1. Organization of the Siemens Group and basis of presentation

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 comprises Siemens Aktiengesellschaft (Siemens AG), a stock corporation under the Federal laws of Germany, as the parent company, and its subsidiaries. Our Company is incorporated in Germany, with our corporate headquarters situated in Munich. As of September 30, 2022, Siemens had around 311,000 employees.

As of September 30, 2022, Siemens has the following reportable segments: **Digital Industries**, **Smart Infrastructure**, **Mobility** and **Siemens Healthineers**, which together form our "Industrial Business" and **Siemens Financial Services (SFS),** which supports the activities of our industrial businesses and also conducts its own business with external customers. Furthermore, we report results for **Portfolio Companies**, which comprises businesses that are managed separately to improve their performance.

Our reportable segments and Portfolio Companies may do business with each other, leading to corresponding orders and revenue. Such orders and revenue are eliminated on the Group level.

Non-financial matters of the Group and Siemens AG

Siemens has policies for environmental, employee and social matters, for the respect of human rights, and anti-corruption and bribery matters, among others. Our business model is described in chapters 1 and 3 of this Combined Management Report. Reportable information that is necessary for an understanding of the development, performance, position and the impact of our activities on these matters is included in this Combined Management Report, in particular in chapters 3 through 7. Forward-looking information, including risk disclosures, is presented in chapter 8. Chapter 9 includes additional information that is required to be reported in the Combined Management Report related to the parent company Siemens AG. As supplementary information, amounts reported in the Consolidated Financial Statements and the Annual Financial Statements of Siemens AG related to such non-financial matters, and additional explanations thereto, are included in Notes to Consolidated Financial Statements for fiscal 2022, Notes 17, 18, 22, 26 and 27, and in the Notes to the Annual Financial Statements for fiscal 2022, Notes 16, 17, 20, 21 and 25. In order to inform the users of the financial reports in a focused manner, these disclosures are not subject to a specific non-financial framework – in contrast to the disclosures in our separate "Sustainability report 2022" document, which are based on the standards developed by the Global Reporting Initiative (GRI). Said document also includes detailed information on DEGREE, Siemens' sustainability framework. With DEGREE, Siemens intends to manage and track its progress on selected ambitions in the environmental, social and governance areas.

Disclosures in accordance with EU Taxonomy: The key performance indicators in this section were determined based on Commission Delegated Regulation (EU) 2021/2178 in conjunction with the International Financial Reporting Standards applicable for the Consolidated Financial Statements. Thereby, revenue, capital expenditures and operating expenses were predominantly directly allocated to an economic activity listed in Delegated Regulation (EU) 2020/852; in determining capital expenditures and operating expenses, allocations were also made based on the revenue of the Taxonomy-eligible activities. To avoid double counting, the allocation was always made to one economic activity only. Taxonomy-eligible revenue accounted for 20% of revenue according to the Consolidated Statement of Income in the reporting year. In the reporting year, Taxonomy-eligible capital expenditures accounted for 40% of additions (including additions from business combinations) to other intangible assets and property, plant and equipment in accordance with Note 13 to the Consolidated Financial Statements. Taxonomy-eligible operating expenses accounted for 14% of the corresponding expenses recognized in the Consolidated Financial Statements in the reporting year. The remaining portions of the key performance indicators are not Taxonomy-eligible. Our main Taxonomy-eligible economic activities are derived from the manufacture of low-carbon transport and energy-efficient building technologies (mainly from Mobility and Smart Infrastructure operations), transport infrastructure (from Mobility operations) and the service of energy-efficient building technologies (from Smart Infrastructure operations), as well as the Group's own real estate portfolio. The majority of Taxonomy-eligible capital expenditures result from the latter economic activity. The above-mentioned economic activities refer to chapters 3, 6 and 7 of Annex I of Delegated Regulation (EU) 2020/852.

2. Financial performance system

2.1 Revenue growth

In the Siemens Financial Framework we aim to achieve a revenue growth range of 5% to 7% per year on a comparable basis over a cycle of three to five years. Our primary measure for managing and controlling our revenue growth is comparable growth, because it shows the development in our business net of currency translation effects, which arise from the external environment outside of our control, and portfolio effects, which involve business activities which are either new to or no longer a part of the respective business.

Currency translation effects are the difference between revenue for the current period calculated using the exchange rates of the current period and revenue for the current period calculated using the exchange rates of the comparison period. For calculating the percentage change year-over-year, this absolute difference is divided by revenue for the comparison period. A portfolio effect arises in the case of an acquisition or a disposition and is calculated as the change year-over-year in revenue related to the transaction. For calculating the percentage change, this absolute change is divided by revenue for the comparison period. Any portfolio effect is excluded for the 12 months following the relevant transaction after which both current and past reporting periods fully reflect the portfolio change. For orders, we apply the same calculations for currency translation and portfolio effects as described above.

2.2 Profitability and capital efficiency

Within the Siemens Financial Framework, we aim to achieve over a cycle of three to five years margins that are comparable to those of our relevant competitors. Therefore, we have defined profit margin ranges for our industrial businesses which also consider the profit margins of their respective relevant competitors. Profit margin is defined as profit of the respective business divided by its revenue.

For our industrial businesses, profit represents EBITA adjusted for amortization of intangible assets not acquired in business combinations.

We have set the following margin ranges:

	Margin range
Digital Industries	**17 - 23%**
Smart Infrastructure	**11 - 16%**
Mobility	**10 - 13%**
Siemens Healthineers	**17 - 21%**
Siemens Financial Services (ROE after tax)	**15 - 20%**

For Siemens Healthineers, we present the margin range we expect as that company's majority shareholder.

In line with common practice in the financial services business, our financial indicator for measuring capital efficiency at SFS is return on equity after tax, or ROE after tax. ROE is defined as SFS' profit after tax, divided by its average allocated equity.

Primary measure for managing and controlling profit and profitability at the Group level: Net income is the primary driver of basic earnings per share from net income (EPS) as well as of EPS before purchase price allocation accounting (EPS pre PPA) which is used for our capital market communication. EPS pre PPA is defined as basic earnings per share from net income adjusted for amortization of intangible assets acquired in business combinations and related income taxes. As with EPS, EPS pre PPA includes the amounts attributable to shareholders of Siemens AG. We aim to achieve high-single-digit annual growth in EPS pre PPA over a cycle of three to five years.

We seek to work profitably and as efficiently as possible with the capital provided by our shareholders and lenders. For purposes of managing and controlling our capital efficiency, we use return on capital employed, or ROCE, as our primary measure in our Siemens Financial Framework. Our goal is to achieve a ROCE within a range of 15% to 20% over a cycle of three to five years.

2.3 Capital structure

Sustainable revenue and profit development is supported by a healthy capital structure. Accordingly, a key consideration within the Siemens Financial Framework is to maintain ready access to the capital markets through various debt products and preserve our ability to repay and service our debt obligations over time. Our primary measure for managing and controlling our capital structure is the ratio of Industrial net debt to EBITDA (continuing operations). This financial measure indicates the approximate amount of time in years that would be needed to cover Industrial net debt through income from continuing operations, without taking into account interest, taxes, depreciation and amortization. We aim to achieve a ratio of up to 1.5.

2.4 Liquidity and dividend

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 that at least matches the prior year level.

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.

At the Annual Shareholders' Meeting, the Managing Board, in agreement with the Supervisory Board, will submit the following proposal to allocate the unappropriated net income of Siemens AG for fiscal 2022: to distribute a dividend of €4.25 on each share of no par value entitled to the dividend for fiscal 2022 existing at the date of the Annual Shareholders' Meeting; the remaining amount is to be carried forward. Payment of the proposed dividend is contingent upon approval by Siemens shareholders at the Annual Shareholders' Meeting on February 9, 2023. The prior-year dividend was €4.00 per share.

2.5 Calculations of EPS pre PPA and ROCE

Calculation of EPS pre PPA

	Fiscal year	
(in millions of €, shares in thousands, earnings per share in €)	2022	2021
Net income attributable to shareholders of Siemens AG	**3,723**	6,161
Plus: Amortization of intangible assets acquired in business combinations – attributable to shareholders of Siemens AG	**882**	677
Less: Taxes on adjustment	**(220)**	(169)
(I) Adjusted Net income attributable to shareholders of Siemens AG	**4,384**	6,668
(II) Weighted average shares outstanding	**801**	802
(I) / (II) EPS pre PPA	**5.47**	8.32

Calculation of ROCE

	Fiscal year	
(in millions of €)	2022	2021
Net income	**4,392**	6,697
Less: Other interest expenses/income, net[1]	**(939)**	(761)
Plus: SFS Other interest expenses/income	**971**	834
Plus: Net interest expenses related to provisions for pensions and similar obligations	**51**	53
Less: Interest adjustments (discontinued operations)	**5**	(11)
Less: Taxes on interest adjustments (tax rate (flat) 30%)	**(27)**	(34)
Plus: Defined Varian-related acquisition effects (after tax)[2]	**365**	195
(I) Income before interest after tax	**4,819**	6,973
(II) Average capital employed	**47,996**	46,027
(I) / (II) ROCE	**10.0%**	15.2%

[1] Item Other interest expenses/income, net primarily consists of interest relating to corporate debt, and related hedging activities, as well as interest income on corporate assets.

[2] Effects resulting from purchase price allocation for Varian Medical Systems, Inc. (Varian) which are comprised of amortization of tangible and intangible assets, inventory step-ups, deferred revenue adjustments and related income taxes.

For purposes of calculating ROCE in interim periods, Income before interest after tax is annualized. Average capital employed is determined using the average of the respective balances as of the quarterly reporting dates for the periods under review.

Calculation of capital employed

Total equity
Less: Goodwill and other intangible assets resulting from purchase price allocation related to the Varian acquisition
Plus: Long-term debt
Plus: Short-term debt and current maturities of long-term debt
Less: Cash and cash equivalents
Less: Current interest-bearing debt securities
Less: Fair value of foreign currency and interest hedges relating to short- and long-term debt
Plus: Provisions for pensions and similar obligations
Less: SFS debt
Plus: Adjustments from assets classified as held for disposal and liabilities associated with assets classified as held for disposal
Less: Adjustment for deferred taxes on net accumulated actuarial gains/losses on provisions for pensions and similar obligations
Capital employed (continuing and discontinued operations)

3. Segment information

3.1 Overall economic conditions

Global economic development in fiscal 2022 was dominated by three disruptions: the war in Ukraine, the repercussions of the coronavirus pandemic (COVID-19), and the economic slowdown in China. After the strong rebound of economic growth in calendar 2021, in which global gross domestic product (GDP) increased by 5.9%, calendar 2022 is expected to show global GDP increasing by only 2.9%. The post-COVID economic recovery came to a sudden end during calendar 2022.

Global economic activity expanded strongly in the second half of calendar 2021 in light of increasing vaccination rates and lifted COVID-19 restrictions as well as recovering consumer spending. This triggered inflationary pressures, especially in the United States (U.S.) and in Europe. Primary reasons for these inflationary pressures included limitations on the supply of goods and services due to COVID-19 repercussions (logistics bottlenecks, material and component shortages in the manufacturing sector, labor shortages especially in the service sector), while large stimulus packages and high household savings fueled pent-up demand. In addition, already high energy prices increased significantly and added to surging inflation rates.

The war in Ukraine impacted the overall economic conditions starting in the first quarter of calendar 2022. Energy prices – already soaring in the latter half of 2021 – sky-rocketed in the first half of calendar 2022. The tightening of gas flows from Russia to the European Union (EU) resulted in European natural gas prices temporarily increasing by as much as ten-fold compared to the prior year. Oil prices also increased significantly – global prices for Brent crude oil nearly doubled in March 2022 compared to March 2021. Both over-proportionally hit Germany and the industrial sector, especially energy-intensive industries such as chemicals. But due to its very strong start in calendar 2022, the EU economy is still expected to grow by 3.3% in calendar 2022.

The war in Ukraine put further pressure on developing economies, especially in the Middle East, Africa, and Turkey, as both Russia and Ukraine were major exporters of grain and fertilizer before the war. For emerging markets in aggregate, GDP is estimated to increase by 3.4% in calendar 2022 after it expanded by nearly 7% in 2021.

China's zero-COVID strategy became even more strict with the emergence of the Delta variant and the highly infectious Omicron variant, resulting in more major lockdowns which burdened economic activity and global supply chains in the second half of calendar 2021. In addition, regulatory restrictions on several high-growth sectors and companies along with a recession in the very important real estate sector weighed on the economy. Hence, China's GDP growth is expected to slow significantly in calendar 2022, to 3.0%, after it rebounded in calendar 2021 with 8.1%.

While energy prices were a major contributor to inflationary pressure, both the U.S. and the EU experienced broader-based price increases. This resulted in a strong response by the Federal Reserve which massively tightened monetary policy by starting to reduce money supply (quantitative tightening) and increasing its key interest rate by 300 basis points from March to September 2022. The European Central Bank (ECB) also started to tighten monetary policy to reduce inflation. ECB's interest rate on main refinancing operations increased by a cumulative 125 basis points in August and September. U.S. inflation (as measured by the consumer price index, or CPI) is currently expected at 8.1% for calendar 2022, with EU inflation at 9%. Producer prices (PPI) are expected to increase even more: by 16.8% in the U.S. and as much as 30.4% in the EU, though a large part of the increase in the EU is driven by energy prices: while the overall PPI in September 2022 increased by 41.4% year-over-year, the index excluding energy grew by only 15% year-over-year.

As the Federal Reserve went forward with tackling inflation, it was followed by central banks around the world. The appreciation of the U.S. dollar against most other currencies added to inflation outside of the U.S. and put pressure on international financial markets, especially for some emerging countries.

Overall, the major economies experienced significant economic disruptions during calendar 2022. Therefore, GDP in calendar 2022 will grow much more slowly than was expected last year. For advanced countries in aggregate, calendar 2022 GDP is expected to expand by 2.5%. For emerging markets, the increase in calendar 2022 GDP is estimated at 3.4%.

The partly estimated figures presented here for GDP are based on an S&P Global report dated November 15, 2022.

3.2 Digital Industries

Digital Industries offers a comprehensive product portfolio and system solutions for automation used in discrete and process industries; these offerings include automation systems and software for factories, numerical control systems, motors, drives and inverters and integrated automation systems for machine tools and production machines. Digital Industries also provides process control systems, machine-to-machine communication products, sensors (for measuring pressure, temperature, level, flow rate, distance or shape) and radio frequency identification systems. Furthermore, Digital Industries offers production and product lifecycle management (PLM) software, and software for simulation and testing of mechatronic systems. These leading software offerings are integrated with an electronic design automation (EDA) software portfolio, and the open, cloud-based industrial Internet of Things (IoT) operating system MindSphere, which connects machines and physical infrastructure to the digital world. All these software offerings are complemented by the Mendix cloud-native low-code application development platform, which allows customers to significantly reduce app development times through visual representation of underlying code as well as by digital marketplaces for the global electronics value chain, such as Supplyframe and Pixeom. Digital Industries also provides customers with lifecycle and data-driven services.

Taken together, Digital Industries' offerings enable customers to optimize entire value chains from product design and development through production and post-sale services. With its advanced software solutions in particular, Digital Industries supports customers in their evolution towards the "Digital Enterprise," resulting in increased flexibility and efficiency of production processes and reduced time to market for new products. The most important customer customermarkets include the automotive industry, the machine building industry, the pharmaceutical and chemicals industry, the food and beverage industry and the electronics and semiconductor industry. Digital Industries serves its customers through a common regional sales organization spanning all its businesses, using various sales channels depending on the type of customer and industry and also enhancing customer choice across all channels. Changes in customer demand, especially for standard products, are driven strongly by macroeconomic cycles, and can lead to significant short-term fluctuation in Digital Industries' profitability. Volume from large contracts in the software business, particularly for EDA, may also result in strong fluctuations in quarterly volume and profitability. In fiscal 2022, Digital Industries started 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 2022 and Digital Industries expects continued impacts until completion of the transition. Competition with Digital Industries' business activities comes primarily from multinational corporations that offer a relatively broad portfolio and from smaller companies active only in certain geographic or product markets.

Digital Industries sees three **trends** influencing its business and providing long-term growth opportunities. Producers of investment goods in today's increasingly digital environment must modernize their production capacity, particularly to increase production flexibility and reduce time to market. This environment also spurs producers to complement their core products with vertical solutions and service offerings, which their customers either need or want in order to take full advantage of the investment goods. Finally, there is a trend from globalization to regionalization, to support local economic development, to increase supply chain resilience or to better adapt solutions to local needs. This is increasingly accompanied by more differentiated regulatory requirements.

Research & Development (R&D) activities at Digital Industries are aimed at helping customers to increase production and resource efficiency by merging the real and the digital worlds in a continuous flow of data using cutting-edge technologies such as artificial intelligence (AI), edge computing, cloud technologies, additive manufacturing, and industrial 5G technology. As part of Siemens' open digital marketplace Siemens Xcelerator – a business platform that includes a curated portfolio of IoT-enabled hardware, software and digital services from across Siemens and certified third parties and facilitates interactions and transactions between customers, partners and developers – Digital Industries is developing Industrial Operations X, a next-generation industrial IoT solution. Industrial Operations X is aimed at bringing together solutions and applications, ranging from sensors and edge computing to the cloud, IoT as a service and low-code development capabilities, as well as including a wide range of ready-to-use apps. Furthermore, in fiscal 2022, Digital Industries launched the open Industrial Edge Ecosystem where third-party app providers can offer solutions based on the Siemens Industrial Edge platform, an IT platform which enables the scalable deployment of IT technologies and apps in the production environment. Customers thus benefit from a broad range of compatible software components, offered by numerous providers and manufacturers, which they can readily integrate into their manufacturing processes. For example, offerings of the Industrial Edge Ecosystem include an AI-based edge app to increase availability of drives. In fiscal 2022, Digital Industries strengthened its transition to SaaS by introducing a cloud-based version of its NX software (NX X) that combines the advantages of computer aided design software, centralized storage capacity and native collaboration. With its latest advances in additive manufacturing, Digital Industries enables cost-effective bespoke manufacturing of consumer products. Also in fiscal 2022, Digital Industries enabled the transmission of Profinet IO via a private 5G network, which allows industrial data to be transmitted securely across network boundaries in real time for industrial applications. This is made possible by the VXLAN (Virtual Extensible LAN) transmission technology in the Scalance 5G routers and security appliances from Digital Industries. Major **investments** of Digital Industries in fiscal 2022 relate to its own factory automation, motion control and process automation businesses, to further automate and digitalize facilities particularly in Germany, China and the Czech Republic.

	Fiscal year		% Change	
(in millions of €)	2022	2021	Actual	Comp.
Orders	**25,283**	18,427	37%	32%
Revenue	**19,517**	16,514	18%	13%
therein: software business	***4,691***	*4,290*	*9%*	*0%*
Profit	**3,892**	3,360	16%	
Profit margin	**19.9%**	20.3%		

Order growth was driven by extraordinarily strong customer demand in Digital Industries' major market segments. Orders rose in all businesses including a sharp increase in the factory automation business and substantial growth contributions from the other businesses. Within the software business, both EDA and PLM made strong growth contributions due to large contract wins. **Revenue** growth was mainly driven by the automation businesses. While Digital Industries successfully avoided major supply chain disruptions, shortages for electronics components and raw materials led to extended delivery times for some automation products. Growth in the software business was due mainly to positive currency translation effects. A high rate of customer acceptance of the PLM SaaS transition reduced current license revenue in favor of recurring future subscription revenue. On a geographic basis, orders rose substantially in all three reporting regions and revenue was up by double digits in all regions. Volume growth was led by the Asia, Australia region and included positive currency translation effects. **Profit** and profitability rose in all automation businesses led by a sharp increase in the motion control business. The increases were supported by higher capacity utilization and pricing measures to offset cost inflation. In contrast, profit in the software business declined. This was due mainly to revenue development from the SaaS transition and higher expenses related to cloud-based activities, which were also influenced by the SaaS transition. Severance charges fell to €64 million from €114 million in the prior year. Digital Industries' order backlog rose sharply year-over-year, reaching €14 billion at the end of the fiscal year, of which €11 billion are expected to be converted into revenue in fiscal 2023.

