A.1 Organization of the Siemens Group and basis of presentation

Siemens is a technology company 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, conventional and renewable power generation and power distribution, smart mobility solutions for rail and road and medical technology and digital healthcare services.

Siemens comprises 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, 2019, Siemens had around 385,000 employees.

At the end of fiscal 2018, Siemens announced its "Vision 2020+" company strategy. The main aim of "Vision 2020+" is to give Siemens' individual businesses significantly more entrepreneurial freedom under the strong Siemens brand in order to sharpen their focus on their respective markets. As a result, we implemented a new organizational structure in fiscal 2019 consisting of the three Operating Companies Digital Industries, Smart Infrastructure and Gas and Power, and the three Strategic Companies Mobility, Siemens Healthineers and Siemens Gamesa Renewable Energy. These six industrial businesses are reportable segments, which together are reported as "Industrial Businesses". Financial Services (SFS), which supports the activities of our industrial businesses and also conducts its own business with external customers, continues to be a reportable segment outside our Industrial Businesses. Furthermore, we report Portfolio Companies, which comprises businesses that are managed separately to improve their performance. For further information on the reorganization of our businesses, see → A.3 SEGMENT INFORMATION. In this Annual Report, we report financial results for fiscal 2019 according to the new company structure on a full year basis. Prior-period amounts are presented on a comparable basis.

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 → A.1 and A.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 → A.3 through A.7. Forward-looking information, including risk disclosures, is presented in chapter → A.8. Chapter → A.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 → B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, NOTES 17, 18, 22, 26 and 27, and in the ↗ NOTES TO THE ANNUAL FINANCIAL STATEMENTS OF SIEMENS AG FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2019, NOTES 16, 17, 20, 21 and 25. These disclosures are not subject to a specific framework in order to inform the users of the financial reports in a focused manner – in contrast to the disclosures in our separately available "Sustainability Information 2019" document, which are based on the standards developed by the Global Reporting Initiative (GRI).

A.2 Financial performance system

A.2.1 Overview

The Siemens Financial Framework includes targets that we aim to achieve over the cycle of the business activities.

A.2.2 Revenue growth

In the Siemens Financial Framework we aim to achieve a revenue growth range of 4% to 5% per year on a comparable basis. 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 of the relevant business resulting specifically from the acquisition or disposition. For calculating the percentage change, this absolute change is divided by revenue for the comparison period. For orders, we apply the same calculations for currency translation and portfolio effects as described above.

A.2.3 Profitability and capital efficiency

Within the Siemens Financial Framework, we aim to achieve margins that are comparable to those of our relevant competitors. Therefore, we have defined profit margin ranges for our industrial businesses which are based on 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 operating financial income (expenses), net, and amortization of intangible assets not acquired in business combinations (Adjusted EBITA).

We have set the following margin ranges in our Siemens Financial Framework:

Margin ranges

	Margin range
Digital Industries	17 – 23%
Smart Infrastructure	10 – 15%
Gas and Power	8 – 12%
Mobility	9 – 12%
Siemens Healthineers	17 – 21%
Siemens Gamesa Renewable Energy	7 – 11%
Industrial Businesses	**11 – 15%**
Financial Services (ROE after tax)	17 – 22%

Margin ranges for Siemens Healthineers and Siemens Gamesa Renewable Energy reflect our expectations as a majority shareholder.

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

For purposes of managing and controlling profitability at the Group level, we use net income as our primary measure. This measure is the main driver of basic earnings per share (EPS) from net income, which we use in communication to the capital markets.

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 long-term goal is to achieve ROCE within a range of 15% to 20%.

A.2.4 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 1.0.

