for guarantees. If the collateral is drawn, Siemens has committed to buy up to 5% of shares in Siemens Ltd. India for 750 million euro. Secondly, Siemens grants payment deferrals at market conditions in the amount of 250 million euro, also to be used as collateral for guarantees. These commitments enable Siemens Energy to provide appropriate collateral for the bank consortium providing a guarantee line. This line serves to secure Siemens Energy's business development and participation in the German energy transition.

Stock performance and dividend policy

We intend to continue providing an attractive return to our shareholders. In the Siemens Financial Framework, we strive for a dividend per share that exceeds the amount for the preceding year, or at least matches it.

As in the past, we intend to fund the dividend payout from Free cash flow. Our primary measure to assess our ability to generate cash, and ultimately to pay dividends, is the cash conversion rate for the Siemens Group, defined as the ratio of Free cash flow (continuing and discontinued operations) to net income. Over a cycle of three to five years, we aim to achieve a cash conversion rate of 1 minus the annual comparable revenue growth rate. Following this year's dividend of €4.25 per share, the company has already committed to a distribution of €4.7 per share at the beginning of next year.

In June 2021, Siemens announced a 5-year share buyback program with a total volume of up to €3 billion with approval by the Annual Shareholders' Meeting the company. During F2023, Siemens had repurchased 6,853,091 shares as part of its program. Further expanding its shareholder return efforts, Siemens extended its share buyback on November 16, committing now up to more €6 billion over a five-year span.

Management

Roland Busch, Siemens' President and CEO since November 2021 has joined the group in 1994 while project head of the Corporate Research and Development Department. Since then he has accumulated loads of experience and multiple positions within the group, and sustained companies' most successful years with overarching responsibility for Siemens' Industrial Businesses and as a member of the Managing Board. In addition, during his tenure as CEO, he achieved a total average return of more than 8%. Although his 2023 annual compensation of €16,5 million is way above the average compensation for CEOs of similar size in the German market, 83% of his remuneration was performance-based. Therefore, with a term due to expire in March 2025, we place a lot of credibility on his leadership, given his exceptional tenure at the company.

DI REVENUES

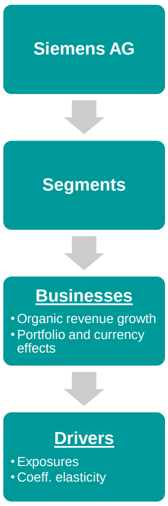
Digital Industries revenue growth rates and profit margins were temporarily impacted as the company seeks to transition its PLM software business to a Software as a Service (SaaS) model, aiming for more predictable revenue streams and expanding its reach to smaller companies through subscription revenues.

In fiscal 2023, Digital Industries continued to transition parts of its software business, particularly PLM, from largely upfront revenue recognition towards Software as a Service (SaaS), which yields more predictable recurring revenue and offers growth opportunities by opening access to new customers, especially small and medium-sized companies seeking to reduce costs associated with owning complex IT infrastructure. The transition held back revenue growth rates and profit margin development in the software business in fiscal 2023 and Digital Industries expects continued impacts until completion of the transition.

Revenue rose on increases in all businesses due in part to conversion from the order backlog which had expanded significantly in the previous fiscal year. The strongest revenue growth contributions came from the factory automation and the process automation businesses. Overall, growth in the automation businesses was supported by improved availability of components year-over-year. Revenue growth in the software business was led by the EDA business while year-over-year growth in PLM was held back by the transition to SaaS

Business Drivers & Financial Forecasts

Exhibit 1. Industrial segments revenue estimation process

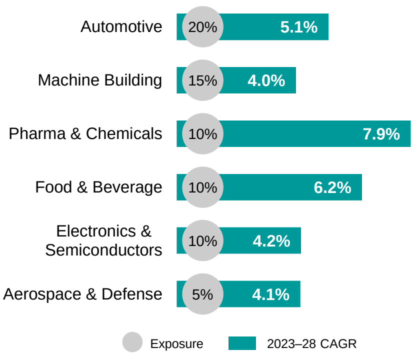


Source: Analyst estimates

To allow for a refined and granular forecasting process—and thereby a more accurate valuation of Siemens AG stock—the company's historical consolidated financial statements were broken down and allocated across its various segments.[1] These segments comprise (i) Siemens AG's Industrial Business (Digital Industries, Smart Infrastructure, Mobility, and Siemens Healthineers); (ii) its financial subsidiary (Siemens Financial Services); (iii) a self-defined segment named Portfolio Companies, Corporate Center & Eliminations (which encompasses Siemens' portfolio companies, its corporate center, and eliminations of intersegment transactions); (iv) its non-core business; and (v) its financing activites (equity, debt, and debt-like items).

For revenue-forecasting purposes of Industrial Business segments, historical revenue growth rates for each segment's businesses were split into (i) organic revenue growth and (ii) portfolio and currency effects,[2] based on Siemens-reported information and own estimates. To forecast future organic revenue growth, different drivers were selected for each business, tailored to their specific characteristics and trends. For each driver, a specific exposure was estimated (either disclosed by Siemens or self-estimated), with each business drivers' exposures totalling 100%; additionally, an elasticity coefficient of the business's organic revenue growth relative to the driver's growth was also estimated, based on historical analysis, to assess how each driver translates in economic value for Siemens. Portfolio and currency effects on revenue growth are assumed to be nil from FY2024 onwards.

Exhibit 2. Digital Industries' Relevant Markets



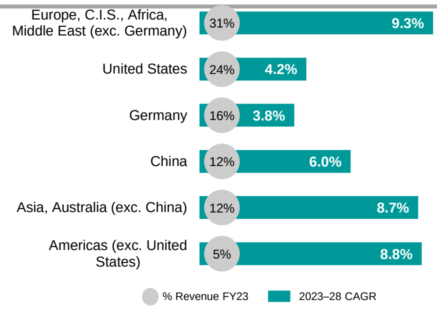
Source: Analyst estimates; Siemens; Statista; GlobalData

Digital Industries

Digital Industries' revenue is expected to closely correlate with the economy, given its significant exposure to industries that are highly sensitive to economic fluctuations. The Automotive market is the most important for Digital Industries, accounting for 20% of its revenue exposure. Following a 12.4% downturn in 2020 due to the pandemic, the global automotive manufacturing market rebounded with a 2020–23 CAGR of 7.9% as supply chain conditions normalized, and is forecasted to grow at a 2023–27 CAGR of 5.3% (GlobalData Sector Reports 2023). It is followed by the Machine Building market, which was negatively

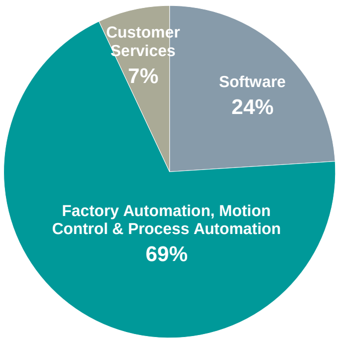
[1] Based on Siemens-disclosed information (parent, subsidiaries, and associates), or on specific drivers believed to be the most appropriate for the line items in question where no information is disclosed. The management report and notes to the accounts were also parsed to identify and adjust for any one-off gains or losses included in the segments' Siemens-reported profit.
[2] Also accounting for effects of rapid COVID-19 antigen tests on Siemens Healthineers' Diagnostics business.