In fiscal 2022, **markets** served by Digital Industries grew clearly. Growth was driven by a further recovery in global manufacturing production, only partly held back by impacts related to the war in Ukraine, lockdown measures and electricity shutdowns in China, and global supply chain and logistics constraints. Nominal market growth in fiscal 2022 benefited from fast-rising price inflation especially in discrete and process industries, which started to weigh on real demand, especially consumer spending, towards the end of the fiscal year. Markets grew in all three reporting regions, led by Asia, Australia and the Americas. Overall, markets for discrete industries rose faster while recovery in the more project-related process industries was delayed. Within Digital Industries' most important customer markets, growth in the automotive industry was held back by the above-mentioned factors, most notably supply chain constraints, which impacted production. Ongoing structural changes in the macroeconomy – such as working from home, adoption of e-vehicles, and international trade conflicts – are expected to restrain the automotive industry's mid-term growth perspectives. The machine-building industry expanded strongly, with growth driven by demand in Japan, the U.S. and eastern European countries. The machine-building industry benefited from demand for general investment goods. This development was evident in demand for automation equipment which in addition benefited from the trend towards digitalization. The pharmaceutical and the chemicals industries grew throughout the fiscal year, but with slower momentum towards the end of the fiscal year. The food and beverage industry grew steadily throughout the fiscal year, with the beverage industry growing faster than the food industry. Global production of electronics and semiconductors experienced strong growth in fiscal 2022, with some moderation during the course of the fiscal year due in part to production lockdowns in China. Market shifts before fiscal 2022 in the semiconductor industry led to global shortages of semiconductors for certain customer segments such as the automotive industry; demand patterns began to normalize at the end of the fiscal year, including more moderate spending on consumer electronics. Supplier price increases, caused mainly by shortages, affected all of the key markets for Digital Industries, and were sharper than usual for a period of economic rebound. For fiscal 2023, Digital Industries' primary markets are expected to show strong revenue growth benefiting in part from high order backlogs and price inflation. While growth is expected to be more evenly spread across the three reporting regions than in fiscal 2022, growth momentum is expected to slow down gradually over the course of the fiscal year. Growth expectations for fiscal 2023 are subject to a high level of uncertainty depending among other factors on the development of geopolitical tensions, trade sanctions, energy markets and interest rates.

3.3 Smart Infrastructure

Smart Infrastructure offers products, systems, solutions, services and software to support a sustainable transition from fossil to renewable energy sources, as well as a transition to smarter, more sustainable buildings and communities. Smart Infrastructure's versatile portfolio consists of buildings, electrification, and electrical products. Its buildings portfolio addresses the needs of operators, owners, occupants and users of buildings. It spans integrated building management systems and software; heating, ventilation and air conditioning (HVAC) controls; fire safety and security products and systems; and solutions and services such as energy performance services. With its electrification portfolio, Smart Infrastructure makes grids more resilient, flexible and efficient. Its offerings cover grid simulation, operation and control software; substation automation and protection; medium-voltage primary and secondary switchgear including sulfur hexafluoride-free (SF6-free) medium-voltage switchgear; and low-voltage switchboards and eMobility charging infrastructure. The electrical products portfolio addresses industrial and building applications. Its offerings include low-voltage switching, measuring and control equipment; low-voltage distribution systems and switchgear; and circuit breakers, contactors and switching for medium voltage. In fiscal 2022, Smart Infrastructure acquired Brightly Software Inc. (Brightly), a U.S.-based provider of cloud-based SaaS for asset and maintenance management and for energy and sustainability management. The acquisition strengthens Smart Infrastructure's presence in the market for software used to manage built infrastructure.

Smart Infrastructure's customer and end user base is diverse. It encompasses infrastructure developers, construction companies and contractors; owners, operators and tenants of both public and commercial buildings including hospitals, campuses, airports and data centers; companies in process industries such as oil and gas, pharmaceuticals and chemicals; companies in discrete manufacturing industries such as automotive and machine building; and utilities and power grid network operators (transmission and distribution). Smart Infrastructure serves its customers through a broad range of channels, including distributors and partners such as panel builders, original equipment manufacturers (OEM) and value-added resellers and installers, all complemented by direct sales and through e-commerce channels. Digital marketplaces, such as Siemens Xcelerator, are increasingly important for Smart Infrastructure's digital offerings. Smart Infrastructure's principal competitors consist mainly of large multinational companies and smaller manufacturers in emerging countries. Its solutions and services business also competes with local players such as system integrators and facility management firms. Smart Infrastructure's businesses are impacted by changes in the overall economic environment to varying degrees, depending on the customer segment and offering. Demand for Smart Infrastructure's electrical and building products offerings is driven strongly by macroeconomic cycles, while demand for its systems and solutions offerings changes more slowly, with a time lag of several quarters. In contrast, demand for service offerings shows only limited influence from macroeconomic cycles. Overall, Smart Infrastructure has developed a balanced and resilient business mix with its diversified regional and vertical markets; its range of products, systems, solutions and services; and its participation in both long- and short-cycle markets. To further strengthen the resilience of its portfolio, Smart Infrastructure aims at increasing the share of overall revenue that comes from services.

Smart Infrastructure benefits from a number of major **trends**. These include urbanization, demographic change, decarbonization, and digitalization. Urbanization and demographic change drive a need for smarter and more human-centric buildings. Climate change drives the need for decarbonization. This results in an increasing demand for flexible and resilient energy infrastructures including rapid growth in electric mobility and more sustainable buildings. Digitalization is an enabler for such changes in both buildings and grids, making it possible to develop smarter buildings and manage electricity distribution with a higher share of renewables. The markets served are experiencing shifts that present opportunities where building technologies and electrification meet.

Smart Infrastructure's **R&D activities** focus on sustainable and decarbonizing offerings for buildings, utilities and industrial customers. It develops digital offerings for the energy market such as for integrating renewable energy into grids. Furthermore, R&D efforts strengthen Smart Infrastructure's capabilities to improve the sustainability, performance and attractiveness of buildings. Smart Infrastructure is expanding its digital offerings such as cloud solutions using field data from controllers and IoT devices. In June 2022, Smart Infrastructure launched the new software platform Building X, developed in accordance with the principles of openness and modularity of Siemens Xcelerator. Furthermore, it develops technologies for environmentally friendly and increasingly renewable-based energy systems, ranging from climate-friendly SF6-free switchgear for medium voltage to charging solutions for e-mobility. In this regard, data from field devices is the basis for intelligent grid control and protection, providing grid stability and flexibility and continuously matching energy supply and demand while protecting grid assets. For electrical distribution systems and industrial plants, Smart Infrastructure continuously drives digitalization of its switching and control products with built-in intelligence, connectivity to the cloud, and remote diagnostics and edge computing capability. Smart Infrastructure puts an increasing focus of R&D on the sustainability of its products along the lifecycle, addressing environmentally friendly designs, materials and processes. To a large extent, its capital expenditures relate to the products businesses. Main **investment** areas are replacement of fixed assets and further digitalization of factories and technical equipment, with a strong focus on innovation.

(in millions of €)	Fiscal year 2022	2021	% Change Actual	Comp.
Orders	**20,798**	16,071	29%	23%
Revenue	**17,353**	15,015	16%	10%
therein: service business	***3,799***	*3,387*	*12%*	*7%*
Profit	**2,222**	1,729	29%	
Profit margin	**12.8%**	11.5%		

Orders at Smart Infrastructure rose by double-digits in all businesses, led by the electrical products business and the electrification business including a number of larger contract wins. Order growth was highlighted by strong demand from industrial customers, for data centers and for digital building services, and included proactive purchasing by customers. **Revenue** also rose in all businesses led by the electrical products business, which operated in strong customer markets. Smart Infrastructure successfully avoided major disruptions from challenging supply chain conditions. On a geographic basis, orders and revenue rose in all three reporting regions. The strongest growth contribution came from the Americas region, driven by the U.S., while growth in the Asia, Australia region was held back by impacts related to COVID-19 in China. Both order and revenue development included positive currency translation effects. **Profit** and profitability rose in all businesses, with the strongest increases coming from the electrical products business and the buildings business. The increases were due mainly to higher capacity utilization, pricing measures to offset cost inflation and cost savings related to prior execution of Smart Infrastructure's competitiveness program. Severance charges, largely associated with the program, fell to €28 million from €47 million a year earlier. In fiscal 2022, Smart Infrastructure recorded a €54 million gain from the sale of a business. These positive effects were only partly offset by COVID-19-related impacts mainly from medical leaves and lockdowns in China. Smart Infrastructure's order backlog was €15 billion at the end of the fiscal year, of which €10 billion are expected to be converted into revenue in fiscal 2023.

Overall, **markets** served by Smart Infrastructure grew clearly in fiscal 2022. Market dynamics were influenced by a further recovery from COVID-19-related effects, severe supply chain and logistics constraints, strong price inflation and effects from the war in Ukraine. On a geographic basis, all reporting regions contributed to growth. Price inflation affected all regions and came in particularly high in the U.S. In China, growth was held back by lockdown measures, which also impacted growth dynamics in other countries, while Europe was most strongly affected by the war in Ukraine. Grid markets grew above average with market growth driven by demand for integration of energy from renewable resources. Industrial markets grew nearly as fast as grid markets, driven by growth in the automotive industry among other factors. Growth in the buildings market came in somewhat lower mainly due to weaker growth momentum in commercial building markets. In fiscal 2023, markets served by Smart Infrastructure are expected to grow slightly slower than in fiscal 2022. While growth in residential and commercial building markets and some industrial markets is expected to slow down somewhat, demand for data centers and power distribution is expected to be robust. Price inflation is expected to contribute to market growth in fiscal 2023. Overall, market development in fiscal 2023 is expected to continue to be influenced by supply chain constraints and effects from the war in Ukraine, including on energy prices. Further impacts could arise from potential lockdown measures in China and geopolitical tensions.

3.4 Mobility

Mobility combines all Siemens businesses in the area of passenger and freight transportation. Within its rolling stock business, its offerings encompass trains for urban and regional transport such as vehicles for metro systems, trams and light rail, and commuter trains as well as trains and passenger coaches for intercity and long-distance services, such as high-speed rail. Rolling stock offerings furthermore include locomotives for freight or passenger transport and solutions for automated transportation such as automated people movers. Offerings in its rail infrastructure business include products and solutions for rail automation, such as automatic train control systems, interlocking, operations control and telematic systems, digital station solutions and railway communication systems, signaling on-board and crossing products and yard and depot solutions; and for electrification such as AC and DC traction power supply, contact lines and network control. With its service business, Mobility provides customer services for rolling stock and rail infrastructure throughout the entire lifecycle, such as maintenance and digital services. In its turnkey business, it bundles consulting, planning, financing, construction, service and operation of complete mobility systems. Mobility's software business comprises intermodal solutions, such as platforms for fleet management, route planning, ticketing and payments solutions and data analytics. To enhance these offerings, Mobility at the beginning of fiscal 2022 acquired SQCAP B.V. (Sqills), Netherlands, a provider of cloud-based inventory management, reservation, and ticketing software for public transport operators. During fiscal 2022, Mobility divested its road traffic business, Yunex Traffic.

Mobility sells its products, systems and solutions through its worldwide network of sales and execution units. The principal customers of Mobility are public and state-owned companies in the transportation and logistics sectors, so its markets are driven primarily by public spending. Customers usually have multi-year planning and implementation horizons, and their contract tenders therefore tend to be independent of short-term economic trends. Large contracts in the rolling stock and the rail infrastructure business are often awarded together with service contracts, which start to generate revenue only after the respective products and solutions have been put in operation, which can be a number of years after the contract award. Mobility's principal competitors are multinational companies. Consolidation among Mobility's competitors is continuing and may lead to increased competitive pressure within the rail transport industry and also to fewer sourcing options for rail customers.

The main **trends** driving Mobility's markets are urbanization, the need to reduce emissions from transportation, and digitalization. Increasing populations in urban centers need daily mobility that is simpler, faster, and more flexible, reliable and affordable. At the same time, cities and national economies face the challenge of cutting CO_2 and noise emissions and reducing space requirements and costs of transportation. The pressure on mobility providers to meet all these needs is expected to rise continuously. Furthermore, improving availability, connectivity, and sustainability of rail infrastructures increasingly requires digital solutions, which generates growth opportunities for providers of such solutions. IoT systems and new software-based solutions such as Mobility as a Service (MaaS) are expected to become major growth enablers for the rail industry. While a significant drop in ridership driven by COVID-19 has strongly impacted mobility operators, overall trends towards urbanization and decarbonization persist unchanged and many countries have been allocating significant funds to rail and public transport operators to address these trends.

Mobility's **R&D strategy** is focused on reducing life-cycle costs of rail infrastructures and rolling stock, securing system availability, increasing network capacity of rail infrastructures, optimizing the processes of rail operators and improving passenger experience. With Siemens Xcelerator, Mobility intends to make software more modular and increasingly move it to the cloud. At the same time, Mobility intends to enhance connectivity of hardware and software and provide open application programming interfaces (APIs). Thereby Mobility accelerates the pace and impact of digital innovation, which in turn benefits owners, operators, and customers of rail transport. Mobility's major R&D areas include the development of efficient vehicle platforms with optimized lifecycle cost; eco-friendly, alternative power supplies for trains; the Railigent X open application suite for maintenance of rail assets; the Distributed Smart Safe System (DS3), which allows for hardware-independent and cloud-enabled signaling; automatic train operation for European Train Control System (ETCS); 5G for wireless-based activities; the Mobility Software Suite X for operators and passengers; and cyber security. Mobility's **investments** focus mainly on maintaining or enhancing its production facilities, on meeting project demands and enhancing its depot services.

	Fiscal year		% Change	
(in millions of €)	2022	2021	Actual	Comp.
Orders	**13,200**	12,696	4%	2%
Revenue	**9,692**	9,232	5%	3%
therein: service business	***1,592***	*1,420*	*12%*	*7%*
Profit	**794**	850	(7)%	
Profit margin	**8.2%**	9.2%		

Order intake exceeded the strong prior-year level and reached a new record. Mobility again took in a substantial volume from large orders, nearly on the high level of the prior year. Contract wins in fiscal 2022 were highlighted by an order worth €1.5 billion for high-speed trains in Germany, a number of orders for locomotives, among them a €0.6 billion order for locomotives and associated service in the U.S., and an order worth €0.3 billion for a train control system from Norway. Order intake a year earlier included among others Mobility's largest-ever contract in the Americas, worth €2.8 billion, for trainsets and associated services. **Revenue** rose in all businesses, led by the services business and the rail infrastructure business. Growth was partly held back by supplier delays in delivering materials and components, along with effects related to COVID-19 mainly including medical leave for employees. On a geographic basis, revenue growth was driven mainly by the region Europe, Commonwealth of Independent States (C.I.S.), Africa, Middle East, due particularly to a significant growth contribution from Germany. **Profit** was burdened by impairments and other charges totaling €0.6 billion for winding down business activities in Russia, among them a €0.2 billion impairment of the entire carrying amount of an investment accounted for using the equity method. In addition, profit included impacts from supplier delays and COVID-19 effects. These burdens were largely offset by a gain of €0.7 billion from the sale of Yunex Traffic. Severance charges were €27 million, compared to €22 million a year earlier. Mobility's order backlog was €36 billion at the end of the fiscal year, of which €10 billion are expected to be converted into revenue in fiscal 2023.

Markets served by Mobility grew moderately in fiscal 2022, supported by long-term trends such as urbanization and decarbonization, though growth dynamics were held back by effects related to COVID-19 and by material shortages. The market for rolling stock saw large orders across all segments, especially for high-speed trains, commuter trains and locomotives. The rail infrastructure market has seen growth in both urban and mainline segments due to the renewal and extension of mainline tracks and the ongoing trend towards automatic train protection (ATP), including communications-based train control (CBTC) and ETCS technologies. The service business benefited from an increased installed base at global level and large backlogs in maintenance orders backlogs in some countries. On a geographic basis, market development in Europe continued to be characterized by awards of mid-size to large orders, particularly in Germany, Denmark and in Switzerland. While demand in the Middle East rose, demand in Africa was held back by ongoing uncertainties related to budget constraints and political climates. In the Americas region, customer demand was strongest for urban and mainline transport, especially in the U.S. and Canada. Within the Asia, Australia region, markets saw ongoing rail investments, particularly in China. For fiscal 2023, markets served by Mobility are expected to grow significantly with all reporting regions contributing to growth. Market expansion is expected to be supported by a large number of fiscal stimulus and investment programs. Mobility anticipates that rail operators in Europe, particularly in Germany and in the U.K., will continue making significant investments in rolling stock and advanced rail infrastructure solutions and that customers in the Middle East and Africa will tender large turnkey systems, especially for additional rail lines in Egypt, Saudi Arabia and the United Arab Emirates. Markets in the Americas region are expected to remain strong, especially due to ongoing investments in urban and mainline transport and large investment programs dedicated to transportation and enhancements of existing infrastructure in the U.S. In Asia, markets in China are also expected to remain strong with investments in high-speed trains, urban transport, freight logistics and rail infrastructure driving growth. Markets in India are expected to grow strongly due to investments in high-speed trains and infrastructure. Despite an adverse short-term impact from COVID-19, rail transport and intermodal mobility solutions are expected to remain a high priority. In emerging countries, rising incomes are expected to result in greater demand for public transport solutions.

3.5 Siemens Healthineers

Siemens as majority shareholder holds just over 75% of the shares of the publicly listed **Siemens Healthineers** AG, Germany (Siemens Healthineers). Siemens Healthineers is a global provider of healthcare solutions and services. It develops, manufactures, and sells a diverse range of innovative diagnostic and therapeutic products and services to healthcare providers. In addition, Siemens Healthineers also provides clinical consulting services, as well as an extensive range of training and service offerings. This comprehensive portfolio supports customers along the entire care continuum, from prevention and early detection through to diagnosis, treatment, and follow-up care. The customer spectrum ranges from public and private healthcare providers, including hospitals and hospital systems, public and private clinics and laboratories, universities, physicians/joint medical practices, public health agencies, public and private health insurers, through to pharmaceutical companies and clinical research institutes. The imaging business provides imaging products, services, and solutions as well as digital offerings. Its most important products are devices for magnetic resonance imaging, computed tomography, X-ray, molecular imaging, and ultrasound. The diagnostics business comprises in-vitro diagnostic products and services that are offered to healthcare providers in the fields of laboratory and point-of-care diagnostics. The Varian business provides innovative, multi-modality cancer care technologies along with solutions and services to oncology departments in hospitals and clinics. The portfolio of the advanced therapies business consists of highly integrated products, solutions, and services across multiple clinical fields that are designed to support imageguided minimally invasive treatments, in areas such as cardiology, interventional radiology, and surgery. Competition in the imaging, Varian and advanced therapies businesses consists mainly of a small number of large multinational companies, while the diagnostics market is fragmented with a variety of global players that compete with each other across market segments and also with several regional players and specialized companies in niche technologies. The business activities of Siemens Healthineers are to a certain extent resilient to short-term economic trends because large portions of its revenue stem from recurring business. They are, however, directly and indirectly dependent on trends in healthcare markets and on developments in health policy, and geopolitical developments around the world.

The addressable markets of Siemens Healthineers are shaped by four major **trends**. The first is demographic, in particular the growing and aging global population. This trend poses major challenges for global healthcare systems and, at the same time, offers opportunities for players in the healthcare industry as the demand for cost-efficient healthcare solutions continues to intensify. The second trend is economic development in emerging countries, which opens up improved access to healthcare for many people. Significant investment in the expansion of private and public healthcare systems will persist, driving overall demand for healthcare products and services and hence market growth. The third trend is the increase in chronic diseases as a consequence of an aging population and environmental and lifestyle-related changes. This trend results in far more patients with multiple morbidities, putting further pressure on healthcare systems and leading to higher costs; it also increases the need for new ways to detect and treat diseases more timely. The fourth global trend, the transformation of healthcare providers such as hospitals and laboratories, results from a combination of societal and market forces that are driving healthcare providers to operate and organize their businesses differently. Increasing cost pressure on the healthcare sector is prompting the introduction of new remuneration models for healthcare services, such as value-based rather than treatment-based reimbursement. Digitalization and artificial intelligence are thereby likely to be key enablers for healthcare providers as they increasingly focus on enhancing the overall patient experience, with better outcomes and overall reduction in cost of care. This development is driven partly by society's increasing resistance to healthcare costs, payers' increasing professionalization, burdens from chronic disease, rapid scientific progress and staff shortages. As a result of these factors, healthcare providers are consolidating into networked structures, resulting in larger clinic and laboratory chains, often operating internationally, which act increasingly like large corporations. Applying this industrial logic to the healthcare market can lead to systematic improvements in quality, while at the same time reducing costs.