A.2.5 Liquidity and dividend

We intend to continue providing an attractive return to our shareholders. Under the Siemens Financial Framework, our intention is to propose a dividend whose distribution volume is within a dividend payout range of 40% to 60% of Net income attributable to shareholders of Siemens AG, which we may adjust for this purpose to exclude selected exceptional non-cash effects. As in the past, we intend to fund the dividend payout from Free cash flow. To provide an assessment of our ability to generate cash, and ultimately to pay dividends, we use the cash conversion rate of Industrial Businesses, defined as the ratio of Free cash flow from Industrial Businesses to Adjusted EBITA Industrial Businesses. Because growth requires investments, we aim to achieve a cash conversion rate of 1 minus the annual comparable revenue growth rate of Industrial Businesses.

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 2019: to distribute a dividend of €3.90 on each share of no par value entitled to the dividend for fiscal year 2019 existing at the date of the Annual Shareholders' Meeting; to allocate €2,069 million to retained earnings; 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 5, 2020. The prior-year dividend was €3.80 per share.

The proposed dividend of €3.90 per share for fiscal 2019 represents a total payout of €3.2 billion based on the estimated number of shares entitled to dividend at the date of the Annual Shareholders' Meeting. Based on Net income attributable to Shareholders of Siemens AG of €5.2 billion for fiscal 2019, the dividend payout percentage is 61%.

A.2.6 Calculation of return on capital employed

Calculation of ROCE

	Fiscal year	
(in millions of €)	2019	2018
Net income	5,648	6,120
Less: Other interest expenses/income, net[1]	(529)	(482)
Plus: SFS Other interest expenses/income	763	721
Plus: Net interest expenses related to provisions for pensions and similar obligations	148	164
Less: Interest adjustments (discontinued operations)	–	–
Less: Taxes on interest adjustments (tax rate (flat) 30%)	(115)	(121)
(I) Income before interest after tax	**5,916**	6,401
(II) Average capital employed	**53,459**	50,715
(I)/(II) ROCE	**11.1%**	12.6%

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.

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
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
Plus: Provisions for pensions and similar obligations
Less: Financial Services debt
Less: Fair value hedge accounting adjustment
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)

A.3 Segment information

A.3.1 Overall economic conditions

In fiscal 2019, global gross domestic product (GDP) growth lost its momentum. After GDP grew by 3.2% in calendar 2018, growth is expected to recede to 2.6% in calendar 2019. This cool-down was hardly expected at the beginning of fiscal 2019: in October 2018, GDP growth for calendar 2019 was forecast at 3.1%.

The main reason for this significant deceleration of the global economy was the escalating trade dispute between the U.S. and China. In addition, geopolitical tensions in the Middle East contributed to uncertainty, which weighed on capital investments. Global exchange of goods started to decline from October 2018, leading to near-stagnation of industrial production afterwards.

Accordingly, the slowdown of the global economy was attributable in particular to regions and countries where trade and industry are of high importance. In Europe, this was especially true for Germany and Italy, where industrial production (excluding construction) had started to recede already in calendar 2018. In addition, European economies suffered from continued uncertainties regarding the U.K. leaving the European Union (Brexit) and the budget clash between the European Commission and Italy's government, both weighing especially on business investment environment. In the Americas, the slowdown was very pronounced in Mexico and Canada, and to a smaller extent in the more consumption-driven U.S. economy, where a fiscal boost helped the economy. In Asia, China continued on its announced path to gradually rebalance its economy, which has resulted in decelerating overall GDP growth. Government stimulus programs have partly buffered the Chinese economy from trade dispute headwinds, but the conflict is nevertheless taking a toll. Economic dynamics deteriorated markedly in India, where a decline in domestic consumption was the biggest drag on growth. Countries dependent on commodities and raw material exporting, notably Chile, Brazil and Argentina, saw declines in commodity prices in addition to other adverse factors including domestic political and financial instability.

In advanced countries, calendar 2019 GDP growth is estimated at 1.6%, 0.7 percentage points lower than 2018. For emerging countries, the GDP growth rate is estimated to recede from 4.6% in calendar 2018 to 4.1% in 2019.

The partly estimated figures presented here for GDP are based on an IHS Markit report dated October 15, 2019.