Exhibit 3. Siemens Relevant Geographies Nominal GDP Growth



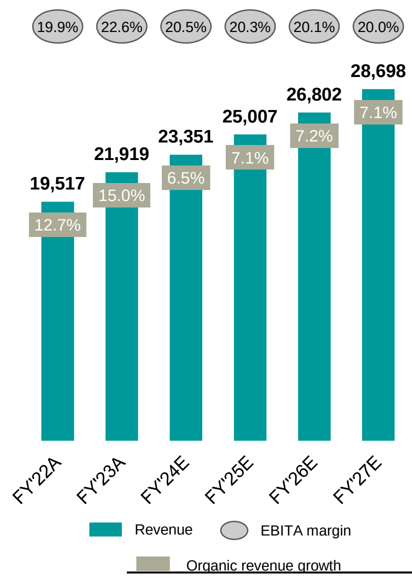
Source: Analyst estimates; IMF; Siemens

Exhibit 4. Digital Industries' FY2022 Revenue Breakdown by Business



Source: Siemens

Exhibit 5. Digital Industries' Revenue and EBITA margin *(in EUR millions)*



Source: Analyst estimates; Siemens

impacted in the past two years due to less favourable investment conditions caused by rising interest rates. The global machinery market is projected to grow at a 2023–26 CAGR of 4.4% (GlobalData Market Analyzer 2023) as the interest rate environment and investment conditions are expected to stabilize. Other relevant markets for Digital Industries—including Pharma & Chemicals, Food & Beverage, and Electronics & Semiconductors—and their respective growth perspectives are displayed in Exhibit 2.

Collectively, these industries account for 70% of Digital Industries' revenue exposure, as reported by Siemens. The remaining 30% are assumed to move in line with the growth of the economy (measured by real GDP growth and inflation) in Siemens' relevant geographies. After the disruptions caused by the pandemic and the war in Ukraine, real GDP growth in the coming years is expected to stabilize slightly below 2% in the United States and Europe, while in China it is projected at around 4%. Inflation is expected to slow down in all regions—in developed economies towards the 2% central banks' target, and in developing economies ranging from 4% in Asia-Pacific to 10% in Africa (IMF 2023).

The Factory Automation, Motion Control & Process Automation businesses—which accounted for 69% of Digital Industries' revenue in FY2022—are projected to move in line with the aforementioned industry and economy dynamics. These businesses' revenue is forecasted to grow at a FY2023-28 CAGR of 7.4%.

The Software business started transitioning towards a Software as a Service (SaaS) model within its Portfolio Lifecycle Management (PLM) offerings in FY2022, marking a significant shift from upfront revenue recognition to more predictable and recurring revenue streams. Despite its forward-looking benefits, the transition is tempering short-term revenue growth. The Software business's organic revenue FY2021–23 CAGR was 4.9%, below that of the combined Digital Industries businesses over the same period, which was 13.8%. Siemens has not specified a timeline for the completion of the SaaS transition; however, drawing parallels from other major corporations' SaaS transitions, such as Adobe's four-and-a-half-year transition period,[3] Siemens' SaaS transition is projected to be complete by FY2026-end. Consequently, Software revenue growth is forecasted to trail behind that of Factory Automation, Motion Control & Process Automation businesses until FY2026. Post-transition, Software business revenue growth is expected to align with that of other Digital Industries' businesses.

Customer Services' revenue has historically represented approximately 7.5–8% of the combined revenue from Factory Automation, Motion Control & Process

[3] https://www.launchnotes.com/blog/how-they-launched-it-adobes-cloud-transformation

Automation and Software businesses. This ratio is expected to remain steady at 7.6% from FY2024 onwards.

In total, Digital Industries' combined revenue is forecasted to grow at a FY2023–28 CAGR of 6.9%.

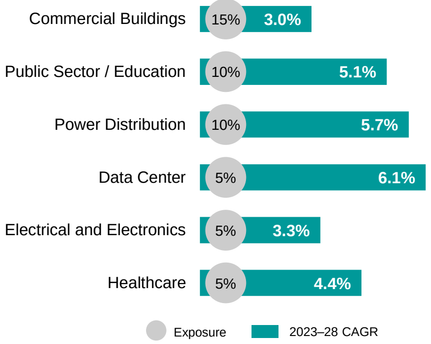
Digital Industries' EBITA margin has improved in the past three years, attributed to a decrease in cost of sales and SG&A expenses as a percentage of revenue. On the other hand, R&D expenses have remained stable at approximately 13% of revenue. Digital Industries' EBITA margin is hence forecasted at 20–20.5%, aligning with FY2021–22 levels.

Capital expenditures have been at 1.6–2.0% of revenue in the past three years, and are forecasted within this range going forward.

Smart Infrastructure

Similarly to Digital Industries, Smart Infrastructure's revenue is anticipated to be impacted by the growth dynamics of the various industries it serves. The Commercial Buildings market—the most significant for Smart Infrastructure, accounting for 15% of its revenue exposure—is forecasted to grow at a 2023–28 CAGR of 3.0% (Statista Market Insights 2023). It is followed by Public Sector / Education, projected to grow at a 2023–26 CAGR of 6.3% (GlobalData Market Analyzer 2023), and Power Distribution, forecasted to grow at a 2023–30 CAGR of 5.9% (Statista 2022). Other relevant markets for Smart Infrastructure—including Data Center, Electrical and Electronics, and Healthcare—and their respective growth perspectives are displayed in Exhibit X.

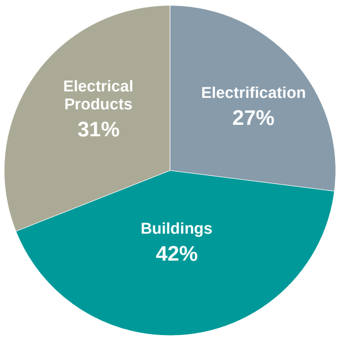
Exhibit 6. Smart Infrastructure's Relevant Markets



Source: Analyst estimates; Siemens; Statista; GlobalData

In aggregate, the above-outlined industries represent 50% of Smart Infrastructure's revenue exposure, as per Siemens' disclosure. The remaining 50% are assumed to be driven by metrics specific to Smart Infrastructure's distinct businesses—Buildings, Electrical Products, and Electrification. In FY2022, these industries accounted for 42%, 31%, and 27% of Smart Infrastructure revenue, respectively.

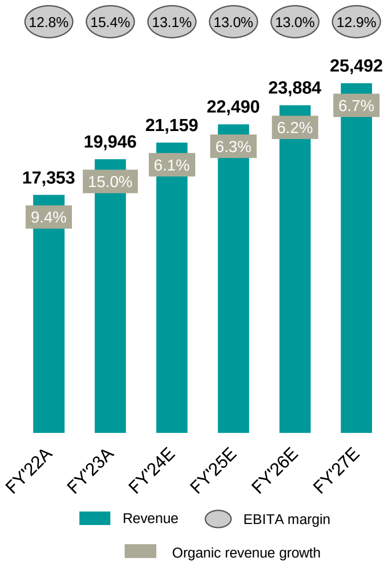
Exhibit 7. Smart Infrastructure's FY2022 Revenue Breakdown by Business



Source: Siemens

The Buildings business selected driver is growth in global urban population, as demographic changes—and urbanization in particular—are driving demand for smarter, more human-centric, and sustainable buildings. The world population is expected to increase by 14.4% until 2040 (United Nations 2022), while the global urban population is projected to rise by 28.3% over the same period—raising the urbanization rate from 56.9% in 2022 to 64.5% in 2040 (United Nations 2019). This urbanization surge presents Siemens with opportunities to address emerging infrastructure needs in building development, with the Buildings business revenue forecasted to grow at a FY2023–28 CAGR of 5.8%.

Exhibit 8. Smart Infrastructure's Revenue and EBITA margin *(in EUR millions)*



Source: Analyst estimates; Siemens

Growth in value added in the global Electrical Products market is the chosen driver for Electrical Products. After a 15.4% decline in 2020 due to the pandemic, value added in the global Electrical Products market rebounded with a 2020-23 CAGR of 5.7% and is expected to grow at a 2023–28 CAGR of 2.4% amid increasing global demand and automation and digitalization investments (Statista Market Insights 2023). The revenue for Siemens' Electrical Products business is projected to grow at a FY2023–28 CAGR of 6.2%.