R&D activities at Siemens Healthineers are aimed at delivering innovative, sustainable solutions to its customers while safeguarding and improving its competitiveness. In particular, in the areas of artificial intelligence, sensing technology, and robotics R&D activities were expanded. In addition, Siemens Healthineers harnesses advanced technologies such as AI and data analytics to improve cancer treatment and expand global access to cancer care. Key applications of sensing technology range from laboratory diagnostic tests via computed tomography detectors and electromagnetic measurement fields in magnetic resonance all the way to ultrasonic transducers. Siemens Healthineers already uses robots for laboratory assistance, radiation, patient handling, and robotic imaging devices. Siemens Healthineers focuses its **investments** mainly on enhancing competitiveness and innovation. The main capital expenditures were for spending for factories to expand manufacturing and technical capabilities, in particular in the U.S. and China, and for additions to intangible assets, including capitalized development expenses within the Atellica Solution and Central Lab product lines.

	Fiscal year		% Change	
(in millions of €)	2022	2021	Actual	Comp.
Orders	**25,556**	20,320	26%	9%
Revenue	**21,715**	17,997	21%	6%
Profit	**3,369**	2,847	18%	
Profit margin	**15.5%**	15.8%		

In fiscal 2022, Siemens Healthineers recorded double-digit growth both in **orders** and **revenue**, which developed similarly. All businesses contributed to this growth. On a geographic basis, the Americas and Asia, Australia regions recorded substantial growth, both benefiting from strong positive portfolio and currency translation effects. In total, portfolio effects, primarily related to the acquisition of Varian in the third quarter of fiscal 2021, added ten percentage points to order and nine percentage points to revenue growth; additionally, currency translation effects added seven percentage points to order and six percentage points to revenue growth. **Profit** benefited primarily from strong earnings development in the diagnostics business which was driven by high demand for rapid coronavirus antigen tests. The imaging business again posted strong earnings, which were higher than in the prior year. Overall profitability was burdened by subsequent measurement effects from purchase price allocation related to the Varian acquisition totaling €0.2 billion and by higher procurement and logistics costs. Severance charges were €71 million in fiscal 2022 and €68 million in fiscal 2021. The order backlog for Siemens Healthineers was €34 billion at the end of the fiscal year, of which €12 billion are expected to be converted into revenue in fiscal 2023.

In general, the addressable global **markets** excluding rapid coronavirus antigen tests grew slightly on a revenue basis in fiscal 2022. From a regional perspective, the Asia, Australia region saw market growth in most businesses; in China, growth opportunities were prevented by COVID-19-related restrictions. In the region Europe, C.I.S., Africa, Middle East, EU government investment programs, among others, were able to support growth in most businesses. In the U.S., market growth was recorded in most businesses. Globally, overall market development for the imaging business was supported by positive developments in the magnetic resonance imaging and nuclear medicine markets, after demand had already recovered in the prior fiscal year; in contrast, delays in revenue recognition due to global supply chain constraints, among other factors, weakened growth. The imaging market is expected to grow moderately overall in fiscal 2023, driven mainly by pent-up demand for major modalities. Within the diagnostics business, the rapid coronavirus antigen test market experienced a sharp increase; in addition, point-of-care (excluding rapid coronavirus antigen tests) and laboratory diagnostics (excluding molecular diagnostics) recorded ongoing recovery in patient volumes as markets continued to return to normalized levels following COVID-19 lockdowns. The diagnostics market is expected to achieve moderate growth in fiscal 2023, excluding COVID-19 testing and molecular diagnostics, and return to pre-COVID-19 market growth across most regions. In Varian markets, product and service innovations led to higher customer investment in the U.S. and Western Europe, while other markets were driven by a need to expand access to oncology equipment and services to underserved population groups and regions. The market for Varian is expected to continue its significant growth. Despite macroeconomic headwinds and global supply chain challenges, the resumption of oncology investments is expected to increase. For advanced therapies, the market recovered from COVID-19 in all relevant regions. The expectation for advanced therapies is that the market will continue to grow clearly in fiscal 2023, but at a more measured pace than in fiscal 2022.

3.6 Siemens Financial Services

Siemens Financial Services provides financing solutions for Siemens' customers as well as other companies in the form of debt and equity investments. Based on its comprehensive financing know-how and specialist technology expertise in the areas of Siemens businesses, SFS supports its customers' investments with leasing, lending, working capital and structured financing solutions and offers a broad range of equipment and project financing. In addition, SFS supports Siemens' industrial businesses with financial advisory services and via a joint go-to-market that includes SFS's risk management expertise, such as to assess the risk profiles of projects or business models. Furthermore, SFS collaborates with Siemens' industrial businesses to co-develop new digital business models and enables its customers to drive sustainable growth through smart financing solutions. Recent examples include pay-per-use and pay-for-outcome models that give customers more financial flexibility.

	Fiscal year	
(in millions of €)	2022	2021
Earnings before taxes (EBT)	**498**	512
therein: equity business	***269***	*49*
ROE (after taxes)	**15.6%**	15.5%

(in millions of €)	Sep 30, 2022	Sep 30, 2021
Total assets	**33,263**	30,384

Earnings before taxes were affected by an increase of expenses for credit risk provisions compared to fiscal 2021 and for impairments on assets in the debt business. Therein impacts of €0.2 billion were recorded in connection with the sale of the financing and leasing business in Russia at the end of fiscal 2022. Decreased results from the debt business were nearly offset by a sharply improved earnings contribution from the equity business, which was driven by gains from fair value measurements and sales of investments, including an offshore wind-farm project divested for a gain of €0.1 billion, and from energy-related investments in connection with rising prices in global energy markets.

The increase in **total assets** since the end of fiscal 2021 was driven by positive currency translation effects.

Net cash from operations (defined as the sum of cash flows from operating and investing activities) amounted to €(616) million compared to €105 million in fiscal 2021. In fiscal 2022 and fiscal 2021, net cash from operations comprised Free cash flow of €985 million and €820 million, respectively, and remaining cash flows from investing activities, including from change in receivables from financing activities, of €(1,601) million and €(715) million, respectively.

SFS is de-risking its business profile by reducing exposure to energy-related equity investments. This has the additional benefit of more tightly focusing SFS's business scope and capital allocation on areas of intense domain know-how closely aligned with Siemens' customers and markets, particularly for Digital Industries, Smart Infrastructure and Mobility. Accordingly, SFS is influenced by the business development of the markets served by our industrial businesses, among other factors, including macroeconomic effects like inflation or recession which could impact the credit risk of customers. In addition to its high level of diversification across industries, SFS has a strong regional footprint in investment-grade countries, with the highest share in the U.S. SFS intends to maintain a highly diversified portfolio across regions, while participating in the strong economic development of selected Asian markets.

3.7 Portfolio Companies

Portfolio Companies comprise businesses which deliver a broad range of customized and application-specific products, software, solutions, systems and services for different industries including oil and gas, chemical, mining, cement, logistics, energy, marine, water and fiber. Unrealized potential within these businesses requires adjustment in their approach using defined measures including internal re-organization, digitalization, cost improvements, and optimizing procurement, production and service activities. After achieving certain threshold performance targets, businesses may be transferred to one of Siemens industrial businesses, combined with an external business from the same industry, sold or placed into an external private equity partnership.

During fiscal 2022, Siemens sold its mail and parcel-handling business (formerly part of Siemens Logistics) to the Körber Group and its at-equity investment in Valeo Siemens eAutomotive GmbH to Valeo GmbH. Siemens also reached an agreement in May 2022 to sell its Commercial Vehicles business to Meritor, Inc. Closing of the transaction was at the beginning of fiscal 2023.

Taking these divestments into consideration, Portfolio Companies consists mainly of three fully consolidated, separately managed units. Large Drives Applications, which offers electric motors, converters and solutions for mining, is being carved out to increase its entrepreneurial freedom and thereby unlock its full potential. Siemens Logistics, offers sorting technology and solutions, focused on baggage and cargo handling at airports. The third fully consolidated unit, Siemens Energy Assets, comprises certain remaining regional business activities of the former Gas and Power segment; as part of the Siemens Energy carve-out these activities remained with Siemens due to country-specific regulatory restrictions or economic considerations.

Demand within the industries served by Portfolio Companies mainly shows a delayed response to changes in the overall economic environment. The results are strongly dependent, however, on customer investment cycles in their key industries. In commodity-based industries such as oil and gas or mining, these cycles are driven mainly by commodity price fluctuations rather than changes in produced volumes. The heterogonous industrial customer base of the fully consolidated units requires a dedicated sales approach based on in-depth understanding of specific industries and customer requests, resulting in the use of various sales and marketing channels for Portfolio Companies.

(in millions of €)	Fiscal year 2022	Fiscal year 2021	% Change Actual	% Change Comp.
Orders	**3,995**	3,516	14%	15%
Revenue	**3,234**	3,058	6%	8%
Profit	**1,520**	(84)	n/a	
Profit margin	**47.0%**	(2.8)%		

Despite supply chain constraints, **volume** increased primarily due to Large Drives Applications, Siemens Energy Assets and the airport business of Siemens Logistics. The **profit** was driven by the two disposals mentioned above: a gain of €1.1 billion from the sale of the mail and parcel-handling business and a revaluation gain of €0.3 billion in connection with the sale of the equity investment in Valeo Siemens eAutomotive GmbH. For comparison, the loss in fiscal 2021 was due mainly to negative results in the equity investment. Additionally, Portfolio Companies recorded lower severance charges of €20 million, down from €74 million in fiscal 2021. Portfolio Companies' order backlog was €4 billion at the end of fiscal 2022, of which €3 billion are expected to be converted into revenue in fiscal 2023.

Although the broad range of businesses is operating in diverse markets, overall the main **markets** served by Portfolio Companies are generally impacted by uncertainties regarding geopolitical and economic developments which tend to increase customer caution regarding purchasing decisions. However, ongoing recovery is expected to continue in most end-customer vertical markets in fiscal 2023.

3.8 Reconciliation to Consolidated Financial Statements

Profit

(in millions of €)	Fiscal year 2022	Fiscal year 2021
Siemens Energy Investment	**(2,911)**	(396)
Siemens Real Estate	**118**	94
Innovation	**(190)**	(207)
Governance	**(582)**	(751)
Centrally carried pension expense	**(113)**	(170)
Amortization of intangible assets acquired in business combinations	**(990)**	(738)
Financing, eliminations and other items	**(474)**	452
Reconciliation to Consolidated Financial Statements	**(5,141)**	(1,717)

The result for **Siemens Energy Investment** was strongly influenced by an impairment of €2.7 billion on Siemens' 35% stake in Siemens Energy AG. The negative result also included Siemens' share of Siemens Energy's after-tax loss and, in addition, expenses from amortization of assets resulting from purchase price allocation due to the initial recognition of the investment at fair value in September 2020.

The increase in **Amortization of intangible assets acquired in business combinations** related mainly to the acquisition of Varian by Siemens Healthineers.

Financing, eliminations and other items included impacts totaling €0.5 billion at Corporate Treasury, resulting from the sale of Siemens' financing and leasing business in Russia at the end of fiscal 2022. Further negative effects included a revaluation loss of €0.3 billion on the stake in Thoughtworks Holding, Inc. (the prior year included a gain of €0.3 billion on this stake) as well as a loss of €0.1 billion resulting from applying hyperinflation accounting related mainly to Türkiye. These effects were partly offset by a gain of €0.5 billion in connection with an investment accounted for using the equity method mainly due to its fair value measurement. For comparison, fiscal 2021 included gains of €0.4 billion related to the transfers of assets to Siemens Pension-Trust e.V. in Germany and expenses of €0.1 billion from revised estimates related to provisions for a legacy project.

4. Results of operations

4.1 Orders and revenue by region

Currency translation effects added five percentage points each to order and revenue growth, respectively. Portfolio transactions, in particular the acquisition of Varian by Siemens Healthineers in the third quarter of fiscal 2021, added three percentage points to order and two percentage points to revenue growth year-over-year. The ratio of orders to revenue (book-to-bill) for Siemens in fiscal 2022 was 1.24. The order backlog was €102 billion as of September 30, 2022.

Orders (location of customer)

	Fiscal year		% Change	
(in millions of €)	2022	2021	Actual	Comp.
Europe, C.I.S., Africa, Middle East	**42,373**	34,311	23%	22%
therein: Germany	***15,046***	*12,118*	*24%*	*24%*
Americas	**25,646**	20,474	25%	8%
therein: U.S.	***21,563***	*17,555*	*23%*	*5%*
Asia, Australia	**20,990**	16,589	27%	15%
therein: China	***10,831***	*9,029*	*20%*	*8%*
Siemens (continuing operations)	**89,010**	71,374	25%	17%
therein: emerging markets[1]	***24,139***	*19,208*	*26%*	*17%*

[1] As defined by the International Monetary Fund.

Despite a continuing complex macroeconomic environment influenced by energy shortages and availability concerns stemming from the war in Ukraine, high inflation and effects associated with COVID-19, orders related to external customers rose in all four industrial businesses year-over-year with Digital Industries, Smart Infrastructure and Siemens Healthineers recording substantial order growth. The broad-based increase in emerging markets was driven by China and, to a lesser degree, India.

In the **Europe, C.I.S., Africa, Middle East** region, order intake increased in all four industrial businesses. Order growth was led by substantial increases in Digital Industries and Mobility. Smart Infrastructure and Siemens Healthineers also recorded strong order growth year-over year. In Germany, Mobility posted sharp growth due to a higher volume from large orders that included a €1.5 billion order for high-speed trains. Digital Industries and Smart Infrastructure also posted double-digit growth, while orders for Siemens Healthineers declined due mainly to lower volume from rapid coronavirus antigen tests.

Order intake in both the **Americas** region and in the U.S. showed a similar pattern: Smart Infrastructure, Digital Industries and Siemens Healthineers recorded double-digit growth, while orders in Mobility declined sharply on a lower volume from large orders which in the prior year included a €2.8 billion order in the U.S. In addition, order intake both in the region and in the U.S. was subject to significant positive currency translation effects, as well as strong portfolio effects which related primarily to the acquisition of Varian.

In the **Asia, Australia** region, order intake was up on double-digit increases in the majority of industrial businesses, with sharp growth at Digital Industries. The pattern of order development in China was largely the same as for the region. Overall, order intake both in the region and in China benefited clearly from positive currency translation effects.

Revenue (location of customer)

	Fiscal year		% Change	
(in millions of €)	2022	2021	Actual	Comp.
Europe, C.I.S., Africa, Middle East	**33,481**	31,138	8%	6%
therein: Germany	***11,961***	*11,249*	*6%*	*6%*
Americas	**20,680**	16,312	27%	10%
therein: U.S.	***17,241***	*13,521*	*28%*	*10%*
Asia, Australia	**17,816**	14,815	20%	10%
therein: China	***9,557***	*8,232*	*16%*	*5%*
Siemens (continuing operations)	**71,977**	62,265	16%	8%
therein: emerging markets[1]	***20,249***	*17,651*	*15%*	*6%*

[1] As defined by the International Monetary Fund.

Revenue related to external customers rose in all four industrial businesses year-over-year, with the highest contributions coming from Siemens Healthineers. Digital Industries and Smart Infrastructure recorded significant increases, while Mobility posted moderately higher revenue year-over-year. The revenue increase in emerging markets was driven by strong demand in China and, to a lesser degree in India.

Revenue in **Europe, C.I.S., Africa, Middle East** increased with contributions from all four industrial businesses, led by significant growth at Digital Industries. Within the region, Germany showed clear growth driven by double-digit growth at Mobility and Digital Industries, while revenue at Siemens Healthineers declined significantly mainly due to lower volume from rapid coronavirus antigen tests.

In the **Americas** and in the U.S., revenue was up in all four industrial businesses with Siemens Healthineers, driven by a high demand from rapid coronavirus antigen tests, Smart Infrastructure and Digital Industries reporting double-digit growth. As with orders, revenue was subject to strong positive currency translation effects and portfolio effects which related primarily to the acquisition of Varian.

In the **Asia, Australia** region, all four industrial businesses contributed to the revenue increase. As in the region, in China, the strong revenue growth was driven by Digital Industries, which recorded substantial growth. Revenue growth both in the region and in China benefited from strong positive currency translation effects.

4.2 Income

(in millions of €, earnings per share in €)	Fiscal year 2022	2021	% Change
Digital Industries	**3,892**	3,360	16%
Smart Infrastructure	**2,222**	1,729	29%
Mobility	**794**	850	(7)%
Siemens Healthineers	**3,369**	2,847	18%
Industrial Business	**10,277**	8,786	17%
Profit margin Industrial Business	***15.1%***	*15.0%*	
Siemens Financial Services	**498**	512	(3)%
Portfolio Companies	**1,520**	(84)	n/a
Reconciliation to Consolidated Financial Statements	**(5,141)**	(1,717)	(199)%
Income from continuing operations before income taxes	**7,154**	7,496	(5)%
Income tax expenses	**(2,741)**	(1,861)	(47)%
Income from continuing operations	**4,413**	5,636	(22)%
Income (loss) from discontinued operations, net of income taxes	**(21)**	1,062	n/a
Net income	**4,392**	6,697	(34)%
Basic EPS	**4.65**	7.68	(40)%
EPS pre PPA	**5.47**	8.32	(34)%
ROCE	**10.0%**	15.2%	

As a result of the developments described in chapter 3, **Income from continuing operations before income taxes** decreased by 5%. Severance charges for continuing operations were €272 million, of which €190 million were in Industrial Business. In fiscal 2021, severance charges for continuing operations were €410 million, of which €251 million were in Industrial Business.

Income from continuing operations decreased by 22%. The tax rate in fiscal 2022 was 38% (fiscal 2021: 25%), substantially impacted by the nontax-deductible impairment of the stake in Siemens Energy AG. Following the war in Ukraine, Siemens decided to exit business activities in Russia. Subsequent to this decision, Income from continuing operations was burdened by negative effects totaling €1.3 billion related to these activities primarily at Mobility, SFS and Corporate Treasury.

Income from discontinued operations, net of income taxes in fiscal 2021 included primarily a gain of €0.9 billion from the sale of Flender GmbH.

The decrease in **Basic EPS** and in **EPS pre PPA** reflects the decrease of Net income attributable to Shareholders of Siemens AG, which was €3,723 million in fiscal 2022 compared to €6,161 million in fiscal 2021.

The impairment of our stake in Siemens Energy AG burdened **ROCE** by 5.3 percentage points, resulting in a declined ROCE year-over-year which is below the target range set in our Siemens Financial Framework.

4.3 Research and development

In fiscal 2022, we reported research and development expenses of €5.6 billion, compared to €4.9 billion in fiscal 2021. The resulting R&D intensity, defined as the ratio of R&D expenses and revenue, was 7.8%, as in fiscal 2021. Additions to capitalized development expenses amounted to €0.3 billion as in the prior year. As of September 30, 2022 and 2021, Siemens worldwide held approximately 43,600 granted patents in its continuing operations. On average, we had 46,900 R&D employees in fiscal 2022.

Our research and development activities are ultimately geared to developing innovative, sustainable solutions for our customers – and our businesses – while also strengthening our own competitiveness. Joint implementation by the operating units and Technology, our central R&D department, ensures that research activities and business strategies are closely aligned with one another, and that all units benefit equally and quickly from technological developments.