A.3.2 Digital Industries

The Operating Company Digital Industries was formed in fiscal 2019, through a combination of the former Digital Factory Division (excluding the control products business) with the process automation and large drives businesses (excluding the industrial applications and traction businesses) of the former Process Industries and Drives Division. It 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 (including sensors measuring pressure, temperature, level, flow rate, distance or shape) and radio frequency identification systems. Furthermore, the Operating Company offers product and production lifecycle software, and software for simulation and testing of mechatronic systems, supplemented by the electronic design automation software portfolio of Mentor Graphics (Mentor) and the open, cloud-based industrial internet of things (IIoT) operating system MindSphere, which connects machines and physical infrastructure to the digital world. To increase growth and accelerate adoption of MindSphere, Digital Industries acquired Mendix group (Mendix) at the beginning of fiscal 2019. Mendix is a pioneer and leader in cloud-native low-code application development, which can significantly reduce app development times through visual representation of underlying code (for more information on the acquisition of Mendix, see → NOTE 3 in B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS). Digital Industries also provides customers with lifecycle and data-driven services. Taken together, the Operating Company's offerings enable customers to optimize entire value chains from product design and development to production and post-sale services. With its advanced software solutions in particular, Digital Industries supports customers in the discrete manufacturing, hybrid and process industries in their evolution towards the "Digital Enterprise," resulting in increased flexibility and efficiency of production processes and reduced time to market for new products. Among its most important customer segments are 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. Changes in customer demand, especially for standard products, are strongly driven by macroeconomic cycles, and can lead to significant short-term fluctuation in the Operating Company's profitability. The competition for Digital Industries' business activities can be grouped into two categories: multinational companies that offer a relatively broad portfolio and companies that are active only in certain geographic or product markets.

Digital Industries sees three basic 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 to remain competitive. 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. Further, there is a trend from globalization to regionalization to either protect local economies or to better adapt solutions to local needs.

Research & Development (R&D) activities at Digital Industries are aimed at integrating technologies such as artificial intelligence (AI), edge computing, industrial 5G, autonomous handling systems and additive manufacturing into Digital Industries' extensive portfolio for industrial automation and digitalization. An example of this integrative approach is a new module with an integrated AI-capable chip for the Simatic S7-1500 programable logic controller, which enables the optimization of robot-based handling processes. Similarly, the latest version of Digital Industries' NX software has been enhanced with machine learning and AI capabilities, so it can predict next steps and help customers use the software more efficiently. In Digital Industries' own factories, AI has already been proven: The integration of edge computing, AI and MindSphere reduced the number of final inspection processes during X-ray inspection of printed circuit boards for Simatic products. Digital Industries, along with other Siemens units, is also running research projects for industrial 5G and establishing several 5G interoperability test centers under actual operational technology conditions. The Operating Company's latest machine tool controller, Sinumerik ONE, was developed entirely through virtualization of both the product's design and its manufacturing processes. The newly developed process control system, PCS neo, is designed for easy, efficient scaling from a small process module up to the largest process plants in the world. Major **investments** of Digital Industries in fiscal 2019 relate to the factory automation, motion control systems and process automation businesses, including capital expenditure in production facilities in China.

	Fiscal year		% Change	
(in millions of €)	2019	2018	Actual	Comp.
Orders	**15,944**	16,287	(2)%	(4)%
Revenue	**16,087**	15,587	3%	2%
therein: software business	***4,039***	*3,560*	*13%*	*8%*
Adjusted EBITA	**2,880**	2,898	(1)%	
Adjusted EBITA margin	**17.9%**	18.6%		