For the Electrification business, the selected driver is the growth in global renewable electricity generation, grounded on the fact that the energy transition from fossil fuels to renewables and the rising demand for energy efficiency are leading to accelerated electrification. Global renewable electricity generation saw a 2018–23 CAGR of 7.1% and is projected to grow at a 2023–27 CAGR of 7.3%, with renewables set to overtake coal as the primary energy source for global electricity generation by 2025 and account for nearly 40% of global electricity output by 2027. In contrast, the shares of all other energy sources—namely coal, natural gas, nuclear, and oil—are expected to decline over the same period (International Energy Agency 2022). Siemens is well-positioned to benefit from this trend, as the accelerating renewable energy integration is likely to drive growth in areas such as electric transportation and digitalization, thereby increasing electricity demand. The Electrification business revenue is forecasted to grow at a FY2023–28 CAGR of 7.2%.

Overall, the revenue from Smart Infrastructure's combined businesses is forecasted to grow at a FY2023–28 CAGR of 63%.

Similarly to Digital Industries, Smart Infrastructure's EBITA margin has shown an upward trend—with a significant increase to 15.4% in FY2023—driven by decreasing cost of sales and SG&A expenses as a percentage of revenue, while R&D expenses have remained stable at approximately 4% of revenue. Smart Infrastructure's EBITA margin is therefore estimated at approximately 13%, in line with FY2022.

Capital expenditures have been at 1.2–1.4% of revenue in the past four years, and are expected to maintain this level in the future.

Mobility

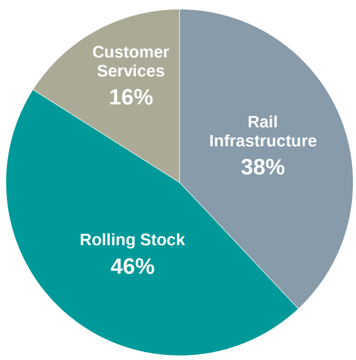
Siemens Mobility's revenue is projected to move in line with global demand trends in train travel and transport, spanning both passenger train travel and freight train transport. This demand serves as a crucial driver for infrastructure investment, providing Siemens with ample opportunities to capitalize on market developments.

Exhibit 9. Mobility's Revenue Exposure

		Passenger (pkm)	Freight (tkm)
Average infrastructure costs	Electric	145	30
	Diesel	270	32
% Rail transport activity	Electric	85%	55%
	Diesel	15%	45%
Economic value split 1 pkm vs. 1 tkm		84%	16%
Train demand split pkm vs. tkm		~ 33%	~ 67%
Siemens Mobility revenue exposure 1 pkm vs. tkm		~ 73%	~ 27%

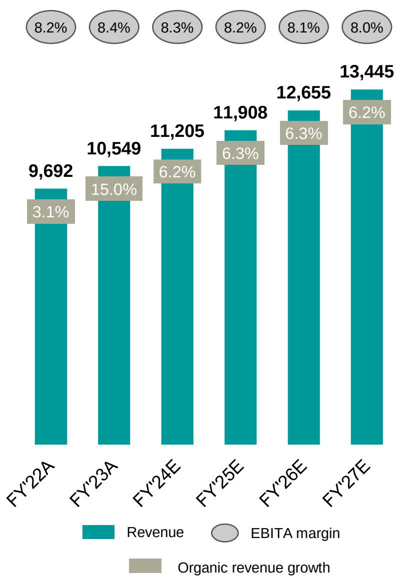
Source: European Commission; International Transport Forum

Exhibit x. Mobility's FY2022 Revenue Breakdown by Business



Source: Siemens

Exhibit 10. Mobility's Revenue and EBITA margin *(in EUR millions)*



Source: Analyst estimates; Siemens

Demand forecasts are expressed in passenger-kilometres and tonne-kilometres for passenger travel and freight transport, respectively. To estimate Mobility's exposure to passenger travel versus freight transport, an analysis is made to compare the economic value of one passenger-kilometre to that of one tonne-kilometre, respectively. The EU-28 average infrastructure costs in 2016 for electric and diesel passenger trains were €145 and €270 per 1,000 passenger-kilometres, respectively, whereas the costs for electric and diesel freight trains were €30 and €32 per 1,000 passenger-kilometres, respectively (European Commission 2019).[4] Additionally, the share of rail transport activity on electric trains is estimated at 85% for passenger and 55% for freight trains, with the remaining activity occurring on diesel trains (International Energy Agency 2023). The combination of these factors yields an 84–16 split for the economic value of a passenger-kilometre versus that of a tonne-kilometre, respectively. This split, weighed by the projected demand from OECD's International Transport Forum, suggests an average revenue exposure for Mobility of 74% to passenger train travel and 26% to freight train transport.

Global passenger train travel demand—encompassing urban, regional, and international and intercity travels—is anticipated to grow at a 2022–30 CAGR of 4.8% and to increase by 145% until 2050, fueled by international and intercity travels, with their share of the total passenger train travel demand expected to rise from 21% in 2022 to 44% in 2050, largely at the expense of regional travels (International Transport Forum 2023). Similarly, global freight train transport demand, comprising both domestic and international transports, is projected to grow at a 2022–30 CAGR of 2.5% and to increase by 150% until 2050 (International Transport Forum 2023).

For Mobility revenue-estimation purposes, a time-lag is considered between infrastructure investment decisions—primarily from public and state-owned companies, which are Siemens Mobility's main customers—and the projected future demand for passenger train travel and freight train transport. Based on this methodology and on the train demand outlook, Siemens' Rolling Stock and Rail Infrastructure businesses are estimated to grow at FY2023–28 CAGRs of 5.7% and 7.1%, respectively. Customer Services' revenue has historically represented approximately 18–20% of the combined revenue from Rolling Stock and Rail Infrastructure businesses; this ratio is expected to remain steady at 18.8% from FY2024 onwards. In the aggregate, Mobility's revenue is forecasted to grow at a FY2023–28 CAGR of 6.2%.

[4] 2016 price level, PPS adjusted

Contrasting with Digital Industries and Smart Infrastructure, Mobility's EBITA margin has been on a downward trend over the last five years, due to an increase in cost of sales and SG&A expenses as a percentage of revenue. R&D expenses have been marginally declining as a percentage of revenue, however its impact is minor at around 4% of revenue. The EBITA margin is thus projected to be slightly above 8%, in line with the past two years.

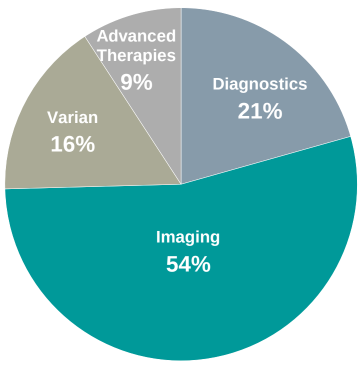
Capital expenditures have been at 1.8–2.0% of revenue in the past four years, and are estimated within this range for the future.

Siemens Healthineers

Siemens Healthineers' revenue is forecasted to move in line with both general healthcare industry trends and specific drivers affecting its various businesses.

A key trend shaping the healthcare sector, and Siemens Healthineers in particular, is the growing and ageing global population, with its impact being measured through an analysis of the growth in world population aged 65 and above. The share of this age group in total population rose from 8.2% in 2014 to 9.8% in 2022, and is anticipated to reach 11.8% by 2030. While the overall world population is expected to grow 8.8% over the next decade, population aged 65 and above is projected to see a 37.2% increase over the same period (World Bank 2023; United Nations 2022).