Siemens core technologies have been determined to be critical for our Company's long-term success and that of our customers and have been refocused in fiscal 2022 in eleven technology areas: additive manufacturing and materials, cybersecurity and trust, data analytics and artificial intelligence, power electronics, simulation and digital twin, sustainable energy and infrastructure, automation, integrated circuits and electronics, connectivity and edge, software systems and processes, and user experience.

We advance technologies also through our open innovation concept. We work closely with scholars from leading universities, research institutions and academic start-ups, not only under bilateral cooperation agreements but also in publicly funded collective projects. Our focus here is on our strategic research partners and in particular the Siemens Research and Innovation Ecosystems, which we maintain at 16 locations worldwide.

Siemens' global venture capital unit, Next47, provides capital to help start-ups expand and scale. It serves as the creator of next-generation businesses for Siemens by building, buying and partnering with innovative companies at any stage. Next47 is focused on anticipating how emerging technologies will influence our end markets. This foreknowledge enables our Company and our customers to grow and thrive in the age of digitalization.

5. Net assets position

(in millions of €)	Sep 30, 2022	2021	% Change
Cash and cash equivalents	**10,465**	9,545	10%
Trade and other receivables	**16,701**	15,518	8%
Other current financial assets	**9,696**	7,985	21%
Contract assets	**7,559**	6,645	14%
Inventories	**10,626**	8,836	20%
Current income tax assets	**1,432**	1,795	(20)%
Other current assets	**1,935**	1,751	10%
Assets classified as held for disposal	**413**	223	85%
Total current assets	**58,829**	52,298	12%
Goodwill	**33,861**	29,672	14%
Other intangible assets	**12,196**	10,827	13%
Property, plant and equipment	**11,733**	11,023	6%
Investments accounted for using the equity method	**4,955**	7,539	(34)%
Other financial assets	**25,903**	22,964	13%
Deferred tax assets	**2,459**	2,865	(14)%
Other assets	**1,565**	2,183	(28)%
Total non-current assets	**92,673**	87,074	6%
Total assets	**151,502**	139,372	9%

Our total assets at the end of fiscal 2022 were influenced by positive currency translation effects of €10.7 billion (particularly affecting goodwill, other intangible assets and other financial assets), primarily involving the U.S. dollar.

Both **other current financial assets** and **other financial assets** increased due mainly to higher loans receivable at SFS. The latter line item rose also due to increased positive fair values of derivative financial instruments, partly offset by effects related to the sale of Siemens' financing and leasing business in Russia.

Inventories increased in all industrial businesses, with the build-up most evident at Siemens Healthineers, Digital Industries and Smart Infrastructure.

While the currency translation effects mentioned above resulted in an increase of **goodwill** and **other intangible assets**, another major factor was the acquisition of Brightly. The increase of other intangible assets resulted also from the acquisition of Sqills. For further information see Note 3 in Notes to Consolidated Financial Statements for fiscal 2022.

The impairment on Siemens' 35% stake in Siemens Energy was the main factor for the decrease of **investments accounted for using the equity method**.

Deferred tax assets decreased due mainly to income tax effects related to remeasurement of defined benefits plans.

The decrease in **other assets** was driven mainly by lower net defined benefit assets, primarily from effects of asset ceiling.

6. Financial position

6.1 Capital structure

(in millions of €)	Sep 30, 2022	2021	% Change
Short-term debt and current maturities of long-term debt	**6,658**	7,821	(15)%
Trade payables	**10,317**	8,832	17%
Other current financial liabilities	**1,616**	1,731	(7)%
Contract liabilities	**12,049**	9,876	22%
Current provisions	**2,156**	2,293	(6)%
Current income tax liabilities	**2,381**	1,809	32%
Other current liabilities	**7,448**	7,628	(2)%
Liabilities associated with assets classified as held for disposal	**61**	10	>200%
Total current liabilities	**42,686**	40,000	7%
Long-term debt	**43,978**	40,879	8%
Provisions for pensions and similar obligations	**2,275**	2,839	(20)%
Deferred tax liabilities	**2,381**	2,337	2%
Provisions	**1,857**	1,723	8%
Other financial liabilities	**1,867**	679	175%
Other liabilities	**1,654**	1,925	(14)%
Total non-current liabilities	**54,011**	50,381	7%
Total liabilities	**96,697**	90,381	7%
Debt ratio	***64%***	*65%*	
Total equity attributable to shareholders of Siemens AG	**48,895**	44,160	11%
Equity ratio	***36%***	*35%*	
Non-controlling interests	**5,910**	4,831	22%
Total liabilities and equity	**151,502**	139,372	9%

The decrease in **short-term debt and current maturities of long-term debt** was due mainly to repayment of euro and U.S. dollar instruments totaling €6.1 billion. This was partly offset by reclassifications of long-term instruments totaling €4.5 billion.

Contract liabilities increased in all industrial businesses, with the build-up most evident at Siemens Healthineers, Digital Industries and Mobility.

Current income tax liabilities increased mainly due to future tax payments resulting from the sale of Siemens' mail and parcel-handling business, among other divestments.

Long-term debt increased due primarily to the issuance of euro instruments of €5.0 billion and currency translation effects for bonds issued in the U.S. dollar and British pound. Set against this were mainly decreases from the above-mentioned reclassifications.

Provisions for pensions and similar obligations decreased mainly due to a higher discount rate. This effect was partially offset by a negative return on plan assets and inflation-related adjustments.

The increase of **other financial liabilities** resulted primarily from negative fair values of derivative financial instruments, which declined further.

The main factors for the increase in **total equity attributable to shareholders of Siemens AG** were €3.7 billion in net income attributable to shareholders of Siemens AG; positive other comprehensive income, net of income taxes, of €5.8 billion resulting mainly from currency translation, partly offset by negative effects from remeasurements of defined benefit plans. The increase was partly offset by dividend payments of €3.2 billion (for fiscal 2021) and the repurchases of 14,185,791 treasury shares totaling €1.6 billion (including commission to a commissional bank).

Capital structure ratio

Our capital structure ratio as of September 30, 2022 decreased to 1.0 from 1.5 a year earlier. The change was due to a decrease in Industrial net debt and a higher EBITDA.

Debt and credit facilities

As of September 30, 2022, we recorded, in total, €44.8 billion in notes and bonds, €2.7 billion in loans from banks, €0.1 billion in other financial indebtedness and €3.0 billion in lease liabilities. Notes and bonds were issued mainly in the U.S. dollar and euro, and to a lesser extent in the British pound.

We have credit facilities totaling €7.5 billion which were unused as of September 30, 2022.

For further information about our debt see Note 16 in Notes to Consolidated Financial Statements for fiscal 2022. For further information about the functions and objectives of our financial risk management see Note 25 in Notes to Consolidated Financial Statements for fiscal 2022.

Off-balance-sheet commitments

As of September 30, 2022, the undiscounted amount of maximum potential future payments related primarily to credit and performance guarantees amounted to €9.8 billion. This included primarily Siemens' obligations from performance and credit guarantees in connection with the Siemens Energy business, for which Siemens has reimbursement rights towards Siemens Energy.

In addition to these commitments, there are contingent liabilities of €0.4 billion which result mainly from other guarantees, legal proceedings and from joint and several liabilities of consortia. Other guarantees include €0.1 billion in connection with the Siemens Energy business, for which Siemens has reimbursement rights towards Siemens Energy.

Irrevocable loan commitments amounted to €4.0 billion. A considerable portion of these commitments resulted from asset-based lending transactions, meaning that the respective loans can be drawn only after the borrower has provided sufficient collateral.

For further information about our commitments and contingencies see Note 21 in Notes to Consolidated Financial Statements for fiscal 2022.

Share buyback

The share buyback program announced on June 24, 2021 with a volume of up to €3 billion ending September 15, 2026, at the latest, began on November 15, 2021. This buyback is executed based on the authorization provided by the Annual Shareholders' Meeting on February 5, 2020. In fiscal 2022, Siemens repurchased 14,185,791 shares under this share buyback program.

6.2 Cash flows

(in millions of €)	Fiscal year 2022
Cash flows from operating activities	
Net income	**4,392**
Change in operating net working capital	**537**
Other reconciling items to cash flows from operating activities - continuing operations	**5,392**
Cash flows from operating activities - continuing operations	**10,322**
Cash flows from operating activities - discontinued operations	**(81)**
Cash flows from operating activities - continuing and discontinued operations	**10,241**
Cash flows from investing activities	
Additions to intangible assets and property, plant and equipment	**(2,084)**
Acquisitions of businesses, net of cash acquired	**(2,207)**
Purchase of investments and financial assets for investment purposes	**(1,404)**
Change in receivables from financing activities of SFS	**(1,100)**
Other disposals of assets	**4,327**
Cash flows from investing activities - continuing operations	**(2,467)**
Cash flows from investing activities - discontinued operations	**(23)**
Cash flows from investing activities - continuing and discontinued operations	**(2,490)**
Cash flows from financing activities	
Purchase of treasury shares	**(1,565)**
Re-issuance of treasury shares and other transactions with owners	**(305)**
Issuance of long-term debt	**4,969**
Repayment of long-term debt (including current maturities of long-term debt)	**(6,663)**
Change in short-term debt and other financing activities	**455**
Interest paid	**(824)**
Dividends paid to shareholders of Siemens AG	**(3,215)**
Dividends attributable to non-controlling interests	**(354)**
Cash flows from financing activities - continuing operations	**(7,502)**
Cash flows from financing activities - discontinued operations	**(1)**
Cash flows from financing activities - continuing and discontinued operations	**(7,502)**

All industrial businesses recorded **cash inflows from operating activities** which exceed their profit, with the highest contribution from Digital Industries. Cash inflows from changes in operating net working capital were driven by Mobility.

Cash outflows from **acquisitions of businesses**, **net of cash acquired**, were due mainly to the acquisitions of Brightly by Smart Infrastructure for €1.5 billion, including the settlement of debt, and Sqills by Mobility for €0.5 billion.

Cash outflows for **purchase of investments and financial assets for investment purposes** primarily included additions of assets eligible as central bank collateral and payments for debt or equity investments.

Cash outflows from **change in receivables from financing activities of SFS** related primarily to SFS' debt business.

Cash inflows from **other disposals of assets** mainly included proceeds of €1.1 billion from the sale of the mail and parcel-handling business by Portfolio Companies and €0.9 billion from the sale of Yunex Traffic by Mobility, as well as repayments of loans and disposals of assets eligible as central bank collateral.

Cash outflows from the **re-issuance of treasury shares and other transactions with owners** were driven by the purchase of Siemens Healthineers AG treasury shares.

Cash inflows from the **change in short-term debt and other financing activities** mainly included cash inflows related to the settlement of financial derivatives used to hedge currency exposure in our financing activities and from new bank loans, partly offset by cash outflows related to commercial paper.

Cash outflows for **dividends attributable to non-controlling interests** mainly included dividends paid to the shareholders of Siemens Healthineers AG.

With our ability to generate positive operating cash flows from continuing and discontinued operations of €10.2 billion in fiscal 2022, our total liquidity (defined as cash and cash equivalents plus current interest-bearing debt securities) of €11.7 billion, our unused lines of credit, and our credit ratings at year-end, we believe that we have sufficient flexibility to fund our capital requirements. Also in our opinion, our operating net working capital is sufficient for our present requirements.

Cash conversion rate

	Fiscal year 2022			Fiscal year 2021		
(in millions of €)	Continuing operations	Discontinued operations	Continuing and discontinued operations	Continuing operations	Discontinued operations	Continuing and discontinued operations
Cash flows from operating activities	**10,322**	**(81)**	**10,241**	10,109	(113)	9,996
Additions to intangible assets and property, plant and equipment	**(2,084)**	**–**	**(2,083)**	(1,730)	(29)	(1,759)
(I) Free cash flow	**8,238**	**(81)**	**8,157**	8,379	(142)	8,237
(II) Net income			**4,392**			6,697
(I) / (II) Cash conversion rate			**1.86**			1.23

The cash conversion rate increased sharply primarily due to lower net income, which was burdened by a non-cash impairment of €2.7 billion on our stake in Siemens Energy AG.

Investing activities

Additions to intangible assets and property, plant and equipment from continuing operations totaled €2.1 billion in fiscal 2022. Within the industrial businesses, ongoing investments related mainly to technological innovations; maintaining, extending and digitalizing our capacities for designing, manufacturing and marketing new solutions; improving productivity; and replacements of fixed assets. These investments amounted to €1.5 billion in fiscal 2022. The remaining portion related mainly to Siemens Real Estate, including significant amounts for projects such as new office buildings in Germany. Siemens Real Estate is responsible for uniform and comprehensive management of Company real estate worldwide (except for Siemens Healthineers) and supports the industrial businesses and corporate activities with customer-specific real estate solutions.

With regard to capital expenditures for continuing operations, we expect a significant increase in fiscal 2023. In the coming years, up to €0.6 billion are to be invested in Siemensstadt Square. This project initiated in fiscal 2019 aims to transform Siemens' existing industrial area in Berlin into a modern urban district supporting a diverse range of purposes, including strengthening key technologies. Further investments are planned in relation to Siemens Campus Erlangen. In addition, we continue to invest in attractive innovation fields through Next47, our global venture capital unit.

7. Overall assessment of the economic position

Fiscal 2022 was marked by geopolitical and economic turmoil, in particular by the war in Ukraine and its global repercussions, which further exacerbated already existing economic problems in many countries and which also affected Siemens. As a consequence of the war, Siemens decided to exit business activities in Russia. Despite strong global efforts in combating COVID-19, the pandemic continued to impact economic development worldwide, resulting in lockdowns particularly in China and affecting global supply and logistics chains. Our focus has been on successfully managing in this complex environment. In fiscal 2022, we saw accelerated demand in particular for our offerings in the areas of automation, digitalization, resource efficiency and decarbonization. We expect them to continue to be growth drivers in the coming years.

During the fiscal year, we made further progress in sharpening our business portfolio. On the divestment side, we sold the road-traffic business Yunex Traffic, our share in Valeo Siemens eAutomotive and the mail and parcel-handling business of Siemens Logistics. On the acquisition side, we strengthened our industrial businesses through the acquisition of Sqills, a provider of cloud-based inventory management, reservation, and ticketing software for public transport operators. This acquisition enhances Mobility's existing offerings for increasing the availability, capacity and utilization of public transportation. We also strengthened Smart Infrastructure's presence in the market for the software used to manage built infrastructure through the acquisition of Brightly, a U.S.-based provider of cloud-based Software as a Service (SaaS) for asset and maintenance management and for energy and sustainability management. As a significant further step in implementing our digitalization strategy, in June 2022 we launched Siemens Xcelerator, a digital business platform that includes a curated portfolio of IoT-enabled hardware, software and digital services from across Siemens and from certified third parties. Siemens Xcelerator facilitates interactions and transactions between customers, partners and developers and thus enables acceleration of the digital transformation of our customers of all sizes in industry, buildings, power transmission grids and mobility.

Siemens was very successful in fiscal 2022 despite the complex geopolitical and economic environment mentioned above. Many of our key customer industries including automotive, machine building, pharmaceuticals, chemicals, electronics, cloud services and public transport kept growing and we continued to successfully avoid major supply chain disruptions. However, tight supply and logistics chains led to extended delivery times for some automation products, while effects related to COVID-19, mainly including medical leave for employees, impacted some of our own production capacity. Our Industrial Business again achieved excellent results, particularly in Digital Industries, Smart Infrastructure and Siemens Healthineers. Results at Mobility were strongly burdened by negative effects for winding down business activities in Russia. Outside Industrial Business, exiting financing and leasing activities in Russia resulted in further charges, burdening results in Reconciliation to Consolidated Financial Statements and SFS. Also outside Industrial Business, a significant decline in the market value of Siemens Energy AG led to an impairment of our stake in the company; as a consequence, after the third quarter of fiscal 2022 we had to revise the forecast provided in our Combined Management Report for fiscal 2021 for EPS pre PPA to include the earnings effect of the impairment.

Orders rose 25% year-over-year to €89.0 billion, for a book-to-bill ratio of 1.24, thus fulfilling our expectation of a ratio above 1. All our four industrial businesses increased orders year-over-year. Order growth was led by substantial increases at Digital Industries and Smart Infrastructure. Orders at Siemens Healthineers also rose substantially and included new orders from the acquisition of Varian. Mobility, which won large contracts in both periods under review, among them an order worth €1.5 billion for high-speed trains in Germany in fiscal 2022, increased order intake moderately year-over-year. Overall, order growth benefited from positive currency translation effects.

Revenue was also higher in all our industrial businesses, rising to €72.0 billion, a 16% increase year-over-year, which included positive currency translation effects. Digital Industries, Smart Infrastructure and Siemens Healthineers contributed double-digit growth. Revenue growth at Digital Industries was driven mainly by the automation businesses, while in its software business a high rate of customer acceptance of the PLM SaaS transition reduced current license revenue in favor of recurring future subscription revenue. Revenue at Smart Infrastructure rose on contributions from all businesses, led by the electrical products business. At Siemens Healthineers, revenue also grew in all businesses and included positive portfolio effects. Revenue at Mobility rose moderately, as revenue development was held back by supplier delays in delivering materials and components and by effects related to COVID-19. Excluding currency translation and portfolio effects, revenue for Siemens grew 8.2%. We thus exceeded the forecast provided in our Combined Management Report for fiscal 2021, which was to achieve mid-single-digit comparable revenue growth, and also exceeded our subsequent guidance provided in the Half-year Financial Report 2022, which was to achieve 6% to 8% in comparable revenue growth.

Profit Industrial Business rose 17% to a record-high €10.3 billion. All industrial businesses except Mobility increased their profit year-over-year. The strongest increase came from Smart Infrastructure on improvements in all its businesses. Higher profit at Siemens Healthineers included another strong contribution from the rapid coronavirus antigen testing business in the diagnostics business. Profit growth at Digital Industries was driven by the automation businesses, only partly offset by a decline in profit in the software business due mainly to higher expenses related to cloud-based activities. Profit at Mobility came in lower due mainly to negative effects for winding down business activities in Russia totaling €0.6 billion and also to burdens from supplier delays and COVID-19 effects, only partly offset by a €0.7 billion gain from the sale of Yunex Traffic.

Our Industrial Business generated a strong profit margin of 15.1%, up slightly from 15.0% a year earlier. This increase was due to Smart Infrastructure which improved its profit margin to 12.8%. Digital Industries and Siemens Healthineers contributed the highest margins with 19.9% and 15.5%, respectively, while the profit margin for Mobility came in at 8.2%.

Earnings before taxes at SFS declined moderately as higher earnings from the equity business were more than offset by decreased results in the debt business, including a €0.2 billion impact in connection with the sale of the financing and leasing business in Russia. Return on equity after tax for SFS was 15.6%. Profit for Portfolio Companies included a €1.1 billion gain from the sale of the mail and parcel-handling business of Siemens Logistics and a €0.3 billion revaluation gain in connection with the sale of our stake in Valeo Siemens eAutomotive GmbH. Results within Reconciliation to Consolidated Financial Statements were burdened by a €2.7 billion impairment of our stake in Siemens Energy AG and a €0.5 billion impact resulting from the sale of Siemens' financing and leasing business in Russia.

Despite the excellent performance of our Industrial Business, net income in fiscal 2022 declined to €4.4 billion, down from €6.7 billion a year earlier in which discontinued operations contributed income of €1.1 billion largely related to the sale of Flender. The successful further focusing of our portfolio in fiscal 2022 resulted in income of €2.2 billion, including the above-mentioned gains related to the mail and parcel-handling business of Siemens Logistics and Yunex Traffic; this figure exceeded the €1.5 billion in such income a year earlier, including the gain from the sale of Flender. Nevertheless, positive results from divestments were more than offset by the €2.7 billion impairment of our stake in Siemens Energy AG and a negative €1.3 billion following our decision to exit business activities in Russia, as mentioned above. Basic EPS from net income came in at €4.65 and EPS pre PPA was €5.47. Due particularly to the impairment of our stake in Siemens Energy AG, which burdened basic EPS from net income and EPS pre PPA each by €3.37 per share, we did not reach the forecast provided in our Combined Management Report for fiscal 2021, which was to achieve EPS pre PPA in a range of €8.70 to €9.10; we did achieve our forecast revised after the third quarter of fiscal 2022, which was for EPS pre PPA in a range of €5.33 to €5.73.