Orders for Digital Industries declined due to lower demand in the short-cycle factory automation and motion control businesses, which faced increasingly adverse market conditions during the course of the fiscal year, particularly in the automotive and machine building industries. These declines were only partly offset by clear growth in the process automation business and a moderate increase in the software business, which was due to positive currency translation effects and new volume from recent acquisitions, particularly including Mendix. The latter two businesses were also the drivers for **revenue** growth, as year-over-year revenue growth for the short-cycle businesses in the first half of fiscal 2019 gave way to declines in the second half. On a geographic basis, orders declined in the regions Europe, C.I.S., Africa, Middle East and in the Americas, only partly offset by an increase in the Asia, Australia region. Revenue rose in all three reporting regions. The software business strengthened its contribution to **Adjusted EBITA** with a double-digit increase. Higher expenses related to new cloud-based offerings were partly offset by a €50 million gain from the sale of an equity investment. The process automation business showed a moderate increase in Adjusted EBITA, due mainly to higher revenue. Nevertheless, Adjusted EBITA for Digital Industries overall came in slightly lower year-over-year due to clear declines in the short-cycle businesses. Severance charges were €92 million in fiscal 2019, up from €75 million a year earlier. Digital Industries' order backlog was €5 billion at the end of the fiscal year, of which €4 billion are expected to be converted into revenue in fiscal 2020.

Digital Industries achieved its results in a **market** environment that lost momentum in the course of fiscal 2019. In particular, demand for investment goods eroded notably in the second half of the fiscal year. All regions were impacted by the slowdown, and countries with strong focus on investment goods and strong export ties to China suffered notably. While process industries still benefited from positive development of raw material prices, discrete industries faced headwinds from low demand including destocking effects. The automotive industry was hit by production cuts in Europe and weak demand in China. This, among other factors, also impacted the machine building industry, particularly affecting customers in Germany and Japan. Production growth in the pharmaceutical and chemicals industries flattened during the course of fiscal 2019, due in part to spillover effects from the automotive industry on related chemicals segments. The food and beverage industry grew modestly and global electronics and semiconductor production expanded but prices were under pressure. For fiscal 2020, the market environment for Digital Industries is expected to weaken further. Manufacturing investments are expected to decrease at least moderately but then begin to stabilize in the second half of fiscal 2020. An overall decline in investment sentiment caused by global trade tensions, among other factors, dampens short-term expectations and fuels increasing cautiousness for investments globally. A weakening of growth in China could lead to spillover effects in other Asian countries and also in Europe.

A.3.3 Smart Infrastructure

The Operating Company **Smart Infrastructure** supplies and intelligently connects energy systems and building technologies, to significantly improve efficiency and sustainability and support its customers to address major technology shifts. Smart Infrastructure was formed in fiscal 2019, through a combination of the former Building Technologies Division; the low- and medium-voltage products and systems and digital grid businesses of the former Energy Management Division; and the control products business of the former Digital Factory Division. Smart Infrastructure brings together energy supply – from intelligent control across the grid and low- and medium-voltage electrification and control products – with building technology: from building automation to fire safety and security to energy efficiency. At the grid edge, there are high growth markets in energy storage, distributed energy systems and prosumption, electric vehicle infrastructure and microgrids. The Operating Company serves its customers through a broad variety of channels, including its global product and systems sales organization, distributors, panel builders, original equipment manufacturers (OEM), value added resellers and installers, as well as by direct sales through the branch offices of its regional solutions and services units worldwide. Smart Infrastructure's customer 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; utilities and power distribution network operators; companies in heavy industries such as oil and gas, mining and chemicals; and companies in discrete manufacturing industries such as automotive and machine building. Smart Infrastructure's principal competitors consist mainly of large multinational companies together with smaller manufacturers in emerging countries. Its solutions and services business also competes with local players such as system integrators and with facility management firms. The degree to which Smart Infrastructure's businesses are impacted by changes in the overall economic environment differs by customer segments. While customer demand in discrete manufacturing industries changes quickly and strongly with macroeconomic cycles, demand in infrastructure, construction, heavy industries and the utilities sector reacts more slowly to economic cycles. Overall, the Operating Company's regional and vertical markets diversification, its mix of products, systems, solutions and services businesses, and its participation in both long- and short-cycle markets, all provide a balanced and resilient business mix.