Exhibit 11. Siemens Healthineers' FY2023 Revenue Breakdown by Business



Source: Siemens Healthineers

Another important indicator for assessing growth in the healthcare sector is the global GDP share of health expenditure, which rose from 9.4% in 2014 to 9.8% in 2019, surging in 2020 to 10.9% due to Covid-19-related expenditure;[5] as of 2022, it stood at 10.7%. As the impacts of Covid-19 in the economy phase-out, the global GDP share of health expenditure is expected to stabilize, being projected at 10.8% in 2028 (Statista 2023).

Siemens Healthineers' Imaging business is projected to move largely in line with the global Diagnostic Imaging Devices market. After a 7.4% decrease in 2020 due to the Covid-19 pandemic—which led to fewer patients and delayed treatments—the worldwide Diagnostic Imaging Devices market rebounded with a 2020–23 CAGR of 5.1%, and is projected to grow at a 2023–28 CAGR of 4.7% (Statista Market Insights 2023), with Siemens Imaging business revenue projected to grow at a FY2023–28 CAGR of 5.8%.

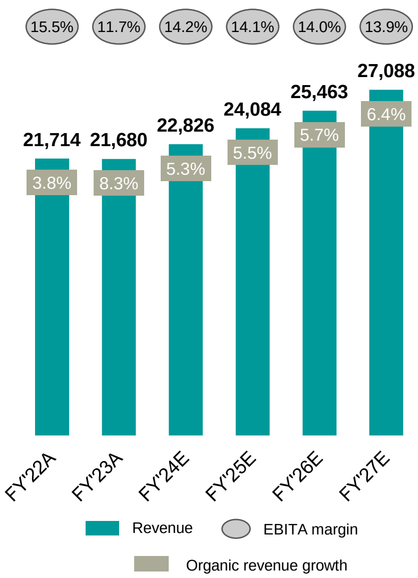
The Diagnostics business portfolio consists of in-vitro diagnostics, which encompasses both laboratory and point-of-care diagnostics. The latter includes

[5] For historical analysis and subsequent forecasting purposes, years after 2019 have not been considered as they heavily account for Covid-19-related expenditure.

rapid COVID-19 antigen tests, which accounted for approximately 70% of Diagnostics' abnormal revenue growth in FY2021 and FY2022, and for 91% of the revenue decline in FY2023. The global In-Vitro Diagnostics market exhibited a 2016–19 CAGR of 6.8% and is projected to grow at a 2023–28 CAGR of 2.0% (Statista Market Insights 2023).[6] Drawing on this, the Diagnostics business is estimated to grow at a FY2023–28 CAGR of 2.2%.

Siemens Healthineers' Varian business is driven by the rising global incidence of cancer, with new cancer cases projected to increase 2.0–2.5% YoY until 2040 (International Agency for Research on Cancer nd). Another driver selected for Varian is the global spending on oncology medicines, which experienced a 2018–23 CAGR of 11.1% and is antecipated to grow at a 2023–27 CAGR of 14.5% (IQVIA 2023). Given these trends, the Varian business is forecasted to grow at a FY2023–28 CAGR of 9.5%.

Exhibit 12. Siemens Healthineers' Revenue and EBITA margin *(in EUR millions)*



Source: Analyst estimates; Siemens Healthineers

The Advanced Therapies business's main products are Angiography Systems and Mobile C-Arms, accounting for 80% and 20% of revenue in FY2023, respectively. The global market for Angio Suites and C-Arms is projected to grow at 2023-25 CAGRs of 6.6% and 4.6% (GlobalData Market Analyzer nd), respectively. In light of these factors, Advanced Therapies business is projected to grow at a FY2023–28 CAGR of 4.9%.

Collectively, Siemens Healthineers businesses' revenue is forecasted to grow at a FY2023–28 CAGR of 5.7%.

Siemens Healthineers' EBITA margin, which ranged from 14.9% to 15.8% in FY2020-22, had a substantial decline to 11.7% in FY2023, largely due to lower earnings contributions from rapid COVID-19 antigen tests in the Diagnostics business. As a percentage of revenue, cost of sales has increased successively in the last five years, whereas SG&A and R&D expenses have displayed stable and decreasing patterns, respectively. The EBITA margin is therefore forecasted at approximately 14%.

Capital expenditures have been at 3.7–4.0% of revenue in the past five years, and are expected to maintain this level in the future.

Siemens Financial Services

At the core of Siemens Financial Services (SFS)'s offerings are the financing solutions provided to its Industrial Business customers. As of FY2023-end, receivables from loans and finance leases stand at 30% and 7% of Industrial

[6] For historical analysis and subsequent forecasting purposes, years post-2019 have not been excluded as they heavily account for Covid-related impacts

Business revenue, respectively; these ratios are assumed to remain at these levels going forward. As a financial institution, SFS adheres to certain leverage ratios—namely the debt-to-capital ratio, which has remained stable at 90.1% to 90.5% over the last five years. This ratio is projected at 90.2% for the future, unchanged from its FY2023-end level. Other balance sheet items of lesser significance include other financial assets and liabilities, assumed to remain constant, and net working capital, projected to move in line with the level of business activity.

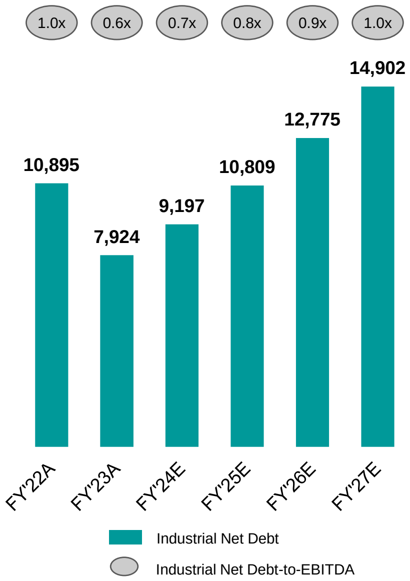
From an income statement standpoint, SFS's most important items are interest income and expenses, given the financial nature of its operations. Our estimated SFS's interest rate spread for the past four years is at 3.2–3.9%. This spread is assumed at 3.5% going forward, in line with our estimate for FY2023. Interest income and expenses are expected to track the balances of loans and finance leases receivables and financial debt, respectively, and correlate with changes in the Euro area annualized policy rate, which was 3.57% in Q3 2023 and is projected to be 2.55% by Q3 2028 (IMF 2023). Revenue and SG&A expenses, forecasted as a percentage of loans and finance leases receivables, have shown a downward trend, with future ratios estimated at 2.0% and 2.8%, respectively.

Portfolio Companies, Corporate Center & Elim.

Portfolio Companies, Corporate Center & Eliminations encompasses Siemens' portfolio companies, centrally carried expenses, and other reconciling items such as eliminations of intersegment transactions. The rationale for defining this segment stems from the lack of information regarding Siemens' portfolio companies and from the pattern observed over the past five years, where, following the allocation of revenues and operating expenses across the segments, the reconciliation of these items to the consolidated financial statements is consistently negative. Hence, this segment is formulated so it can be forecasted and included in Siemens's valuation—as omitting it would lead to an overvaluation of the stock.

The forecasting of this segment's figures does not follow any specific drivers, being estimated based on historical ratios of the corresponding captions in Siemens' operating segments. The impact of this segment on Siemens AG's valuation is detailed in the Valuation section.