The impairment of our stake in Siemens Energy AG burdened ROCE by 5.3 percentage points, resulting in ROCE of 10.0% for fiscal 2022, below our forecast given in the Combined Management Report 2021, which was for ROCE to improve in our target range of 15% to 20%.

We evaluate our capital structure using the ratio of Industrial net debt to EBITDA. Due to a combination of a decrease in Industrial net debt and higher EBITDA year-over-year, this ratio declined to 1.0. We thus achieved the forecast provided in our Combined Management Report 2021, which was to achieve a ratio below the prior-year figure of 1.5.

Free cash flow from continuing and discontinued operations for fiscal 2022 was €8.2 billion, on the high level of a year earlier. The cash conversion rate for Siemens, defined as the ratio of Free cash flow from continuing and discontinued operations to Net income, was 1.86, exceeding our targeted cash conversion rate of 1 minus the annual comparable revenue growth rate for Siemens.

We intend to continue providing an attractive shareholder return. The Siemens Managing Board, in agreement with the Supervisory Board, proposes a dividend of €4.25 per share, up from €4.00 per share a year earlier.

8. Report on expected developments and associated material opportunities and risks

8.1 Report on expected developments

8.1.1 Worldwide economy

After a dynamic start in calendar 2022, the global economy experienced a substantial slowdown in the course the year, mainly due to the war in Ukraine, spiraling energy prices and very high inflation rates. Several regions were expected to be already in or on the verge of a recession at the end of calendar 2022. Calendar 2023 is likely to be a year of economic headwinds, with GDP in Europe and the U.S. contracting slightly and global GDP expanding by only 1.5%. The outlook is subject to an extraordinarily high level of uncertainty.

The EU's economic output is expected to decline by 0.5% in calendar 2023. This assumes that the war in Ukraine does not escalate further. Energy prices, which increased dramatically in calendar 2022, should remain at a high level but ease further compared with the highs of summer 2022. Germany is likely to see a somewhat more significant decline in GDP (-1.0%) due to its high dependence on Russian energy supplies.

In the USA, the Federal Reserve is expected to raise the key policy interest rate to almost 5% in calendar 2023 in order to bring inflation back down to the target level of 2%. The ECB is expected to raise its main refinancing rate to almost 3% in calendar 2023. Rising financing costs will likely cause residential and commercial construction to decline. Investment in property, plant and equipment and software is expected to weaken. Consumer spending is expected to increase slightly, while spending on services is expected to increase more significantly than spending on goods – thus the shift from services to products triggered by COVID-19 should continue to reverse and spending patterns normalize. Economic output is expected to contract slightly by 0.2% in calendar 2023.

Economic growth in China is expected to accelerate only slightly in calendar 2023, after the COVID-19 lockdowns and the housing sector crisis already weighed on GDP growth in calendar 2022 (+3%). The impact of the necessary adjustments in China's real estate sector, the limited benefit of stimulus packages due to concerns about high debt levels, and weakening export demand are together expected to limit China's GDP growth to 4.4% in calendar 2023.

Having probably peaked in calendar 2022, inflation is expected to weaken slightly in calendar 2023. In the USA, consumer price inflation is estimated at 4.3% in calendar 2023, down from 8.1% in calendar 2022. In the EU, inflation is still expected to be 6.5% (down from 9% in calendar 2022). Producer prices, which are more volatile than consumer prices and run ahead of them, are expected to fall by 5.4% in the USA in calendar 2023 (after an increase of 16.8% in calendar 2022), while they are still expected to rise by 5.4% in the EU (after 30.4% in calendar 2022).

Overall, the macroeconomic environment is likely to be challenging for Siemens in fiscal 2023 given the economic headwinds. For example, global fixed capital formation is expected to grow by only 1.7% in calendar 2023, down from 2.7% in calendar 2022. However, two effects are expected to provide significant support to our customer markets in fiscal 2023: Firstly, key customer sectors should be supported by the still very high order backlogs and work them off as supply and logistics chains ease. In this context, the infrastructure sector should continue to benefit from various (green) stimulus programs. On the other hand, producer prices are rising, which means that higher costs are being passed on to customers, at least in part. These higher prices also contribute to nominal (not price-adjusted) growth in customer markets in fiscal 2023.

The forecasts presented here for GDP and fixed investments are based on a report from S&P Global dated November 15, 2022.

8.1.2 Siemens Group

We are basing our outlook for fiscal 2023 on the above-mentioned expectations and assumptions regarding the overall economic situation and also on the specific market conditions we expect for our respective industrial businesses, as described in chapter 3 Segment information. Furthermore, we assume that geopolitical tensions do not further escalate and challenges from COVID-19 and supply chain constraints continue to ease. We expect continued impacts from higher prices for raw materials and components and from wage increases, which we intend to cover with improved productivity and by adjusting prices for our own products, solutions and services, particularly at Digital Industries and Smart Infrastructure.

We are exposed to currency translation effects, mainly involving the U.S. dollar, the British pound and currencies of emerging markets, particularly the Chinese yuan. While we expect volatility in global currency markets to continue in fiscal 2023, we have improved our natural hedge on a global basis through geographic distribution of our production facilities in the past. Additionally, Siemens is still a net exporter from the Eurozone to the rest of the world, so a weak euro is principally favorable for our business and a strong euro is principally unfavorable. In addition to the natural hedging strategy just mentioned, we also hedge currency risk in our export business using derivative financial instruments. We expect these steps to help us limit effects on income related to currency in fiscal 2023. In this outlook, we assume that currency translation effects in fiscal 2023 do not significantly influence nominal volume growth rates for our businesses.

This outlook excludes burdens from legal and regulatory matters and material impairments.

Segments

With our high order backlog, particularly in short-cycle businesses, we expect our industrial businesses to continue their profitable growth.

Digital Industries expects for fiscal 2023 to achieve comparable revenue growth of 10% to 13%. The profit margin is expected to be 19% to 22%.

Smart Infrastructure expects for fiscal 2023 comparable revenue growth of 8% to 11%. The profit margin is expected to be 13% to 14%.

Mobility expects for fiscal 2023 comparable revenue growth of 6% to 9%. The profit margin is expected to be 8% to 10%.

Siemens Healthineers expects to achieve comparable revenue development between (1)% and 1% in fiscal 2023. Siemens Healthineers is expected to contribute solidly to the profit and profit margin of our Industrial Business.

Siemens Financial Services expects Earnings before taxes in fiscal 2023 close to the prior-year level. Return on equity (ROE) (after tax) is expected to be at the lower end of the target range of 15% to 20%.

Revenue growth

For comparable revenue, we expect the Siemens Group to achieve comparable revenue growth in the range of 6% to 9%. Furthermore, we anticipate that orders in fiscal 2023 will exceed revenue for a book-to-bill ratio above 1.

As of September 30, 2022, our order backlog totaled €102 billion, and we expect conversion from the backlog to strongly support revenue growth in fiscal 2023 with approximately €45 billion of past orders converted to current revenue. For expected conversion of order backlog to revenue for our respective segments, see chapter 3 Segment information.

Profitability

Outside our reportable segments, we expect profit at Portfolio Companies of €0.3 billion in fiscal 2023, including a substantial contribution from the sale of the Commercial Vehicles business, which closed at the beginning of fiscal 2023.

Furthermore, within Siemens Energy Investment, we expect amortization of assets resulting from purchase price allocation due to the initial recognition of the investment at fair value in September 2020, to be €0.1 billion in fiscal 2023. In addition, Siemens Energy Investment includes further effects from at-equity accounting, such as our share in Siemens Energy's profit (loss) after tax. We anticipate that Siemens Real Estate will continue with real estate disposals depending on market conditions, at a similar level as in fiscal 2022. Results for Innovation also are expected on the prior-year level, which was a negative €0.2 billion. Results related to Governance were a negative €0.6 billion in fiscal 2022; we expect an improvement in fiscal 2023, to a negative €0.5 billion. Centrally carried pension expense are expected to be on the prior-year level, which was a negative €0.1 billion. Amortization of intangible assets acquired in business combinations, which was €1.0 billion in fiscal 2022, is expected at €0.9 billion in fiscal 2023. Financing, eliminations and other items, which were a negative €0.5 billion in fiscal 2022, are expected in a range between a negative €0.5 billion and a negative €0.6 billion.

We anticipate our tax rate for fiscal 2023 to be in the range of 26% to 31%, compared to 38% in fiscal 2022. This assumption does not take into consideration possible impacts from potential major tax reforms. We do not expect material influence on financial results from discontinued operations in fiscal 2023.

Our forecast for net income takes into account a number of additional factors. We assume solid project execution to continue in fiscal 2023. We plan to increase the ratio of R&D expenses to revenue, which was 7.8% in fiscal 2022, to approximately 8% with a strong focus on software and digital technologies. Severance charges, which were €0.3 billion in fiscal 2022, are expected at a similar level in fiscal 2023. While gains from executing our portfolio improvement program contributed €2.2 billion to net income in fiscal 2022, we expect a sharply lower contribution from such gains in fiscal 2023.

Given the above-mentioned assumptions, we expect profitable growth of our industrial businesses to drive an increase in EPS pre PPA to a range of €8.70 to €9.20 in fiscal 2023, along with a corresponding increase in net income.

Capital efficiency

For fiscal 2023, we expect ROCE, to come close to or reach the lower end of our target range of 15% to 20%.

Capital structure

We aim in general for a capital structure, defined as the ratio of industrial net debt to EBITDA (continuing operations), of up to 1.5 and expect to achieve this in fiscal 2023.

Cash conversion rate

For fiscal 2023, we expect a cash conversion rate that contributes to reaching our target of 1 minus the annual comparable revenue growth rate of Siemens over a cycle of three to five years.

8.1.3 Overall assessment

Our outlook for fiscal 2023 is based on the assumptions that geopolitical tensions do not further escalate and challenges from COVID-19 and supply chain constraints continue to ease. Under these conditions, with our high order backlog, particularly in short-cycle businesses, we expect our industrial businesses to continue their profitable growth.

For the Siemens Group we expect comparable revenue growth in the range of 6% to 9% and a book-to-bill ratio above 1.

We expect this profitable growth of our industrial businesses to drive an increase in EPS pre PPA to a range of €8.70 to €9.20 in fiscal 2023.

This outlook excludes burdens from legal and regulatory matters and material impairments.

Overall, the actual development for Siemens and its segments may vary, positively or negatively, from our outlook due to the risks and opportunities described below or if our expectations and assumptions do not materialize.

8.2 Risk management

8.2.1 Basic principles of risk management

Our risk management policy stems from a philosophy of pursuing sustainable growth and creating economic value while managing appropriate risks and opportunities and avoiding inappropriate risks. As risk management is an integral part of how we plan and execute our business strategies, our risk management policy is set by the Managing Board. Our organizational and accountability structure requires each of the respective managements of our organizational units to implement risk management programs that are tailored to their specific industries and responsibilities, while being consistent with the overall policy.

8.2.2 Enterprise risk management process

We have implemented and coordinated a set of risk management and control systems which support us in the early recognition of developments that could jeopardize the continuity of our business. The most important of these systems include our enterprise-wide processes for strategic planning and management reporting. Strategic planning is intended to support us in considering potential risks and opportunities well in advance of major business decisions, while management reporting is intended to enable us to monitor such risks more closely as our business progresses. Our risk management and its contributing elements are regularly subject of audit activities by our internal audit function. Accordingly, if deficits are detected, it is possible to adopt appropriate measures for their elimination. This coordination of processes and procedures is intended to help ensure that the Managing Board and the Supervisory Board are fully informed about significant risks in a timely manner.

Risk management at Siemens builds on a comprehensive, interactive and management-oriented Enterprise Risk Management (ERM) approach that is integrated into the organization and that addresses both risks and opportunities. Our ERM approach is based on the globally accepted COSO Standard (Committee of Sponsoring Organizations of the Treadway Commission) Enterprise Risk Management – Integrating with Strategy and Performance (2017) and the ISO (International Organization for Standardization) Standard 31000 (2018) and is adapted to Siemens requirements. The frameworks connect the ERM process with our financial reporting process, our internal control and compliance management system. They consider a company's strategy, the efficiency and effectiveness of its business operations, the reliability of its financial reporting and compliance with relevant laws and regulations to be equally important.

Our ERM process aims for early identification and evaluation of, and response regarding, risks and opportunities that could materially affect the achievement of our strategic, operational, financial and compliance objectives. The time horizon is typically three years, and we take a net risk approach, addressing risks and opportunities remaining after the execution of existing and effective measures and controls. If risks have already been considered in plans, budgets, forecasts or the consolidated financial statements (e.g. as a provision or risk contingency), they are supposed to be incorporated with their financial impact in the entity's business objectives. As a consequence, only additional risks arising from the same subject (e.g. deviations from business objectives, different impact perspectives) should be considered. In order to provide a comprehensive view of our business activities, risks and opportunities are identified in a structured way combining elements of both top-down and bottom-up approaches. Reporting generally follows a quarterly cycle; we complement this periodic reporting with an ad-hoc reporting process that aims to escalate critical issues in a timely manner. Relevant risks and opportunities are evaluated in terms of impact and likelihood, considering different impact perspectives, including business objectives, reputation and regulatory requirements. The bottom-up identification and prioritization process is supplemented by workshops with the respective managements of our organizational units. The top-down element ensures that potential new risks and opportunities are discussed at different management levels and are included in the subsequent reporting process, if found to be relevant. Reported risks and opportunities are analyzed regarding potential cumulative effects and are aggregated within and for each of the organizational units mentioned above.

Responsibilities are assigned for all relevant risks and opportunities, with the hierarchical level of responsibility depending on the significance of the respective risk or opportunity. In a first step, assuming responsibility for a specific risk or opportunity involves choosing one of our general response strategies. Our general response strategies with respect to risks are avoidance, transfer, reduction or acceptance of the relevant risk. Our general response strategy with respect to opportunities is to "seize" the relevant opportunity. In a second step, responsibility for a risk or opportunity also involves the development, initiation and monitoring of appropriate response measures corresponding to the chosen response strategy. These response measures have to be specifically tailored to allow for effective risk management. Accordingly, we have developed a variety of response measures with different characteristics. For example, we mitigate the risk of fluctuations in currency and interest rates by engaging in hedging activities. Regarding our projects, systematic and comprehensive project management with standardized project milestones, including provisional acceptances during project execution and complemented by clearly defined approval processes, assists us in identifying and responding to project risks at an early stage, even before the bidding phase. Furthermore, we maintain appropriate insurance levels for potential cases of damage and liability risks in order to reduce our exposure to such risks and to avoid or minimize potential losses. Among others, we address the risk of fluctuation in economic activity and customer demand by closely monitoring macroeconomic conditions and developments in relevant industries, and by adjusting capacity and implementing cost-reduction measures in a timely and consistent manner if they are deemed necessary. Due to regular screening of climate risks and environmental, social and governance (ESG) developments we can initiate related mitigation actions in a timely manner as part of our DEGREE implementation. Worldwide there are risks from the transmission of infectious agents from animals to humans, from humans to humans and in other ways. Epidemic, pandemic or other infectious developments such as bioterrorism to cause high disease rates in countries, regions or continents. We constantly check information from the World Health Organization (WHO), the - Centers for Disease Control and Prevention in the U.S. and Europe, the Robert Koch Institute in Germany and other institutions in order to be able to identify early epidemic or pandemic risks and determine and initiate related mitigation actions as early as possible.

8.2.3 Risk management organization and responsibilities

To oversee the ERM process and to further drive the integration and harmonization of existing control activities to align with legal and operational requirements, the Managing Board established a Risk Management and Internal Control Organization, led by the Head of Assurance. In order to allow for a meaningful discussion of risk at the Siemens Group level, this organization aggregates individual risks and opportunities of similar cause-and-effect nature into broader risk and opportunity themes. This aggregation naturally results in a mixture of risks, including those with a primarily qualitative assessment and those with a primarily quantitative risk assessment. Accordingly, we do not adopt a purely quantitative assessment of risk and opportunity themes. Thematic risk and opportunity assessments as well as our risk-bearing capacity then form the basis for the evaluation of the company-wide risk and opportunity situation during the quarterly Managing Board meetings. The Head of Assurance assists the Managing Board with the operation and oversight of the risk and internal control system and reporting to the Audit Committee of the Supervisory Board.

8.3 Risks

Below we describe the risks that could have a material adverse effect on our business situation, financial condition (including effects on assets, liabilities and cash flows), results of operations and reputation. The order in which the risks are presented in each of the four categories reflects the currently estimated relative exposure for Siemens associated with these risks and thus provides an indication of the risks' current importance to us. Additional risks not known to us or that we currently consider immaterial may also negatively impact our business objectives and operations. Unless otherwise stated, the risks described below relate to all our organizational units.

8.3.1 Strategic risks

Economic, political and geopolitical conditions: We see high uncertainties regarding the global economic and geopolitical outlook, which deteriorated significantly in the past year due to multiple headwinds, all of which may continue to intensify. First and foremost, Russia's invasion of Ukraine and its political and economic consequences, such as sanctions and countermeasures, result in far-reaching risks. War in Ukraine may have a negative impact on sales development, production processes as well as purchasing and logistics processes, for example through interruptions in supply chains and energy supplies or bottlenecks affecting components, raw materials and intermediate products. The conflict could also intensify further to the point of expanding to include other warring parties, including NATO countries, and the use of unconventional weapons. An expansion of the war would have a significant impact on the Siemens market environment. But even the current state of war could have a further negative impact on economic development if potential energy supply shortfalls make rationing necessary in industry and households or even result in blackouts during the next months. This would fuel already high inflation, with further risk of a sustained wage-price-spiral. In any case one of the core risks for the Siemens outlook is that central banks may fail to get inflation under control and have then to react even more restrictively. Alternatively, central banks may overreact, which could lead to rapid monetary tightening. More restrictive financial conditions would likely push advanced economies into recession and pose a significant risk to vulnerable emerging economies. Highly indebted (emerging and industrialized) countries could suffer from increasing financing costs, further U.S. dollar appreciation, and loss of investor confidence. Other risks could arise for the stability of public finances and the banking sector. Further risks are coming from other geopolitical tensions (particularly associated with Ukraine, the Baltics, Eastern Europe, the Western Balkans, China, Taiwan, and Iran). Recent, electoral results within the European Union may make cooperation and implementation of reforms more difficult. Obstruction and redefinitions of international cooperation could severely impact our business. First and foremost a aggravating U.S.-China decoupling would have adverse effects on confidence and investment activity and would severely hit Siemens' business. Increasing trade barriers, protectionism, sanctions and in particular technical regulations would negatively impact production costs and productivity along our global value chains, as well as significantly impede or even hinder access to sales markets. Even though the latest virus variants have seemed less dangerous, the COVID-19 pandemic is still taking a toll on global economic activity, in particular due to the strict "zero-COVID" policy in China with potential spillovers to the global economy (e.g., further tightening supply chain bottlenecks). But also, the evolution of more aggressive and lethal variants remains a key risk for the global economy. We have additional business risk from further weakening of Chinese economic growth. The ongoing crisis in China's real estate sector poses a threat to China's economic outlook, with potential spillovers to the global economy. A significant risk to our sales potential and cost structure is coming from potential supply chain bottlenecks, due to growing lack of availability of intermediate goods, in particular electronic components. We are dependent on the economic development of certain industries; a continuation or even an intensification of the cyclical and structural headwinds in core customer industries, e.g., automotive or construction, would have adverse impact on our business prospects. A terrorist attack, an escalation of conflicts like in the Ukraine or elsewhere or a significant cybercrime incident, or a series of such attacks or incidents in major economies, could depress economic activity globally and undermine consumer and business confidence. Additionally, the highly interconnected global economy remains vulnerable to natural disasters, further pandemics or hybrid warfare.