Exhibit 13. Siemens AG Financial Leverage *(in EUR millions)*



Source: Analyst estimates; Siemens

Capital Structure

Siemens AG targets its leverage through its defined Industrial Net Debt-to-EBITDA,[7] with the company reporting that it aims to maintain this ratio at a maximum of 1.5x. However, it has remained well below this target historically, except during COVID-impacted FY2020–21, when it reached 1.3x and 1.5x, respectively. As of FY2023, Siemens-defined Industrial Net Debt-to-EBITDA stands at 0.6x and is forecasted to increase by 0.1x annually until FY20xx, stabilizing at 1.2x in perpetuity.

The dividend payout ratio is projected to remain at the FY2023 level—approximately 47%. Share issuances/repurchases act as the model's 'plug' variable, with Siemens forecasted to engage in share repurchases, supported by the estimated increase in leverage.

Other Items

Regarding taxation, no major changes in governments' tax policies are expected—statutory tax rates are assumed to remain unchanged and other tax effects are estimated based on historical analysis, leading to a projected effective tax rate of 23% for the foreseeable future. Items whose valuation is not cash flow-based are forecasted solely for future consolidated financial statements projection purposes, and do not impact the stock valuation.[8]

Valuation

The Adjusted Present Value (APV) is selected as the primary valuation method for Siemens AG's core business operations, due to the firm's strategy of aligning its financial leverage with its target Industrial Net Debt-to-EBITDA ratio. The fluctuation of debt based on EBITDA, rather than on Enterprise Value, renders APV a more suitable method than the traditional DCF.

All cash flow-based valuations follow the mid-year discounting convention, i.e., each fiscal year's (FY) cash flow is discounted under the assumption that it takes

[7] Industrial Net Debt comprises financial debt not allocated to Siemens Financial Services and other debt-like items. Siemens definition differs from our defined Industrial Net Debt for valuation purposes—as outlined in the Valuation section—as the latter does not include pension provisions, credit guarantees, and operating cash.
[8] Income statement items forecasted either nil, at historical averages, or based on consensus; and balance items forecasted as FY2023-end unchanged book value.

place at the midpoint of the FY rather than at FY-end. This approach mirrors the real-life dispersion of cash flows throughout a FY—contrasting with a single cash flow at FY-end—thereby more accurately reflecting the actual timing of cash flows. Moreover, since the valuation reference date falls within FY2025—and following the assumption of FY2025's cash flow to be evenly spread throughout the FY—the cash flow spanning the start of FY2025 to the reference date is excluded from the valuation, and the expected cash flow from the reference date to FY2025-end is assumed to occur at the midpoint of these dates for discounting purposes.

Siemens AG's core business operations are valued through a sum-of-the-parts (SOTP) intrinsic cash flow-based valuation. Industrial business segments are valued through their respective free cash flows discounted at each segment's specific unlevered cost of equity, while Portfolio Companies, Corporate Center & Eliminations is discounted at a weighted average unlevered cost of equity.[9] Siemens Financial Services, given its financial nature, is valued through the Flow-to-Equity (FTE) method, i.e., equity cash flows discounted at the levered cost of equity. Given Siemens' leverage policy wherein the Industrial Net Debt is not permanent nor predetermined—i.e., it moves in tandem with the level of business activity, as measured by EBITDA—the risk associated with tax shields is assumed equivalent to the risk of the firm's assets. Therefore, non-SFS interest tax shields are discounted at the unlevered cost of equity,[7] rather than at the cost of debt. Other assets, liabilities, and claims against the company's Enterprise Value—including investments in other companies, minority interests, and nonoperating provisions—are valued autonomously at each item's appropriate valuation method, detailed later in this section.

Cost of Capital & Core Business Value

Each segment's operating cash flows are discounted at a segment-specific cost of capital, as different segments have different underlying systematic risks. To estimate the cost of capital for each core business segment, a set of comparable publicly traded companies was selected, based on competitors' information provided by Siemens and financial databases such as Bloomberg and Refinitiv. Equity/levered betas for these firms were retrieved and subsequently unlevered—taking into account each company's capital structure—using the

[9] Industrial Business segments' unlevered cost of equity weighted by each segment's estimated FCF-value as of this report's publishing date.

Exhibit 14. Siemens AG Cost of Capital Inputs

Market inputs

		Source:
Risk-free rate	2.27%	Germany 20-Year Government Bond
Market risk premium	5.70%	Fernandez, García, and Acin 2023

Segment inputs

	Unlevered Beta[1]	Unlevered cost of equity	Terminal growth rate
Digital Industries	1.06	8.3%	2.3%
Smart Infrastructure	0.87	7.2%	2.5%
Mobility	0.72	6.4%	2.1%
Siemens Healthineers	0.70	6.2%	3.0%
Siemens Financial Services[2]	1.00	8.0%	2.8%
Portf. Comp., Corp. Center & Elim.	n/a	7.2%	2.5%
Non-SFS Interest Tax Shield	n/a	7.2%	2.5%

[1] Peers' median (based on five-year monthly stock returns)
[2] Relevered beta and unlevered cost of equity; assuming peers' median unlevered beta of 0.19 and market Net Debt-to-Enterprise Value of 85%, and tax rate of 22.4%

Exhibit 15. Siemens AG Core Business Valuation Buildup as of 19-Dec-24 *(in EUR millions)*

Digital Industries Value [U]	77,528
Smart Infrastructure Value [U]	56,855
Mobility Value [U]	18,794
Siemens Healthineers Value [U]	80,722
Industrial Business Value [U]	**233,900**
SFS Equity Value	11,590
PC, CC & Elim. Value [U]	(30,189)
Core Business Value [U]	**215,301**

[U] Unlevered

Source: Analyst estimates

Exhibit 16. Siemens AG's At-Equity Investments and Minority Interest Book vs. Market Value *(in EUR millions)*

	Book Value	Market Value	Val. Method
At-equity investments			
Siemens Energy AG	1,779	2,213	**Market Cap**
Other associates	1,235	3,071	**P/E**
Minority interests			
Siemens Healthineers AG	4,341	16,513	**DCF**
Other subsidiaries	929	3,746	**P/E**

Source: Analyst estimates; Bloomberg

Harris–Pringle equation.[10] Subsequently, each Industrial Business segment's unlevered cost of equity was estimated through the Capital Asset Pricing Model (CAPM) equation, taking as inputs (i) a risk-free rate of xx%, corresponding to the yield of Germany 20-year government bonds; a market risk premium of xx% (Fernandez, García, and Acin 2023); and (iii) the unlevered betas estimated for each segment. For Siemens Financial Services, which is valued at Flow-to-Equity, the unlevered beta was relevered using the peer group's median capital structure to estimate the levered cost of equity.

The unlevered cash flows of the Industrial Business segments and Portfolio Companies, Corporate Center & Eliminations are then discounted at the respective unlevered cost of equity, while Siemens Financial Services' equity cash flows are discounted at the levered cost of equity.

To determine the terminal value for the segments, a terminal growth rate was estimated for each segment, ranging from 2% to 3%, in line with long-term GDP growth. Siemens Healthineers is assumed to have the highest long-term growth rate, as it benefits from stable growth in the healthcare industry and persistent advancements in medical technology. It is followed by Smart Infrastructure and Digital Industries with long-term growth rates of 2.5% and 2.3%, respectively. While both segments are clearly expanding, Digital Industries is expected to reach market saturation at an earlier stage. Mobility is mainly driven by public spending and its terminal growth is therefore projected more conservatively at 2%. The remaining segments are driven by the Industrial segments, and hence their respective terminal growth rates, displayed in Exhibit 14, are an output of the model

Core Business Value-to-Implied Share Price Bridge

Siemens AG's stake in Siemens Energy AG—at-equity accounted in the company's financial statements—is valued by multiplying Siemens Energy's market capitalization of €8,818 million by Siemens AG's ownership interest of 25.1%. Other equity-accounted associates and joint ventures are valued at a 18.0x P/E multiple,[11] applied to Siemens AG's share of profit from these entities in FY2023. Other non-core assets and liabilities—including deferred taxes and non-debt financial assets and liabilities—are added at book value to arrive at Siemens AG's Unlevered Enterprise Value. To this figure, the value of non-SFS

[10] Assuming the debt beta equals zero and that the risk of each company's tax shields is equal to that of its assets; slightly modified to account for minority interests in the capital structure, and assuming its beta equals that of equity.
[11] The P/E multiple applied is a weighted average of the Industrial Business segments' P/E multiples, excluding Siemens Healthineers.