In general, due to long-cycle businesses in our organizational units and the importance of long-term contracts for Siemens, there is usually a time lag between changes in macroeconomic conditions and their impact on our financial results. In contrast, short-cycle business activities react quickly to volatility in market demand. If the moderate growth of certain markets stalls again and if we are not successful in adapting our production and cost structure to subsequent changes in conditions in the markets in which we operate, there can be no assurance that we will not experience adverse effects. For example, our customers may modify, delay or cancel plans to purchase our products, solutions and services, or fail to follow through on purchases or contracts already executed. Furthermore, the prices for our products, solutions and services may decline to a greater extent than we currently anticipate. In addition, it may become more difficult for our customers to obtain financing. Contracted payment terms, especially regarding the level of advance payments by our customers relating to long-term projects, may become less favorable, which could negatively impact our financial condition. Siemens' global setup with operations in almost all relevant economies, our wide range of offerings with varied exposures to business cycles, and our balanced mix of business models (e.g., equipment, components, systems, software, services and solutions) help us to absorb impacts from adverse developments in any single market.

Disruptive technologies: The markets in which our businesses operate experience rapid and significant changes due to the introduction of innovative and disruptive technologies. In the fields of digitalization (e.g. IoT, artificial intelligence, cloud computing, industrial metaverse), there are risks associated with new competitors, substitutions for existing products/solutions/services, new business models (e.g. in terms of pricing, financing, extended scopes for project business or subscription models in the software business) and finally the risk that our competitors may have more advanced time-to-market strategies and introduce their disruptive products and solutions faster than Siemens. Our operating results depend to a significant extent on our technological leadership, our ability to anticipate and adapt to changes in our markets and to optimize our cost base accordingly. Introducing new products and technologies requires a significant commitment to research and development, which in return requires expenditure of considerable financial resources that may not always result in success. Our results of operations may suffer if we invest in technologies that do not operate or may not be integrated as expected, or that are not accepted in the marketplace as anticipated, or if our products, solutions or systems are not introduced to the market in a timely manner, particularly compared to our competitors, or even become obsolete. We constantly apply for new patents and actively manage our intellectual property portfolio to secure our technological position. However, our patents and other intellectual property may not prevent competitors from independently developing or selling products and services that are similar to ours.

Increasing sustainability focus: The increasing ESG-requirements from governments, investors and customers as well as financing restrictions for greenhouse gas emitting technologies could result in additional costs. The growing requirements in the regulatory environment, but also the self-commitment to own sustainability and climate protection targets, bear further liability risks. Additionally, business involvement in areas of public debate regarding sustainability might be negatively perceived and trigger adverse media attention. This could lead to reputational damage and have an impact on achievement of our business goals. We address these risks, among other things, in the context of our sustainability framework DEGREE, in which we have also set ourselves ambitious sustainability targets. Measures to reduce climate-related risks include, for example, our decarbonization strategy (including Science Based Target), as well as our engagement in the supply chain. In fiscal 2021, we introduced an ESG risk framework along with an optimized ESG due diligence process. This supports Siemens businesses with due diligence in the customer-oriented environment with a view to possible environmental and social risks as well as related human rights and reputational risks.

COVID-19: Compared to the first years of the pandemic, we are seeing a recovery in many business sectors, and travel has also normalized in many areas. The availability of vaccines has improved, although their effectiveness against emerging virus variants cannot yet be conclusively assessed. Nevertheless, regional lockdowns may continue to be the result. The extent and duration of individual impacts on our business are difficult to predict. For example, if measures to the virus are initiated at short notice or last an unpredictably long time, our business may be significantly impacted in ways that exceed current expectations and go beyond mitigation measures already in place. We could face unexpected closures of sites, factories or office buildings of our suppliers, customers or our own operations, which would affect our ability to produce or deliver our products, solutions and services. The longer such restrictive measures (e.g. curfews) last, the deeper the resulting consequences will be. Possible consequences include an unchecked increase of public and private debt which hampers the post-crisis recovery, serious disruptions in the financial system, and insolvencies among Siemens customers and suppliers. In the long term, a reversal of globalization could reduce the potential for future growth. Various task forces and crisis teams in all functional areas of Siemens continue to closely monitor COVID-19 events and engage in active mitigation activities if required.

Competitive environment: The worldwide markets for our products, solutions and services are highly competitive in terms of pricing, product and service quality, product development and introduction time, customer service, financing terms and shifts in market demands. We face strong, established competitors as well as rising competitors from emerging markets and new industries, which may have a better cost structure. Some industries in which we operate are undergoing consolidation, which may result in stronger competition, a change in our relative market position, an increase in inventory of finished or work-in-progress goods, or unexpected price erosion. Furthermore, there is a risk that critical suppliers could be taken over by competitors and a risk that competitors are increasingly offering services to our installed base. We address these risks with various measures, for example benchmarking, strategic initiatives, sales push initiatives, executing productivity measures and target cost projects, rightsizing of our footprint, outsourcings, mergers and joint ventures and optimizing our product and service portfolio. We continuously monitor and analyze competitive, market and industry information in order to be able to anticipate unfavorable changes in the competitive environment rather than merely reacting to such changes.

Portfolio measures, at-equity investments, other investments and strategic alliances: Our strategy includes divesting our activities in some business areas and strengthening others through portfolio measures, including mergers and acquisitions. With respect to divestments, we may not be able to divest some of our activities as planned, and the divestitures we do carry out could have a negative impact on our business situation, financial condition, results of operations and reputation. Mergers and acquisitions are inherently risky because of difficulties that may arise when integrating people, operations, technologies and products. There can be no assurance that any of the businesses we acquire can be integrated successfully and in a timely manner as originally planned, or that they will perform as anticipated once integrated. In addition, we may incur significant acquisition, administrative, tax and other expenditures in connection with these transactions, including costs related to integration of acquired businesses. Furthermore, portfolio measures may result in additional financing needs and adversely affect our capital structure. Acquisitions can lead to substantial additions to intangible assets, including goodwill, in our statements of financial position. If we were to encounter continuing adverse business developments or if we were otherwise to perform worse than expected at acquisition activities, then these intangible assets, including goodwill, might have to be impaired, which could adversely affect our business situation, financial condition and results of operations. Our investment portfolio includes investments held for purposes other than trading and other investments. Any factors negatively influencing the financial condition and results of operations of our at-equity investments and other investments could have an adverse effect on our equity pick-up related to these investments or may result in a related write-off. In addition, our business situation, financial condition and results of operations could also be adversely affected in connection with loans, guarantees or non-compliance with financial covenants related to these investments. Furthermore, such investments are inherently risky as we may not be able to sufficiently influence corporate governance processes or business decisions taken by our at-equity investments, other investments and strategic alliances, which may have a negative effect on our business and especially on our reputation. In addition, joint ventures bear the risk of difficulties that may arise when integrating people, operations, technologies and products. Strategic alliances may also pose risks for us because we compete in some business areas with companies with which we have strategic alliances. Besides other measures, we handle these risks with standardized processes as well as dedicated roles and responsibilities in the areas of mergers, acquisitions, divestments and carve-outs. This includes the systematic treatment of all contractual obligations and post-closing claims.

8.3.2 Operational risks

Cyber/Information security: Digital technologies are deeply integrated into our business portfolio. Further integration of information technology into products and services in conjunction with changing business strategies (such as outsourcing, globally distributed development, a lesser degree of sole production) are leading to an increasingly distributed supply chain, making efficient controls difficult. The fact of a large number of suppliers requires a significant effort for the initial and regular verification of the effective implementation of cybersecurity requirements by suppliers. Siemens business entities might lose market access if their products, solutions and services do not comply with increased regulations and legal requirements for cybersecurity in their respective countries. We observe a global increase of cybersecurity threats and higher levels of professionalism in computer crime, which pose a risk to the security of products, systems and networks and the confidentiality, availability and integrity of data. According to external sources of relevant data this trend has accelerated during the COVID-19 pandemic and the outbreak of the war in Ukraine. Especially the numbers of phishing attacks and malicious websites have increased significantly. Moreover, the information technology market is concentrated among a small number of information technology and software vendors, which could lead to dependence on a single provider. There can be no assurance that the measures aimed at protecting our intellectual property and portfolio will address these threats under all circumstances. There is a risk that confidential information or data privacy-relevant information may be stolen or that the integrity of our portfolio may be compromised, e.g. by attacks on our networks, social engineering, data manipulations in critical applications and a loss of critical resources, resulting in financial damages and violating the data privacy laws. Cybersecurity covers the IT of our entire enterprise including office IT, systems and applications, special-purpose networks, and our operating environments such as manufacturing and research and development (R&D). Like other large multinational companies, we face active cyber threats from sophisticated adversaries that are supported by organized crime and nation-states engaged in economic espionage or even sabotage. We strive to mitigate these risks by employing a number of measures, including employee training, considering new models of flexible working environments, and comprehensive monitoring of our networks and systems through cyber defense with an artificial intelligence solution to identify attacks faster and prevent damage to society and to critical infrastructures, our customers, our partners and Siemens overall. We initiated the industrial "Charter of Trust," signed by a growing group of global companies, which sets out principles for building trust in digital technologies and creating a more secure digital world. Nonetheless, our systems, products, solutions and services, as well as those of our service providers, remain potentially vulnerable to attacks. Such attacks could potentially lead to the publication, manipulation or leakage of information such as through industrial espionage. They could also result in deliberate improper use of our systems, vulnerable products, production downtimes and supply shortages, with potential adverse effects on our reputation, our competitiveness and results of operations. We might lose market access if our products, solutions and services do not comply with local regulations and requirements for cybersecurity. For increased protection of Siemens and reduction of a potential financial impact caused by cyber incidents, the risk transfer possibilities have been evaluated. As a result of an international insurance tender, the currently insurable cybersecurity risks have been to a partial extent transferred to a consortium of insurance companies.

Supply chain management: The financial performance of our operating units depends on reliable and effective supply chain management for components, sub-assemblies, energy, critical parts (e.g. semiconductors) and materials. Capacity constraints and supply shortages resulting from ineffective supply chain management may lead to production bottlenecks, delivery delays, quality issues and additional costs. We also rely on third parties to supply us with parts, components and services. Using third parties to manufacture, assemble and test our products may reduce our control over manufacturing yields, quality assurance, product delivery schedules and costs. Although we work closely with our suppliers to avoid supply-related problems, there can be no assurance that we will not encounter supply problems in the future, especially if we use single-source suppliers for critical components. Shortages and delays could materially harm our businesses. Unanticipated increases in the price of components or raw materials due to market shortages or other reasons could also adversely affect performance. Furthermore, we may be exposed to the risk of delays and interruptions in the supply chain as a consequence of catastrophic events (including pandemics), geopolitical uncertainties, energy shortages, sabotage, cyber incidents or suppliers' financial difficulties, particularly if we are unable to identify alternative sources of supply or means of transportation in a timely manner or at all. Besides other measures, we mitigate price fluctuation in global raw material markets with various hedging instruments.

Internal programs and initiatives: We are in a continuous process of operational optimization and constantly engage in cost-reduction initiatives, including ongoing capacity adjustment measures and structural initiatives. Consolidation of business activities and manufacturing facilities, outsourcings, joint ventures and the streamlining of product portfolios are all part of these cost-reduction efforts. These measures may not be implemented as planned, may turn out to be less effective than anticipated, may become effective later than estimated or may not become effective at all. Any future contribution of these measures to our profitability will be influenced by the actual savings achieved and by our ability to sustain them. In case of restructuring and outsourcing activities, there could be delays in product deliveries or we might even experience delivery failures. Furthermore, delays in critical R&D projects could lead to negative impacts in running projects. We constantly control and monitor the progress of these projects and initiatives using standardized controlling and milestone tracking approaches.

Project-related risks: A number of our segments conduct activities under long-term contracts that are awarded on a competitive bidding basis. Such contracts typically arise at Mobility and in various activities of Smart Infrastructure or Portfolio Companies. Some of these contracts are inherently risky because we may assume substantially all of the risks associated with completing a project and meeting post-completion warranty obligations. For example, we may face the risk that we must satisfy technical requirements of a project even though we have not gained experience with those requirements before winning the project. The profit margins realized on fixed-priced contracts may vary from original estimates as a result of changes in costs and productivity over a contract's term. We sometimes bear the risk of unanticipated project modifications, shortage of key personnel, quality problems, financial difficulties of our customers and/or significant partners, cost overruns or contractual penalties caused by unexpected technological problems, unexpected developments at the project sites, unforeseen changes or difficulties in the regulatory or political environment, performance problems with our suppliers, subcontractors and consortium partners or other logistical difficulties. Some of our multi-year contracts also contain demanding installation and maintenance requirements in addition to other performance criteria relating to timing, unit cost and compliance with government regulations, which, if not satisfied, could subject us to substantial contractual penalties, damages, non-payment and contract termination. There can be no assurance that contracts and projects, in particular those with long-term duration and fixed-price calculation, can be completed profitably. To tackle those risks, we established a global project management organization to systematically improve the technical and commercial capabilities of our project management personnel. For very complex projects we conduct dedicated risk assessments in very early stages of the sales phase before we decide to hand over a binding offer to our customers.

Shortage of skilled personnel: Competition for diverse and highly qualified personnel (e.g. specialists, experts, digital talent) remains intense in the industries and regions in which our businesses operate. We have ongoing demand for highly skilled employees and a need to enhance diversity, inclusion and sense of belonging in our workforce. Our future success depends in part on our continued ability to identify, assess and hire engineers, digital talent and other qualified personnel. We must also integrate, develop and retain them after they join us, which appears especially relevant in times of a new, increasingly virtual working environment. We address these topics for example by strengthening the capabilities and skills of our talent acquisition teams and a strategy of proactive search for people with the required capabilities in our respective industries and markets. Starting in fiscal 2023 we will roll out our new Employer Branding activities with focus on hard-to-fill positions in our key markets. Technology and digitalization help us to be more effective in attracting and selecting diverse talent. In addition, we have a focus on diversity and structured succession planning.

8.3.3 Financial risks

Risks from pension obligations: The provisions for pensions and similar obligations may be affected by changes in actuarial assumptions, including the discount rate, as well as by movements in financial markets or a change in the mix of assets in our investment portfolio. Additionally, they are subject to legal risks with regard to plan design, among other factors. A significant increase in underfunding may have a negative effect on our capital structure and rating, and thus may tighten refinancing options and increase costs. In order to comply with local pension regulations in selected foreign countries, we may face an economic risk of increasing cash outflows due to changes in funding level according to local regulations of our pension plans in these countries or to changes in the regulations themselves.

Audits by tax authorities and changes in tax regulations: We operate in nearly all countries of the world and therefore are subject to many different tax regulations. Changes in tax laws in any of these jurisdictions could result in higher tax expenses and increased tax payments. Furthermore, legislative changes could impact our tax receivables and liabilities as well as deferred tax assets and deferred tax liabilities. In addition, the uncertain legal environment in some regions could limit our ability to enforce our rights. As a globally operating organization, we conduct business in countries subject to complex tax rules, which may be interpreted in different ways. Future interpretations or developments of tax regimes may affect our business situation, financial condition and results of operations. We are regularly audited by tax authorities in various jurisdictions and we continuously identify and assess relevant risks.

Market price risks: We are exposed to fluctuations in exchange rates, especially between the U.S. dollar and the euro, because a high percentage of our business volume is conducted as exports from Europe to regions using the U.S. dollar. In addition, we are exposed to effects involving the currencies of emerging markets, in particular the Chinese yuan. Appreciable changes in euro exchange rates could materially change our competitive position. We are also exposed to fluctuations in interest rates. Even hedging activities to mitigate such risks may result in a reverse effect. Fluctuations in exchange or interest rates, negative developments in the financial markets and changes in central bank policies could therefore negatively impact our financial results. Market prices show higher volatility than before due to increased macroeconomic uncertainties (e.g. resulting from inflation, COVID-19, war in Ukraine).

Liquidity and financing risks: Our treasury and financing activities could face adverse deposit and/or financing conditions from negative developments related to financial markets, such as limited availability of funds and hedging instruments, an updated evaluation of our solvency, particularly from rating agencies, negative interest rates, and impacts arising from more restrictive regulation of the financial sector, central bank policy, or the usage of financial instruments. Widening credit spreads due to uncertainty and risk aversion in the financial markets might lead to adverse changes in the market values of our financial assets, in particular our derivative financial instruments.

Credit risks: We provide our customers with various forms of direct and indirect financing of orders and projects, including guarantees. Siemens Financial Services in particular bears credit risks due to such financing activities if, for example, customers do not meet obligations arising from these financing arrangements, meet them only partially, or meet them late. The credit environment has become more dynamic due to a more uncertain macroeconomic outlook (e.g. inflation) and geopolitical tensions.

For further information on post-employment benefits, derivative financial instruments, hedging activities, financial risk management and related measures, see Notes 17, 24 and 25 in Notes to Consolidated Financial Statements for fiscal 2022.

8.3.4 Compliance risks

Current and future investigations regarding allegations of corruption, of antitrust violations and of other violations of law: Proceedings against us or our business partners regarding allegations of corruption, of antitrust violations and of other violations of law may lead to fines as well as penalties, sanctions, injunctions against future conduct, profit disgorgements, disqualifications from directly and indirectly engaging in certain types of business, the loss of business licenses or permits, other restrictions and legal consequences as well as negative public media coverage. Accordingly, we may, among other things, be required to comply with potential obligations and liabilities arising in connection with such investigations and proceedings, including potential tax penalties. Moreover, any findings related to public corruption that are not covered by the 2008 and 2009 corruption charge settlements, which we concluded with U.S. and German authorities, may endanger our business with government agencies and intergovernmental and supranational organizations. Monitors could again be appointed to review future business practices and we may otherwise be required to further modify our business practices and our compliance program.

In its global business, Siemens does part of its business with state-owned enterprises and governments. We also participate in a number of projects funded by government agencies and intergovernmental and supranational organizations, such as multilateral development banks. Ongoing or potential future investigations into allegations of corruption, antitrust violations or other violations of law could as well impair relationships with such parties or could result in our exclusion from public contracts. Such investigations may also adversely affect existing private business relationships and our ability to pursue potentially important strategic projects and transactions, such as strategic alliances, joint ventures or other business alliances, or could result in the cancellation of certain of our existing contracts. Moreover, third parties, including our competitors, could initiate significant litigation.

In addition, future developments in ongoing and potential future investigations, such as responding to the requests of governmental authorities and cooperating with them, could divert management's attention and resources from other issues facing our business. Furthermore, we might be exposed to compliance risks in connection with recently acquired operations that are in the ongoing process of integration.

Along with other measures, Siemens has established a global compliance organization that conducts among others compliance risk mitigation processes such as Compliance Risk Assessments or initiates internal audit activities performed by the internal assurance department.

Changes of regulations, laws and policies: As a diversified company with global businesses we are exposed to various product- and country-related regulations, laws and policies influencing our business activities and processes. According to observations and analysis, there is an increasing risk that existing technical regulations in target markets will suddenly change, or new ones will be set in force, which result in market access criteria that our products do not meet. The affected products would lose marketability in this market. Reducing the risk of a sales-stop depends on the required correction for the non-conformity. In case the product can technically stay as is, while it has to undergo new and additional conformity assessment and certification, there will be considerable effort and cost to carry out the needed testing and certification procedures. In a worse case, the affected product will need re-engineering or re-design to meet the requirements of the changed or new technical regulation even before it can become re-assessed and certified for market approval. The latter case will cause significant extra effort and cost to make the needed product changes and to maintain the country-specific product variant as an additional derivative item in the portfolio. In the worst case, if the two aforementioned ways of maintaining the product's marketability prove to be not feasible, we must stop selling the affected product in the market. We monitor the political and regulatory landscape in all our key markets to anticipate potential problem areas, with the aim of quickly adjusting our business activities and processes to changed conditions. However, any changes in regulations, laws and policies could adversely affect our business activities and processes as well as our financial condition and results of operations.

Sanctions and export control: As a globally operating organization, we conduct business with customers in countries which are subject to export control regulations, embargoes, economic sanctions, debarment policies or other forms of trade restrictions (hereafter referred to as "sanctions") imposed by the U.S., the EU, China or other countries or organizations. New or expanded sanctions in countries in which we do business may result in a curtailment of our existing business in such countries or indirectly in other countries. We are also aware of policies of national authorities and institutional investors, such as pension funds or insurance companies, requiring divestment of interests in and prohibiting investment in and transactions with entities doing business with countries identified by the U.S. Department of State as state sponsors of terrorism. As a result, it is possible that such policies may result in our inability to gain or retain certain investors or customers. In addition, the termination of our activities in sanctioned countries may expose us to customer claims and other actions. Our reputation could also suffer due to our activities with counterparties in or affiliated with these countries.

Protectionism (including tariffs/trade war): Protectionist trade policies, de-coupling and changes in the political and regulatory environment in the markets in which we operate, such as import and export controls, tariffs and other trade barriers including debarment from certain markets, and price or exchange controls, could affect our business in national markets and could impact our business situation, financial position and results of operations; we may also be exposed to penalties, other sanctions and reputational damage. In addition, the uncertainty of the legal environment in some regions could limit our ability to enforce our rights and subject us to increasing costs related to adjusting our compliance programs.

Environmental, health & safety and other governmental regulations: Some of the industries in which we operate are highly regulated. Current and future environmental, health and safety and other governmental regulations or changes thereto may require us to change the way we run our operations and could result in significant increases in our operating or production costs. Furthermore, we see the risk of potential environmental and health and safety incidents as well as potential non-compliance with environmental and health and safety regulations affecting Siemens and our contractors or sub-suppliers, resulting for example in serious injuries, business interruptions, penalties, loss of reputation and internal or external investigations.

In addition, while we have procedures in place to ensure compliance with applicable governmental regulations in the conduct of our business operations, it cannot be excluded that violations of applicable governmental regulations may be caused either by us or by third parties that we contract with, including suppliers or service providers whose activities may be attributed to us. Any such violations particularly expose us to the risk of liability, penalties, fines, reputational damage or loss of licenses or permits that are important to our business operations. In particular, we could also face liability for damage or remediation for environmental contamination at the facilities we design or operate. With regard to certain environmental risks, we maintain liability insurance at levels that our management believes are appropriate and consistent with industry practice. We may incur environmental losses beyond the limits, or outside the coverage, of such insurance, and such losses may have an adverse effect on our business situation, financial condition and results of operations.

Current or future litigation and legal and regulatory proceedings: Siemens is and potentially will be involved in numerous legal disputes and proceedings in various jurisdictions. These legal disputes and proceedings could result, in particular, in Siemens being subject to payment of damages and punitive damages, equitable remedies or sanctions, fines or disgorgement of profit. In individual cases this may also lead to formal or informal exclusion from tenders or the revocation or loss of business licenses or permits. Asserted claims are generally subject to interest rates. Some of these legal disputes and proceedings could result in adverse decisions for Siemens; or decisions, assessments or requirements of regulatory authorities could deviate from our expectations, which may have material effects on our business activities as well as our financial position, results of operations and cash flows. Siemens maintains liability insurance for certain legal risks at levels our management believes are appropriate and consistent with industry practice. However, the insurance policy does not protect Siemens against, in particular, reputational damage. Moreover, Siemens may incur losses relating to legal disputes and proceedings beyond the limits, or outside the coverage, of such insurance or exceeding any provisions made for losses related to legal disputes and proceedings. Finally, there can be no assurance that Siemens will be able to maintain adequate insurance coverage on commercially reasonable terms in the future.

For additional information with respect to specific proceedings, see Note 22 in Notes to Consolidated Financial Statements for fiscal 2022.

8.3.5 Assessment of the overall risk situation

The most significant challenges have been mentioned first in each of the four risk categories: strategic, operational, financial and compliance.

While our assessments of individual risks have changed during fiscal 2022 due to developments in the external environment, changes in our business portfolio, effects of our own mitigation measures and the revision of our risk assessment, the overall risk situation for Siemens did not change significantly as compared to the prior year. We currently see the strategic risk economic, political and geopolitical conditions as the most significant challenge for us followed by the operational risk cyber/information security.

At present, no risks have been identified that either individually or in combination could endanger our ability to continue as a going concern.

8.4 Opportunities

Within our ERM we regularly identify, evaluate and respond to opportunities that present themselves in our various fields of activity. Below we describe our most significant opportunities. Unless otherwise stated, the opportunities described relate to all organizational units. The order in which the opportunities are presented reflects the currently estimated relative exposure for Siemens associated with these opportunities and thus provides an indication of the opportunities' current importance to us. The described opportunities are not necessarily the only ones we encounter. In addition, our assessment of opportunities is subject to change because the Company, our markets and technologies are constantly advancing. It is also possible that opportunities we see today will never materialize.

Favorable political and regulatory environment (including sustainability): A favorable political and regulatory environment including the transition towards a low-carbon economy could restore a more positive industrial investment sentiment that supports the growth of our markets. In addition, government initiatives and subsidies (including tax reforms, green and digital recovery plans, R&D among others) may lead to more government spending (e.g. infrastructure, healthcare, mobility or digitalization investments) and ultimately result in an opportunity for us to participate in ways that increase our revenue and profit. Investments to strengthen countries' resilience, energy and food security, as well as to diversify value chains close to major markets (reshoring, nearshoring) can present opportunities to businesses. By enabling our customers to reduce their greenhouse gas (GHG) emissions using our portfolio and by reducing CO2 emission in our own operations, Siemens strives to support the transition towards a low-carbon economy. Siemens also welcomes and supports recent legislative and governmental measures to accelerate the mitigation of climate change, especially in Europe such as through the Green Deal or sustainable finance initiatives.

Turning COVID-19 challenges into opportunities: Accelerated post COVID-19 recovery of certain markets driven by e.g. digitalization, decarbonization and demographic change might lead to business opportunities. One of the success factors is a balanced and flexible workforce strategy. There is also the chance to strengthen our customer relationships through additional market offerings that specifically address use cases related directly to the COVID-19.

Value creation through innovation: We drive innovation by investing significantly in R&D in order to develop sustainable solutions for our customers while also strengthening our own competitiveness. Being an innovative company and constantly inventing new technologies that we expect will meet future demands arising from the megatrends of demographic change, urbanization, digitalization, environmental change, resource scarcity and glocalization is one of our core purposes. We are granted thousands of new patents every year and continuously develop new concepts and convincing new digital and data-driven business models. This helps us create the next generation of ground-breaking innovations in such fields as digital twin, artificial intelligence, automation and edge computing. Across our operating units, we are profiting from our strength in connecting the real and digital worlds. Our new Xcelerator platform is an open, digital business platform featuring a curated portfolio of IoT-enabled hardware and software, an ecosystem and a marketplace to enhance the digital transformation of our customers. We see growth opportunities in opening up access to new markets and customers through new marketing and sales strategies, which we implement in our operating units. Our position along the value chains of automation and digitalization allows us to further increase market penetration. Along these value chains, we have identified several clear growth fields in which we see our greatest long-term potential. Hence, we are combining and developing our resources and capabilities for these growth fields.

Mergers, acquisitions, equity investments, partnerships, divestments and streamlining our portfolio: We constantly monitor our current and potential markets to identify opportunities for strategic mergers, acquisitions, equity investments and partnerships, which may complement our organic growth. Such activities may help us to strengthen our position in our existing markets, provide access to new or underserved markets, or complement our technological portfolio in strategic areas. Opportunities might also arise when portfolio optimization measures generate gains, which enable us to further pursue our other strategies for growth and profitability.

Optimization of organization and processes: On the one hand, we leverage ideas to drive further improvements in our processes and cost structure, such as common computing architecture for image processing. Furthermore, we leverage ideas to drive further improvements in our processes and cost structure optimizing factory capacities for shorter lead times. On the other hand, we see an opportunity of further penetrating markets by quality initiative program and avoiding or reducing non conformance cost.

Leveraging Market Potential: Through sales and services initiatives we continuously strive to grow and extend our businesses in established markets, open up new markets for existing portfolio elements and strengthen our installed base in order to gain a higher market share and increased profits. Furthermore, we aim to increase our sales via improved account management and new distribution channels.

Assessment of the overall opportunities situation: The most significant opportunity for Siemens is favorable political and regulatory environment (including sustainability) as described above.

While our assessments of individual opportunities have changed during fiscal 2022 due to developments in the external environment, changes in our business portfolio, our endeavors to profit from them and revision of our strategic plans, the overall opportunity situation for Siemens did not change significantly as compared to the prior year.

8.5 Significant characteristics of the internal control and risk management system

8.5.1 Internal Control System (ICS) and ERM

Our ICS and ERM are based on the principles, guidelines and measures introduced by the Managing Board, which are aimed at the organizational implementation of the Managing Board's decisions. Our ICS and ERM include the management of risks and opportunities relating to the achievement of business goals, the correctness and reliability of internal and external accounting, and compliance with the laws and regulations relevant to Siemens. Sustainability aspects are covered as well and are continuously developed based on the regulatory requirements.

Our ICS and ERM are based on the globally accepted COSO framework (Committee of Sponsoring Organizations of the Treadway Commission). Our ERM approach is based on the COSO Standard "Enterprise Risk Management – Integrating with Strategy and Performance" (2017) and the ISO (International Organization for Standardization) Standard 31000 (2018) and is adapted to Siemens requirements. Our ICS is based on the internationally recognized "Internal Control – Integrated Framework" (2013) also developed by COSO. The framework defines the elements of a control system and sets the standard for assessing the adequacy and effectiveness of the ICS. The frameworks connect the ERM process with our financial reporting process and our ICS, both systems are complementary.

All Siemens entities are part of our ICS and ERM. The scope of activities to be performed by each entity is different, depending, among others, on the entity's impact on the Consolidated Financial Statements of Siemens and the specific risks associated with the entity. The management of each entity is obliged to implement an adequate and effective ICS and ERM within their area of responsibility, based on the group-wide mandatory methodology.

Overall responsibility for our ICS and ERM lies with the Managing Board. The Siemens Risk and Internal Control (RIC) organization bundles and integrates the internal control and ERM processes and supports the Managing Board in designing and maintaining adequate and effective processes for implementing, monitoring and reporting on internal control and ERM activities. It consists of the central RIC departments of Siemens AG and the RIC departments at our organizational units. The central RIC departments are responsible for monitoring and coordinating the entire processes in order to ensure an adequate and effective ICS and ERM within the Group.

We have an overarching, integrated ICS and ERM methodology (RIC methodology) with a standardized procedure under which necessary controls are defined, documented in accordance with uniform standards, and tested regularly for their adequacy and effectiveness. For more information on ERM, see chapter 8.2 Risk management.

Our ICS and ERM and their contributing elements are regularly subject of audit activities by our internal audit function. These are carried out either as part of the risk-based annual audit plan or as part of audits scheduled during the year upon request. Siemens Healthineers has its own internal audit function and annual audit plan. Topics from the annual audit plan of Siemens Healthineers that are also relevant for our Managing Board and Audit Committee must be mandated first by Siemens Healthineers' Managing Board and Audit Committee and subsequently by our Managing Board and Audit Committee. The audit procedures for these topics will be generally executed by joint teams including members of our and Siemens Healthineers' internal audit functions, thus respecting the interests of both Siemens AG and Siemens Healthineers.

At the end of each fiscal year, our Managing Board performs an evaluation of the adequacy and effectiveness of the ICS and ERM. This evaluation is based primarily on the Siemens "In Control"-Statement and quarterly Managing Board meetings. The purpose of the "In Control" Statement is to provide an overview of the key elements of the ICS and ERM of Siemens AG and its affiliated companies at the end of the fiscal year, to summarize the activities undertaken to review its adequacy and effectiveness and highlight any critical control weaknesses identified as part of these activities. The information contained in this statement is provided to the Audit Committee of the Supervisory Board of Siemens AG to report on the effectiveness of the ICS and ERM. The Siemens "In Control" Statement is supported by certifications at various corporate levels and by all affiliated companies. In the quarterly Managing Board meetings, the company-wide risk and opportunity situation is evaluated, the results of the internal control process are explained and once a year an overall conclusion is made about the adequacy and effectiveness of our ICS or ERM. Based on this, the Managing Board has no indication that our ICS or ERM in their respective wholes have not been adequate or effective as of September 30, 2022.

Nevertheless, there are inherent limitations on the effectiveness of any risk management and control system. For example, no system - even if deemed to be adequate and effective - can guarantee that all risks that will actually occur will be identified in advance or that any process violations will be ruled out under all circumstances.

The Audit Committee is systematically integrated into our ICS and ERM. In particular, it oversees the accounting and the accounting process as well as the adequacy and effectiveness of the ICS, ERM and the internal audit system.

Siemens Healthineers is largely subject to the Group-wide principles for our ICS and ERM and is responsible for adhering to those principles.

The integration of Varian into our ICS, which began in fiscal 2021 after the acquisition by Siemens Healthineers, continued in fiscal 2022 and was completed to a large extent with regard to the most significant Varian entities. The integration measures will be continued in fiscal 2023.

8.5.2 Compliance Management System (CMS)

The ICS and ERM also include a CMS geared to the Company's risk situation.

Our CMS is based on the three pillars -- prevent, detect and react -- and includes the legal risk areas of corruption, antitrust law, data protection, money laundering, export controls and respect for human rights. It is based on an extensive internal set of rules: The Siemens Business Conduct Guidelines ("BCG") define the basic principles and standards of behavior that must be observed by all employees in the company units and in relation to customers, external partners and the public. In addition, there are extensive internal compliance regulations, including associated controls, which oblige all Siemens employees to ensure the implementation of the CMS. They contain topic-specific implementation regulations for the individual risk areas with regard to compliance processes and tools as well as additional guidelines and information. The compliance operating model contains binding specifications for the employees of the compliance organization and describes responsibilities and how the CMS works.

Compliance risk management and compliance reviews as part of the CMS aim to identify compliance risks at an early stage and thus enable to take appropriate and effective measures to avoid or minimize risks. The risk assessment is also integrated into individual business processes and tools. The results of CMS that are relevant to the Group are taken into account as part of the Company-wide ERM.

The Compliance Control Program aims to ensure compliance and implementation of the CMS and processes used worldwide. It is part of the ICS and is continuously further developed and adapted to the current Siemens guidelines. In addition, current compliance issues are discussed at the management level on a regular basis.

The entire CMS is continuously adapted to business-specific risks and various local legal requirements. The findings from compliance risk management as well as compliance controls and audits are used to derive measures for its further development.

8.5.3 Significant characteristics of the accounting-related ICS and ERM

The overarching objective of our accounting-related ICS and ERM -- as part of the overarching ICS and ERM -- is to ensure that financial reporting is conducted in a proper manner, such that the Consolidated Financial Statements and the Combined Management Report of the Siemens Group and the Annual Financial Statements of Siemens AG as the parent company are prepared in accordance with all relevant regulations.

Our ICS and ERM are based on the globally recognized COSO framework (Committee of Sponsoring Organizations of the Treadway Commission), for further information see 8.5.1.

At the end of each fiscal year, our management performs an evaluation of the effectiveness of the accounting-related ICS. We have a standardized procedure under which necessary controls are defined, documented in accordance with uniform standards, and tested regularly for their effectiveness. Nevertheless, there are inherent limitations on the effectiveness of any control system, and no system, including one determined to be effective, may prevent or detect all misstatements

Our Consolidated Financial Statements are prepared on the basis of a centrally issued conceptual framework which primarily consists of uniform Financial Reporting Guidelines and a chart of accounts. For Siemens AG and other companies within the Siemens Group required to prepare financial statements in accordance with German Commercial Code, this conceptual framework is complemented by mandatory regulations specific to the German Commercial Code. The need for adjustments in the conceptual framework due to regulatory changes is analyzed on an ongoing basis. Accounting departments are informed quarterly about current topics and deadlines from an accounting and closing process perspective.

The base data used in preparing our financial statements consists of the closing data reported by the operations of Siemens AG and its subsidiaries. The preparation of the closing data of most of our entities is supported by an internal shared services organization. Furthermore, other accounting activities, such as governance and monitoring activities, are usually bundled on a regional level. In particular cases, such as valuations relating to post-employment benefits, we use external experts. The reported closing data is used to prepare the financial statements in the consolidation system. The steps necessary to prepare the financial statements are subject to both manual and automated controls.

Qualification of employees involved in the accounting process is ensured through appropriate selection processes and training. As a fundamental principle, based on materiality considerations, the "four eyes" principle applies, and specific procedures must be adhered to for data authorization. Additional control mechanisms include target-performance comparisons and analyses of the composition of and changes in individual line items, both in the closing data submitted by reporting units and in the Consolidated Financial Statements. In line with our information security requirements, accounting-related IT systems contain defined access rules protecting them from unauthorized access. The manual and system-based control mechanisms referred to above generally also apply when reconciling the International Financial Reporting Standards (IFRS) closing data to the Annual Financial Statements of Siemens AG.

On a quarterly basis, we execute an internal certification process. Management at different levels of our organization, supported by confirmations by managements of entities under their responsibility, confirms the accuracy of the financial data that has been reported to Siemens' corporate headquarters and reports on the effectiveness of the related control systems.

Siemens Healthineers is subject to our Group-wide principles for the accounting-related internal control and risk management system and is responsible for adhering to those principles.

The integration of Varian into our accounting-related ICS, which began in fiscal 2021 after the acquisition by Siemens Healthineers, continued in fiscal 2022 and was largely completed with regard to the main Varian entities. The integration measures will be continued in fiscal 2023.

Our internal audit function systematically reviews our financial reporting integrity, our accounting-related ICS and ERM. Siemens Healthineers has its own internal audit department and annual audit plan (see also 8.5.1). The Audit Committee is integrated into our accounting-related ICS. In particular, it oversees the accounting and accounting process and the adequacy and effectiveness of the associated ICS, the ERM and the internal audit system. Moreover, we have rules for accounting-related complaints.

9. Siemens AG

The Annual Financial Statements of Siemens AG have been prepared in accordance with the regulations set forth in the German Commercial Code (Handelsgesetzbuch) and the German Stock Corporation Act (Aktiengesetz).

In fiscal 2022, results for Siemens AG arise mainly from the business activities of Digital Industries and Smart Infrastructure and are influenced significantly by the results of subsidiaries and investments we own either directly or indirectly. The business development of Siemens AG is fundamentally subject to the same risks and opportunities as the Siemens Group. Therefore, the foregoing explanations for the Siemens Group apply also for Siemens AG.

The Supervisory Board and the Managing Board propose to distribute a dividend of €4.25 per share of no par value entitled to the dividend, from the unappropriated net income of Siemens AG for the fiscal year ended September 30, 2022 amounting to €3.613 million. The proposed dividend represents a total payout of €3.4 billion based on the estimated number of shares entitled to dividend at the date of the Annual Shareholders' Meeting. We intend to continue providing an attractive return to our shareholders. This includes striving for a dividend per share that exceeds the amount for the preceding year, or that at least matches the prior-year level. For fiscal 2023, we expect that net income of Siemens AG will be sufficient to fund the distribution of a corresponding dividend.

As of September 30, 2022, the number of employees was around 49,000.

9.1 Results of operations

Statement of Income of Siemens AG in accordance with German Commercial Code (condensed)

	Fiscal year		% Change
(in millions of €)	2022	2021	
Revenue	**17,390**	15,094	15%
Cost of sales	**(12,502)**	(10,960)	(14)%
Gross profit	**4,888**	4,135	18%
as percentage of revenue	***28%***	*27%*	
Research and development expenses	**(1,785)**	(1,570)	(14)%
Selling and general administrative expenses	**(3,283)**	(2,999)	(9)%
Other operating income (expenses), net	**(306)**	(196)	(56)%
Financial income, net *thereof Income (loss) from investments, net 4.204 (prior year 5.303)*	**3,599**	5,797	(38)%
Income from business activity	**3,115**	5,166	(40)%
Income taxes	**498**	(20)	n/a
Net income	**3,612**	5,147	(30)%
Profit carried forward	**185**	171	8%
Allocation to other retained earnings	**(185)**	(1,918)	90%
Unappropriated net income	**3,613**	3,400	6%

On a geographical basis, 74% of revenue was generated in the Europe, C.I.S., Africa, Middle East region, 18% in the Asia, Australia region and 8% in the Americas region. Exports from Germany accounted for 57% of overall revenue. In fiscal 2022, orders for Siemens AG amounted to €20.8 billion.