Exhibit 17. Siemens Healthineers Proforma Valuation Buildup as of 19-Dec-24 *(in EUR millions exc. shares in millions and share price in EUR)*

		Valuation Method
Core Business Value [L]	82,468	DCF[1]
At-equity investments	44	P/E
Other Non-Core Assets (Liabilities)	1,912	Book V.
Enterprise Value [L]	**84,424**	
Net Debt	(14,821)	Book V.
Nonoperating provisions	(172)	Book V.
After-tax pension provisions	(393)	Book V.
Minority interests	(234)	P/E
Equity Value[2]	**68,804**	
(÷) # Diluted shares outstanding	1,124	
Implied Share Price *(in EUR)*	**61.24**	
Share price as of 19-Dec-23	*53.74*	

[L] Levered

[1] Employing the same unlevered cash flows and cost of capital inputs as in Siemens Healthineers segment valuation, assuming a 3.7% cost of debt, a target Net Debt-to-Enterprise Value of 22%, and a tax rate of 23%

[2] Assuming no transactions with shareholders in the next twelve month, and thus Siemens AG stake unchanged

Source: Analyst estimates

Exhibit 18. Siemens AG Core Business Value-to-Implied Share Price Bridge as of 19-Dec-24 *(in EUR millions exc. shares in millions and share price in EUR)*

Core Business Value [U]	**215,301**
Investment in Siemens Energy AG	2,213
Other at-equity investments	3,071
Other Non-Core Assets (Liabilities)	(702)
Unlevered Enterprise Value	**219,883**
Non-SFS Interest Tax Shield Value	772
Levered Enterprise Value	**220,656**
Industrial Net Debt	(9,390)
Nonoperating provisions	(2,078)
After-tax pension provisions	283
Minorities - Siemens Healthineers AG	(16,513)
Minorities - Other subsidiaries	(3,746)
Contingent liabilities	(6,559)
Equity Value	**182,653**
(÷) # Diluted shares outstanding	750
Implied Share Price	**243.58**

[U] Unlevered

Source: Analyst estimates

interest tax shields is added to arrive at Siemens AG's Levered Enterprise Value of €220,656 million.

The Levered Enterprise Value is then deducted by the various claims against it that have priority over the interests of Siemens AG's shareholders. These claims include the projected book value of Industrial Net Debt as of December 2024, after-tax pension provisions, nonoperating provisions, off-balance sheet contingent liabilities, and minority interests. Minority interests in Siemens Healthineers AG are valued through Discounted Cash Flow,[12] multiplied by the 24% of ownership interests not held by Siemens AG. Other minority interests are valued at a 18.0x P/E multiple,[10] applied to Siemens AG's net income attributable to these minorities in FY2023.

Finally, the resultant projected fair Equity Value as of December 2024, estimated at €182,653, is divided by the number of diluted shares anticipated to be outstanding in December 2024 (deducted of projected shares to be repurchased over the next twelve months), thereby yielding an implied share price of €243.58.

Scenario Analysis

The scenario and valuation buildup outlined in the preceding sections constitute our base case. Complementing this are two additional scenarios—an upside case and a downside case—grounded on Siemens' guidance for organic revenue growth and EBITA margins within its Industrial segments for the next five years,[13] with all other assumptions kept constant. Items whose valuation is neither cash flow-based nor cash flow-impacted remain unchanged across the three scenarios. These alternate scenarios are intended to help investors gauge the fair share price that would be expected should Siemens' guidance range upper or lower bounds materialise, and to provide a critical assessment of the reasonableness of Siemens' guidance. However, it is important to note that these scenarios should be taken with caution, as they are provided by Siemens and thus subject to potential bias, and also because they were introduced in 2021. However, their continued reference in Siemens' annual reports and earnings presentations justifies their inclusion in our analysis.

In the case of Digital Industries, base case forecasts for organic revenue growth exceed Siemens' guidance upper bound, influenced by the segment's performance over the past three years, which saw growth rates from 13% to 15%. The base case EBITA margin falls at the midpoint of Siemens' guidance.

[13] For FY2024, as per Siemens' guidance in its FY2023 annual report. For FY2025-28, as per Siemens Financial Framework—Siemens-defined *"targets over 3–5 year cycle"*.

Exhibit 19. Siemens AG Scenario Analysis Inputs

SIEMENS AG

	Base case	Upside case	Downside case
		Siemens Guidance	
Digital Industries			
Org. revenue gr.	6.9%	6.2%	4.0%
EBITA margin	20.2%	23.0%	17.6%
Smart Infrastructure			
Org. revenue gr.	6.3%	6.8%	4.6%
EBITA margin	13.0%	16.2%	11.8%
Mobility			
Org. revenue gr.	6.2%	8.6%	5.6%
EBITA margin	8.1%	12.4%	9.6%
Siemens Healthineers			
Org. revenue gr.	5.7%	7.8%	5.8%
EBITA margin	14.0%	21.0%	17.0%

Organic revenue CAGR FY2023–28
Average EBITA Margin FY2024–28

Source: Analyst estimates; Siemens

Exhibit 20. Siemens AG Valuation Buildup by Scenario as of 19-Dec-24 *(in EUR millions exc. shares in millions and share price in EUR)*

	Base case	Upside case	Downside case
		Siemens Guidance	
Digital Industries Value [U]	77,528	77,011	65,872
Smart Infrastructure Value [U]	56,855	60,194	51,337
Mobility Value [U]	18,794	22,964	18,868
Siemens Healthineers Value [U]	80,722	98,678	83,487
Industrial Business Value [U]	**233,900**	**258,848**	**219,564**
SFS Equity Value	11,590	12,026	10,971
PC, CC & Elim. Value [U]	(30,189)	(31,470)	(29,206)
Core Business Value [U]	**215,301**	**239,404**	**201,329**
Investment in Siemens Energy AG	2,213	2,213	2,213
Other at-equity investments	3,071	3,024	3,029
Other Non-Core Assets (Liabilities)	(702)	(702)	(702)
Unlevered Enterprise Value	**219,883**	**243,939**	**205,869**
Non-SFS Interest Tax Shield Value	772	843	732
Levered Enterprise Value	**220,656**	**244,782**	**206,601**
Industrial Net Debt	(9,390)	(11,883)	(9,631)
Nonoperating provisions	(2,078)	(2,078)	(2,078)
After-tax pension provisions	283	283	283
Minorities - Siemens Healthineers AG	(16,513)	(20,888)	(17,161)
Minorities - Other subsidiaries	(3,746)	(3,716)	(3,721)
Contingent liabilities	(6,559)	(6,559)	(6,559)
Equity Value	**182,653**	**199,941**	**167,734**
(÷) # Diluted shares outstanding	750	732	742
Implied Share Price	**243.58**	**273.26**	**225.97**
	vs. base case	*+12.2%*	*-7.2%*

Source: Analyst estimates; Siemens

Exhibit 21. Siemens AG Stock Price Sensitivity Analysis

		Terminal growth rate				
		-1.0%	-0.5%	Baseline	+0.5%	+1.0%
Discount rate	-2.0%	338	386	461	605	1,110
	-1.0%	261	284	315	360	430
	Baseline	213	226	244	265	295
	+1.0%	180	189	199	212	228
	+2.0%	156	162	169	177	187

For Smart Infrastructure, our base case projects organic revenue growth towards the higher end of Siemens' guidance. Similarly to Digital Industries, this is impacted by the above-average growth rates of 8% to 15% observed over the last three years. The base case EBITA margin falls in the lower spectrum of Siemens' guidance.

Regarding Mobility, base case forecasts for organic revenue growth fall in the lower end of Siemens' guidance, while the base case EBITA margin is below Siemens' guidance lower bound. In our view, Siemens is being overly optimistic regarding its margin, considering its downward trend and a peak EBITA margin of only 9.2% in the past four years.

For Siemens Healthineers, both the projected organic revenue growth and EBITA margin in our base case fall below Siemens' guidance threshold. This stems from our projection of a slowdown in growth for Imaging and Advanced Therapies businesses, coupled with weak growth in Diagnostics. The EBITA margin forecast below Siemens guidance reflects the fact that the highest margin achieved in the past four years was only 15.8%.

Following the FY2023–28 period, the assumptions for organic revenue growth and EBITA margin are the same across the three scenarios, with differences in assumptions during this period yielding a share price of €276.26 in the upside case, 12.2% above our base case, whereas the downside case suggests a share price of €225.97, 7.2% below the base case.

Sensitivity Analysis

To complement and stress-test our baseline valuation, we conducted a sensitivity analysis on Siemens' stock price, which shows the sensitivity of Siemens stock price with respect to increments in the terminal growth rate and discount rate (applicable to all segments).

Relative Valuation

Similarly to the approach employed in our baseline valuation framework, Siemens AG's relative valuation also entails a sum-of-the-parts valuation. This methodology is fitting given the heterogeneity of Siemens AG's segments in terms of their operational and financial profiles. Thus, valuing each segment at its specific multiple leads to a more accurate stock valuation than applying a single multiple for the entire company. This relative valuation is based on forward multiples from comparable companies[14]. The selected valuation multiples are

[14] Using the same companies as for the cost of capital estimation.

Enterprise Value-to-Revenue and Enterprise Value-to-EBITDA.[15] The median of these multiples sets the baseline for our relative valuation, complemented by the 25th and 75th percentile multiples to yield a range of possible share prices based on Siemens AG's peers. It should be noted, however, that the standalone value of each segment and the bottom line are not comparable on a one-to-one basis to those in the baseline valuation framework due to differences in the Enterprise Value calculation formula. For instance, in our relative valuation buildup, minority interests are valued at book value, which can significantly differ from their fair market value—as with Siemens Healthineers AG—potentially leading to material distortions.

Exhibit 22. Siemens AG Relative Valuation Buildup *(in EUR millions exc. shares in millions and share price in EUR)*

	Enterprise Value-to-Revenue						
	Applicable Siemens AG Figure[1]	Applicable Multiple			Valuation		
		Median	75th Percentile	25th Percentile	Median	75th Percentile	25th Percentile
Digital Industries Value	23,765	2.5x	4.4x	1.9x	58,863	104,357	45,820
Smart Infrastructure Value	21,492	2.5x	2.8x	2.0x	53,318	60,150	43,619
Mobility Value	11,381	1.3x	2.0x	0.8x	15,080	22,359	8,705
Siemens Healthineers Value	23,141	3.0x	4.0x	1.7x	69,579	93,319	39,322
Industrial Business Value					**196,839**	**280,185**	**137,465**
SFS Equity Value[2]	462	8.1x	9.8x	5.9x	3,754	4,516	2,708
PC, CC & Elim. Value[3]	3,600	2.5x	3.5x	1.7x	8,883	12,645	6,204
Enterprise Value					**209,477**	**297,346**	**146,377**
Industrial Debt					(17,839)	(17,839)	(17,839)
Cash and equivalents					10,084	10,084	10,084
Minority interests					(5,270)	(5,270)	(5,270)
Equity Value					**196,452**	**284,321**	**133,352**
(÷) # Diluted shares outstanding[4]					750	750	750
Implied Share Price					**261.98**	**379.15**	**177.83**

	Enterprise Value-to-EBITDA						
	Applicable Siemens AG Figure[1]	Applicable Multiple			Valuation		
		Median	75th Percentile	25th Percentile	Median	75th Percentile	25th Percentile
Digital Industries Value	5,159	12.7x	18.8x	11.6x	65,455	96,929	60,093
Smart Infrastructure Value	3,084	12.0x	13.8x	11.4x	37,106	42,666	35,137
Mobility Value	1,081	8.5x	10.3x	8.1x	9,221	11,152	8,802
Siemens Healthineers Value	4,329	11.9x	15.5x	9.1x	51,442	67,143	39,376
Industrial Business Value					**163,224**	**217,890**	**143,409**
SFS Equity Value[2]	462	8.1x	9.8x	5.9x	3,754	4,516	2,708
PC, CC & Elim. Value[3]	(655)	12.0x	16.0x	10.5x	(7,834)	(10,458)	(6,883)
Enterprise Value					**159,143**	**211,948**	**139,233**
Industrial Debt					(17,839)	(17,839)	(17,839)
Cash and equivalents					10,084	10,084	10,084
Minority interests					(5,270)	(5,270)	(5,270)
Equity Value					**146,118**	**198,923**	**126,208**
(÷) # Diluted shares outstanding[4]					750	750	750
Implied Share Price					**194.86**	**265.27**	**168.30**

[1] Figure for 2024 calendar year; includes 3/4 of figure estimated for FY24 and 1/4 of figure estimated for FY25
[2] Valued at P/E
[3] Valued at Industrial segments' weighted average multiple
[4] Number of diluted shares estimated to be outstanding in December 2024 in the baseline valuation, for implied share price comparability purposes across valuation methods

Source: Analyst estimates; Bloomberg

The Enterprise Value-to-Revenue valuation yields a share price of €261.98, 7.5% above our baseline valuation. In addition to the above-mentioned comparability limitations, further constraints arise from a segment perspective since Portfolio Companies, Corporate Center & Eliminations has a positive value, in contrast with the baseline valuation framework, distorting the comparability of the other segments. The Enterprise Value of both methods is identical, with the primary difference lying in the valuation of minority interests, mainly due to Siemens Healthineers AG, causing differences in the Equity Value.

The Enterprise Value-to-EBITDA renders a share price of €194.86, 20% below our baseline valuation. Despite the comparability limitations, all segments have a substantially lower value compared to the baseline cash flow-based valuation.

[15] Given the financial nature of its operations, SFS is always valued at Price-to-Earnings in these multiples' valuation buildup.

Peers' multiples are relatively uniform in the Smart Infrastructure and Mobility segments, with small variation in the 75th and 25th percentile valuations relative to the median baseline valuation, and Digital Industries' median multiple near the 25th percentile; on the other hand, Digital Industries' 75th percentile multiple is 48% higher than the median. Finally, Siemens Healthineers' peers' multiples are rather widespread, with the 75th percentile 30.5% above the median and the 25th percentile 23.5% below the median, introducing some uncertainty in this segment's Enterprise Value-to-EBITDA valuation.

Price Target & Recommendation

Based on the valuation methodologies applied and described above, we weight the different implied share prices yielded by the different methods according to the ones we believe to be the most accurate given Siemens AG's complexity as a conglomerate from a valuation perspective. We attribute a 70% weight to our baseline valuation framework, as it is the one that involved a more detailed and granular process from an analytical perspective. We attribute a weight of 20% to the Enterprise Value-to-EBITDA as it shows slight to moderate volatility between the median and 75th and 25th percentile valuations, hence showing less uncertainty than Enterprise-to-Revenue, for instance. Finally, we attribute a weight of 5% to the upside case and 5% to the downside case. As these scenarios are based on Siemens guidance, we decide to include them with a minimal weight as they may be subject to potential bias from Siemens management.