The increases of **revenue, cost of sales** and **research and development expenses** were due mainly to Digital Industries.

The R&D intensity (R&D as a percentage of revenue) was 10%, on the same level as fiscal 2021. The research and development activities of Siemens AG are fundamentally the same as for its corresponding business activities within the Siemens Group. Research and development expenses in both periods related mainly to Digital Industries. On an average basis, Siemens AG employed 7,000 people in R&D in fiscal 2022.

The increase in **selling and general administrative expenses** was due mainly to higher selling expenses led also by Digital Industries.

Other operating income (expenses), net, included lower income from the release of provisions related to a former investment, as in fiscal 2021.

Financial income, net, was burdened by Siemens' decision to exit business activities in Russia as a consequence of the war in the Ukraine. Subsequent to this decision, Siemens AG recorded impacts of €0.6 billion in connection with allowances on receivables from affiliated companies and an impairment of €0.3 billion on the investment OOO Siemens, Russia. In addition to these impacts, financial income, net, decreased mainly due to the following reasons:

The main factors in lower **income (loss) from investments, net** included an increase of €3.4 billion in impairments on investments, driven by an impairment of €2.9 billion on Siemens AG's stake in Siemens Energy AG, Germany, and a decrease of €1.7 billion in gains from the disposals of investments, which in fiscal 2021 included a gain of €0.9 billion from the sale of Flender GmbH, Germany. These factors were partly offset by an increase of €2.9 billion in income from profit transfer agreements with affiliated companies, due mainly to higher income of €2.6 billion from Siemens Beteiligungen Inland GmbH, Germany, and an increase of €1.2 billion in income from investments, which included income of €2.4 billion from the investment in Siemens Beteiligungsverwaltung GmbH & Co. OHG, Germany.

A negative change in other financial income (expenses), net included a decrease of €0.7 billion in gains from non-current securities and a negative change of €0.6 billion for provisions relating to derivative financial instruments. Additionally, it included the allowances on receivables from affiliated companies of €0.6 billion as mentioned above. In contrast, there was a decrease of €0.6 billion in expenses from interest component of changes in pension provisions that are not offset against designated plan assets; this related mainly to a decrease in performance of entitlements resulting from plans based on asset returns from underlying assets and changes in the discount rates.

In connection with the decision to exit business activities in Russia following the war in Ukraine **Net income** was burdened by €0.8 billion.

9.2 Net assets and financial position

Statement of Financial Position of Siemens AG in accordance with German Commercial Code (condensed)

	Sep. 30,		% Change
(in millions of €)	2022	2021	
Assets			
Non-current assets			
Intangible and tangible assets	**1,081**	1,068	1%
Financial assets	**71,576**	74,852	(4)%
	72,657	75,920	(4)%
Current assets			
Inventories, receivables and other assets	**30,424**	21,792	40%
Cash and cash equivalents, other securities	**1,623**	2,297	(29)%
	32,047	24,089	33%
Prepaid expenses	**220**	184	19%
Deferred tax assets	**2,065**	1,243	66%
Active difference resulting from offsetting	**16**	51	(69)%
Total assets	**107,005**	101,487	5%
Liabilities and equity			
Equity	**20,623**	21,216	(3)%
Special reserve with an equity portion	**540**	541	0%
Provisions			
Provisions for pensions and similar commitments	**13,380**	12,372	8%
Provisions for taxes and other provisions	**4,313**	4,220	2%
	17,693	16,592	7%
Liabilities			
Liabilities to banks	**639**	501	28%
Trade payables, liabilities to affiliated companies and other liabilities	**67,275**	62,389	8%
	67,914	62,890	8%
Deferred income	**235**	249	(5)%
Total liabilities and equity	**107,005**	101,487	5%

The main factor for the decrease in **financial assets** was the impairment on the stake in Siemens Energy AG.

The change in **cash and cash equivalents, other securities** related to the liquidity management of Corporate Treasury, which was focused not solely on the business activities of Siemens AG. The liquidity management is based on the financing policy of the Siemens Group, which is aimed towards a balanced financing portfolio, a diversified maturity profile and a comfortable liquidity cushion. Intra-group financing activities drove both an increase of €8.5 billion in receivables from affiliated companies, which resulted in higher **inventories, receivables and other assets,** and an increase of €5.0 billion in liabilities to affiliated companies, which was the main reason for the increase of **trade payables, liabilities to affiliated companies and other liabilities.**

The increase in **provisions for pensions and similar commitments** was due mainly to recording of current service and interest costs, including actuarial valuation effects relating to the increase of the rate of pension progression up to 2.0% per year (1.5% per year in fiscal 2021) in connection with the inflation, partly offset by payments for pensions and similar commitments.

The decrease in **equity** was due to dividends paid in fiscal 2022 (for fiscal 2021) of €3.2 billion and share buybacks during the year amounting to €1.6 billion. These factors were partly offset by net income for the year of €3.6 billion and the transfer of €0.6 billion in treasury shares to employees in connection with our share-based payment programs. The equity ratio as of September 30, 2022 decreased to 19%, from 21% a fiscal year earlier. For the disclosures in accordance with Section 160 para. 1 no. 2 of the German Stock Corporation Act about treasury shares, refer to Note 15 of our Notes to Annual Financial Statements for fiscal 2022.

9.3 Corporate Governance statement

The Corporate Governance statement pursuant to Sections 289f and 315d of the German Commercial Code is publicly available on the company's website at siemens.com/corporate-governance.

10. Takeover-relevant information (pursuant to Sections 289a and 315a of the German Commercial Code) and explanatory report

10.1 Composition of common stock

As of September 30, 2022, the Company's common stock totaled €2.550 billion. The capital stock is divided into 850 million registered shares of no par value (Siemens shares). The shares are fully paid in. All shares confer the same rights and obligations. The shareholders' rights and obligations are governed in detail by the provisions of the German Stock Corporation Act, in particular by Sections 12, 53a et seq., 118 et seq. and 186 of the German Stock Corporation Act.

10.2 Restrictions on voting rights or transfer of shares

At the Shareholders' Meeting, each share of stock has one vote and accounts for the shareholder's proportionate share in the Company's net income. An exception to this rule applies with regard to treasury shares held by the Company, which do not entitle the Company to any rights. Under Section 136 of the German Stock Corporation Act the voting right of the affected shares is excluded by law.

Siemens shares issued to employees worldwide under the employee share programs implemented since the beginning of fiscal 2009, in particular the Share Matching Plan, are freely transferable unless applicable local laws provide otherwise. Under the rules of the Share Matching Plan, however, in order to receive one matching share free of charge for each three shares purchased, participants are required to hold the shares purchased by them for a vesting period of several years, during which the participants must be continuously employed by Siemens AG or any of its affiliated companies. The right to receive matching shares is forfeited if the purchased shares are sold, transferred, hedged on, pledged or hypothecated in any way during the relevant vesting period.

The von Siemens-Vermögensverwaltung GmbH (vSV) has, on a sustained basis, powers of attorney allowing it to exercise the voting rights for 10,584,465 shares (as of September 30, 2022) on behalf of members of the Siemens family. These shares are part of the total number of shares held by the family's members. The powers of attorney are based on an agreement between the vSV and, among others, members of the Siemens family. The shares are voted together by vSV, taking into account the suggestions of a family partnership established by the family's members or of one of this partnership's governing bodies.

10.3 Legislation and provisions of the Articles of Association applicable to the appointment and removal of members of the Managing Board and governing amendment to the Articles of Association

The appointment and removal of members of the Managing Board are subject to the provisions of Sections 84 and 85 of the German Stock Corporation Act and Section 31 of the German Codetermination Act (Mitbestimmungsgesetz). According to Section 8 para. 1 of the Articles of Association, the Managing Board is comprised of several members, the number of which is determined by the Supervisory Board.

According to Section 179 of the German Stock Corporation Act, any amendment to the Articles of Association requires a resolution of the Shareholders' Meeting. The authority to adopt purely formal amendments to the Articles of Association was transferred to the Supervisory Board under Section 13 para. 2 of the Articles of Association. In addition, by resolutions adopted during past Shareholders' Meetings, the Supervisory Board has been authorized to amend Section 4 of the Articles of Association in accordance with the utilization of the Authorized and Conditional Capitals, and after expiration of the then-applicable authorization and utilization period.

Resolutions of the Shareholders' Meeting require a simple majority vote, unless a greater majority is required by law (Section 23 para. 2 of the Articles of Association). Pursuant to Section 179 para. 2 of the German Stock Corporation Act, amendments to the Articles of Association require a majority of at least three-quarters of the capital stock represented at the time of the casting of the votes, unless another capital majority is prescribed by the Articles of Association.

10.4 Powers of the Managing Board to issue and repurchase shares

The Managing Board is authorized to increase, with the approval of the Supervisory Board, the capital stock until February 2, 2026 by up to €90 million through the issuance of up to 30 million Siemens shares against contributions in cash (Authorized Capital 2021). Subscription rights of existing shareholders are excluded. The new shares shall be offered exclusively to employees of the Company and any of its affiliated companies. To the extent permitted by law, such employee shares may also be issued in such a manner that the contribution to be paid on such shares is covered by that part of the annual net income which the Managing Board and the Supervisory Board may allocate to other retained earnings under Section 58 para. 2 of the German Stock Corporation Act.

Furthermore, the Managing Board is authorized to increase, with the approval of the Supervisory Board, the capital stock until January 29, 2024 by up to €510 million through the issuance of up to 170 million Siemens shares against cash contributions and/or contributions in kind (Authorized Capital 2019).

As of September 30, 2022, the total unissued authorized capital of Siemens AG therefore consisted of €600 million nominal that may be used, in installments with varying terms, by issuance of up to 200 million Siemens shares.

By resolutions of the Shareholders' Meetings on January 30, 2019 and February 5, 2020, the Managing Board is authorized to issue bonds with conversion, exchange or option rights or with warrants attached, or a combination of these instruments, entitling the holders to subscribe to up to 80 million and up to 60 million Siemens shares, respectively. Based on these two authorizations, the Company or its affiliated companies may issue bonds until January 29, 2024 and February 4, 2025, respectively, each in an aggregate principal amount of up to €15 billion. In order to grant shares of stock to holders/creditors of such convertible bonds or warrant bonds, the capital stock was conditionally increased by resolutions of the Shareholders' Meetings in 2019 and 2020, by up to 80 million and up to 60 million Siemens shares, respectively (Conditional Capitals 2019 and 2020), i.e. in total by up to €420 million through the issuance of up to 140 million Siemens shares.

The new shares under Authorized Capital 2019 and the aforementioned bonds are to be issued against cash or non-cash contributions. They are, as a matter of principle, to be offered to shareholders for subscription. The Managing Board is authorized to exclude, with the approval of the Supervisory Board, subscription rights of shareholders in the event of capital increases against contributions in kind. In the event of capital increases against contributions in cash, the Managing Board is authorized to exclude shareholders' subscription rights with the approval of the Supervisory Board in the following cases:

- The issue price of the new shares/bonds is not significantly lower than the stock market price of the Siemens shares already listed or the theoretical market price of the bonds computed in accordance with generally accepted actuarial methods (exclusion of subscription rights, limited to 10% of the capital stock, in accordance with or by mutatis mutandis application of Section 186 para. 3 sentence 4 German Stock Corporation Act).
- The exclusion is necessary with regard to fractional amounts resulting from the subscription ratio.
- The exclusion is used to grant holders of conversion or option rights or conversion or option obligations on Siemens shares a compensation for the effects of dilution.

The new shares issued or to be issued in exchange for contributions in cash and in kind and with shareholders' subscription rights excluded, may in certain cases be subject to further restrictions. The details of those restrictions are described in the relevant authorization. In addition, the Managing Board has issued the commitment not to increase the capital stock from the Authorized Capital 2019 and the Conditional Capitals 2019 and 2020 by a total of more than 10% of the capital stock existing at the time of the Shareholders' Meeting on February 5, 2020, to the extent that capital increases with shareholders' subscription rights excluded are made from the Authorized Capital 2019 against contributions in cash or in kind or to service convertible bonds and/or warrant bonds issued under the authorizations approved on January 30, 2019 or February 5, 2020 with shareholders' subscription rights excluded. This commitment ends no later than February 4, 2025.

The Company may not repurchase its own shares unless so authorized by a resolution duly adopted by the shareholders at a general meeting or in other very limited circumstances set forth in the German Stock Corporation Act. On February 5, 2020, the Shareholders' Meeting authorized the Company to acquire until February 4, 2025 up to 10% of its capital stock existing at the date of adopting the resolution or – if this value is lower – as of the date on which the authorization is exercised. The aggregate of shares of stock of Siemens AG repurchased under this authorization and any other Siemens shares previously acquired and still held in treasury by the Company or attributable to the Company pursuant to Sections 71d and 71e of the German Stock Corporation Act may at no time exceed 10% of the then existing capital stock. Any repurchase of Siemens shares shall be accomplished at the discretion of the Managing Board either (1) by acquisition over the stock exchange, (2) through a public share repurchase offer or (3) through a public offer to swap Siemens shares for shares in a listed company within the meaning of Section 3 para. 2 German Stock Corporation Act. The Managing Board is additionally authorized to complete the repurchase of Siemens shares in accordance with the authorization described above by using certain derivatives (put and call options, forward purchases and any combination of these derivatives). In exercising this authorization, all stock repurchases based on the derivatives are limited to a maximum volume of 5% of Siemens' capital stock existing at the date of adopting the resolution at the Shareholders' Meeting. A derivative's term of maturity may not, in any case, exceed 18 months and must be chosen in such a way that the repurchase of Siemens shares upon exercise of the derivative will take place no later than February 4, 2025.

In addition to selling them over the stock exchange or through a public sales offer to all shareholders, the Managing Board is authorized by resolution of the Shareholders' Meeting on February 5, 2020 to also use Siemens shares repurchased on the basis of this or any previously given authorization for every permissible purpose, in particular as follows: Such Siemens shares may be

- retired;
- used in connection with share-based compensation programs and/or employee share programs of the Company or any of its affiliated companies and issued to individuals currently or formerly employed by the Company or any of its affiliated companies as well as to board members of any of the Company's affiliated companies;
- offered and transferred, with the approval of the Supervisory Board, to third parties against non-cash contributions;
- sold by the Managing Board, with the approval of the Supervisory Board, against payment in cash if the price at which such Siemens shares are sold is not significantly lower than the market price of Siemens stock (exclusion of subscription rights, limited to 10% of the capital stock, by mutatis mutandis application of Section 186 para. 3 sentence 4 German Stock Corporation Act); or
- used to service or secure obligations or rights to acquire Siemens shares arising particularly from or in connection with convertible bonds or warrant bonds of the Company or its affiliated companies. Moreover, the Managing Board is authorized to exclude subscription rights in order to grant holders/creditors of conversion or option rights or respective conversion or option obligations on Siemens shares subscription rights as compensation against effects of dilution to the extent to which they would be entitled after exercise of such rights or fulfillment of such obligations, and to use Siemens shares to service such subscription rights.

Furthermore, the Supervisory Board is authorized to use shares acquired on the basis of this or any previously given authorization to meet obligations or rights to acquire Siemens shares that were or will be agreed with members of the Managing Board within the framework of rules governing Managing Board compensation.

On June 24, 2021, the Company announced that it would launch a new five-year share buyback program, beginning in fiscal 2022. This buyback, which began on November 15, 2021 and extends at the latest until September 15, 2026, is limited to a maximum value of €3 billion (excluding incidental transaction charges) on purchases of no more than 50 million Siemens shares. Using the authorization given by the Annual Shareholders' Meeting on February 5, 2020, Siemens repurchased 14.2 million shares by September 30, 2022 under this share buyback. This buyback has the exclusive purposes of retirement, of issuing shares to employees, board members of affiliated companies and members of the Managing Board of Siemens AG, and of servicing/securing the obligations or rights to acquire Siemens shares arising particularly from or in connection with convertible bonds and warrant bonds.

As of September 30, 2022, the Company held 57,454,171 shares of stock in treasury.

For details on the authorizations referred to above, especially the terms to exclude subscription rights, please refer to the relevant resolution and to Section 4 of the Articles of Association.

10.5 Significant agreements which take effect, alter or terminate upon a change of control of the Company following a takeover bid

As of September 30, 2022, Siemens AG maintained lines of credit in the amount of €7.45 billion.

In December 2021, Siemens AG entered into two bilateral loan agreements in the total amount of €600 million, which have been fully drawn.

In December 2021, a consolidated subsidiary as borrower and Siemens AG as guarantor entered into a bilateral loan agreement in the amount of €500 million, which has been fully drawn. In addition, in March 2020 and in June 2019 respectively, a consolidated subsidiary as borrower and Siemens AG as guarantor entered into a bilateral loan agreement, each of which has been drawn in the full amount of US$ 500 million.

The lines of credit, and the relevant loan agreements mentioned above provide their respective lenders with a right of termination in the event that (1) Siemens AG becomes a subsidiary of another company or (2) a person or a group of persons acting in concert acquires effective control over Siemens AG by being able to exercise decisive influence over its activities (Art. 3(2) of Council Regulation (EC) 139/2004).

Framework agreements concluded by Siemens AG under International Swaps and Derivatives Association Inc. documentation (ISDA Agreements) grant each counterparty a right of termination, including in certain cases of (i) a transformation (for example mergers and changes of form), (ii) an asset transfer or (iii) acquisition of ownership interests that enables the acquirer to exercise control over Siemens AG or its controlling bodies. Partially this right of termination exists only, if (1) the resulting entity fails to simultaneously assume Siemens AG's obligations under the ISDA Agreements or (2) the resulting entity's creditworthiness is materially weaker than Siemens AG's immediately prior to such event. Generally, ISDA Agreements are designed such that upon termination all outstanding payment claims documented under them are to be netted.

10.6 Compensation agreements with members of the Managing Board or employees in the event of a takeover bid

The contracts with the members of the Managing Board previously contained the right of the member to terminate his or her contract with the Company for good cause in the event of a change of control that results in a substantial change in the position of a Managing Board member (for example, due to a change in corporate strategy or a change in the Managing Board member's duties and responsibilities). A change of control exists if one or several shareholders acting jointly or in concert acquire a majority of the voting rights in Siemens AG and exercise a controlling influence, or if Siemens AG becomes a dependent enterprise as a result of entering into an intercompany agreement within the meaning of Section 291 of the German Stock Corporation Act, or if Siemens AG is to be merged into an existing corporation or other entity. If this right of termination is exercised, the Managing Board member is entitled to a severance payment in the amount of no more than two years' compensation. The calculation of the annual compensation includes not only the base compensation and the target amount for the bonus, but also the target amount for the stock awards, in each case based on the most recent completed fiscal year prior to termination of the contract. The stock-based compensation components for which a firm commitment already exists will remain unaffected. Additionally, the severance payments cover non-monetary benefits by including an amount of 5% of the total severance amount. Severance payments will be reduced by 10% as a lump-sum allowance for discounted values and for income earned elsewhere. However, this reduction will apply only to the portion of the severance payment that was calculated without taking account of the first six months of the remaining term of the Managing Board member's contract. There is no entitlement to a severance payment if the Managing Board member receives benefits from third parties in connection with a change of control. A right to terminate the contract does not exist if the change of control occurs within a period of twelve months prior to a Managing Board member's retirement.

On September 18, 2019, the Supervisory Board of Siemens AG resolved that the contracts with members of the Managing Board should not contain such right of termination in the future. This has already been taken into account in the case of contract extensions and in the case of new contracts with the newly appointed members of the Managing Board as of October 1, 2020.

10.7 Other takeover-relevant information

We are not aware of, nor have we during the last fiscal year been notified of, any shareholder directly or indirectly holding 10% or more of the voting rights. There are no Siemens shares with special rights conferring powers of control. Shares of stock issued by Siemens AG to employees under its employee share program and/or as share-based compensation are transferred to the employees. The beneficiary employees who hold shares of employee stock may exercise their control rights in the same way as any other shareholder in accordance with applicable laws and the Articles of Association.