Valuation Summary

Valuation Framework	**Implied Share Price**	**Weight**
SOTP APV - Base case	EUR 243.58	**70%**
SOTP APV - Upside case	EUR 273.26	**5%**
SOTP APV - Downside case	EUR 225.97	**5%**
SOTP EV-to-Revenue	EUR 261.98	**0%**
SOTP EV-to-EBITDA	EUR 194.86	**20%**

This yields a price target of €234 for December 2024, added of an already announced dividend of €4.70 relative to FY2023's results, resulting in an expected capital gain of 39.3% and a dividend yield of 2.8%. Therefore, we issue a BUY recommendation. We see Siemens has having upside potential and the market to price-in this outlook.

Appendix

Financial Statements

Siemens AG Income Statement

Fiscal year ending September 30 *(in EUR millions)*	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E
Revenue	62,265	71,977	77,769	82,681	87,890	93,486	99,716	105,858
Cost of sales	(39,528)	(46,130)	(48,116)	(52,065)	(55,326)	(58,824)	(62,730)	(66,581)
Gross profit	**22,737**	**25,847**	**29,653**	**30,616**	**32,565**	**34,661**	**36,986**	**39,277**
Research and development expenses	(4,859)	(5,591)	(6,183)	(6,548)	(6,969)	(7,425)	(7,926)	(8,419)
Selling and general administrative expenses	(11,190)	(12,857)	(13,941)	(14,755)	(15,682)	(16,677)	(17,786)	(18,881)
Other operating income	236	2,171	574	547	547	547	547	547
Other operating expenses	(432)	(287)	(454)	(386)	(386)	(386)	(386)	(386)
Income (loss) from investments accounted for using the equity method	(428)	(2,085)	906	946	874	1,037	1,111	1,190
Interest income	1,441	1,632	2,406	2,213	2,129	2,162	2,306	2,465
Interest expenses	(644)	(689)	(1,373)	(1,323)	(1,190)	(1,142)	(1,229)	(1,324)
Other financial income (expenses)	635	(987)	(387)	(155)	(155)	(155)	(155)	(155)
Income (loss) from continuing operations before income taxes	**7,496**	**7,154**	**11,201**	**11,156**	**11,733**	**12,622**	**13,468**	**14,314**
Income tax expenses	(1,860)	(2,741)	(2,687)	(2,557)	(2,690)	(2,892)	(3,086)	(3,279)
Income (loss) from continuing operations	**5,636**	**4,413**	**8,514**	**8,599**	**9,043**	**9,730**	**10,383**	**11,035**
Income (loss) from discontinued operations, net of income taxes	1,061	(21)	15	—	—	—	—	—
Net income (loss)	**6,697**	**4,392**	**8,529**	**8,599**	**9,043**	**9,730**	**10,383**	**11,035**
Net income (loss) attributable to non-controlling interests	(537)	(669)	(580)	(907)	(945)	(987)	(1,037)	(1,083)
Net income (loss) attributable to shareholders of Siemens AG	**6,160**	**3,723**	**7,949**	**7,692**	**8,098**	**8,743**	**9,346**	**9,952**

Siemens AG Balance Sheet

Fiscal year ending September 30 *(in EUR millions)*	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E
Cash and cash equivalents	9,545	10,465	10,084	9,103	10,624	12,453	14,439	16,568
Trade and other receivables	15,518	16,701	17,404	18,739	19,920	21,188	22,600	23,993
Other current financial assets	7,985	9,696	10,605	11,219	11,993	12,862	13,819	14,795
Contract assets	6,645	7,559	7,581	8,649	9,202	9,796	10,452	11,104
Inventories	8,836	10,626	11,548	11,981	12,721	13,517	14,411	15,286
Current income tax assets	1,795	1,432	1,363	1,622	1,714	1,842	1,967	2,093
Other current assets	1,751	1,936	1,955	2,105	2,218	2,340	2,476	2,610
Assets classified as held for disposal	223	413	99	99	99	99	99	99
Total current assets	**52,298**	**58,828**	**60,639**	**63,517**	**68,493**	**74,096**	**80,264**	**86,547**
Goodwill	29,672	33,861	32,225	32,225	32,225	32,225	32,225	32,225
Other intangible assets	10,827	12,197	10,641	9,974	9,482	9,140	8,928	8,822
Property, plant and equipment	11,023	11,733	11,938	11,190	10,638	10,254	10,016	9,897
Investments accounted for using the equity method	7,539	4,955	3,014	3,342	3,599	4,017	4,510	5,083
Other financial assets	22,964	25,903	22,856	24,356	24,880	26,464	28,222	29,974
Deferred tax assets	2,865	2,459	2,231	2,231	2,231	2,231	2,231	2,231
Other assets	2,184	1,566	1,523	1,523	1,523	1,523	1,523	1,523
Total non-current assets	**87,074**	**92,674**	**84,428**	**84,841**	**84,578**	**85,853**	**87,655**	**89,755**
Total assets	**139,372**	**151,502**	**145,067**	**148,357**	**153,071**	**159,949**	**167,919**	**176,301**
Short-term debt and current maturities of long-term debt	7,821	6,658	7,483	7,844	8,534	9,503	10,566	11,684
Trade payables	8,832	10,317	10,129	11,637	12,374	13,164	14,041	14,911
Other current financial liabilities	1,731	1,616	1,601	1,601	1,601	1,601	1,601	1,601
Contract liabilities	9,876	12,049	12,570	13,499	14,348	15,260	16,277	17,277
Current provisions	2,293	2,156	2,320	2,481	2,565	2,655	2,754	2,853
Current income tax liabilities	1,809	2,381	2,566	2,937	3,104	3,334	3,562	3,790
Other current liabilities	7,628	7,448	8,182	8,700	9,251	9,842	10,498	11,148
Liabilities associated with assets classified as held for disposal	10	61	50	50	50	50	50	50
Total current liabilities	**40,000**	**42,686**	**44,901**	**48,748**	**51,827**	**55,408**	**59,349**	**63,315**
Long-term debt	40,879	43,978	39,112	40,998	44,605	49,669	55,224	61,071
Provisions for pensions and similar obligations	2,839	2,275	1,426	1,426	1,426	1,426	1,426	1,426
Deferred tax liabilities	2,337	2,381	1,655	2,108	2,108	2,108	2,108	2,108
Provisions	1,723	1,857	1,794	1,918	1,983	2,053	2,130	2,206
Other financial liabilities	679	1,867	1,453	1,453	1,453	1,453	1,453	1,453
Other liabilities	1,924	1,653	1,666	1,666	1,666	1,666	1,666	1,666
Total non-current liabilities	**50,381**	**54,011**	**47,106**	**49,569**	**53,241**	**58,375**	**64,007**	**69,930**
Total liabilities	**90,381**	**96,697**	**92,007**	**98,317**	**105,068**	**113,783**	**123,356**	**133,245**
Total equity attributable to shareholders of Siemens AG	**44,160**	**48,895**	**47,790**	**43,863**	**40,881**	**38,057**	**35,417**	**32,827**
Non-controlling interests	4,831	5,910	5,270	6,177	7,122	8,109	9,146	10,229
Total equity	**48,991**	**54,805**	**53,060**	**50,040**	**48,003**	**46,166**	**44,563**	**43,056**
Total liabilities and equity	**139,372**	**151,502**	**145,067**	**148,357**	**153,071**	**159,949**	**167,919**	**176,301**

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Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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