The markets served are experiencing shifts that offer opportunities where building technologies and electrification markets come together. Key **trends** include rising population and urbanization, increasing need for safe, secure and sustainable environments with interactive, comfortable spaces and low energy, operating and maintenance costs. These trends lead to cross-sector coupling, such as electrification of heat and transportation to optimize energy efficiency. Decarbonization is changing the energy generation mix towards renewable energy sources, which fluctuate with time of day and weather conditions. As a result, the energy system is becoming increasingly decentralized, more strongly influenced by prosumers, and more dependent on integration of intermittent/distributed energy sources including wind, photovoltaic and biomass, and increasing the need for smart storage and efficient and reliable power networks. Both smarter buildings and the integration of more distributed energy sources into conventional power networks result in increasing complexity with rising volumes of data, bi-directional energy and information flows. These can be reliably managed only through digitalization of buildings, transportation and energy systems.

Smart Infrastructure's **R&D** activities on the one hand focus on addressing the trends of decentralization, decarbonization and digitalization of energy markets. On the other hand, R&D expenses strengthen Smart Infrastructure's capabilities to create comfortable, safe and energy-efficient buildings and infrastructures and to support increased efficiency of occupants, equipment and the use of building space. The Operating Company is expanding its digital offerings in its existing businesses while integrating recent acquisitions in the critical power control systems, power electronics and building IoT space. Furthermore, it develops technologies for environmentally friendly and increasingly renewable energy systems, ranging from photovoltaic inverter technology to battery storage and charging solutions for e-mobility. In this regard, data from field devices is the basis to intelligently deliver grid flexibility and permanently match 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 increasingly remote diagnostics and edge computing capability. Its digital twins of products, building systems or grids deliver customer value with online configuration tools, maintenance and service management. Smart Infrastructure develops data-driven applications and digital services with the Mindsphere in various cloud environments. Its **investments** relate to a large extent to the products businesses and its factories, with a strong focus on innovation.

	Fiscal year		% Change	
(in millions of €)	2019	2018	Actual	Comp.
Orders	**16,244**	15,198	7%	4%
Revenue	**15,225**	14,445	5%	3%
therein: product business	***5,530***	*5,302*	*4%*	*2%*
Adjusted EBITA	**1,500**	1,574	(5)%	
Adjusted EBITA margin	**9.9%**	10.9%		

Orders and **revenue** for Smart Infrastructure rose in all three businesses – solutions and services, systems and software, and the products business – and in all three reporting regions. Order growth was strongest in the solutions and services business on a sharply higher volume from large orders in the Americas and Europe, C.I.S., Africa, Middle East. Revenue rose most strongly in the systems and software and the solutions and services businesses, particularly in the Americas. Revenue growth in the product business was due to low voltage products, while revenue in the other products businesses came in close to prior-year levels due partly to less favorable conditions in short-cycle markets. **Adjusted EBITA** declined due mainly to the systems and software business including negative effects related to grid control projects early in the year. Adjusted EBITA also included higher expenses year-over-year related to expansion of smart building offerings and for grid edge activities. Severance charges were €48 million in fiscal 2019 compared to €34 million a year earlier. Smart Infrastructure's order backlog was €10 billion at the end of the fiscal year, of which €7 billion are expected to be converted into revenue in fiscal 2020.

Smart Infrastructure achieved its results in overall moderately growing **markets** in fiscal 2019. The grid markets benefited from the need for intelligent and flexible energy networks and for automation, particularly in Asia, Australia and the Americas. Heavy industries and the infrastructure industry also developed favorably during fiscal 2019, driven by investments in oil and gas markets, in data centers and in transportation infrastructure, such as for e-mobility. Discrete industries, which started strong in fiscal 2019, experienced a downturn in the second half of the fiscal year. Construction markets continued their stable growth during the fiscal year, particularly in the U.S. and China and in the non-residential construction market overall. Growth in the important building electrification and automation market was driven by demand for building performance and sustainability offerings, including strong demand for energy efficiency and digital services. In fiscal 2020, market growth overall is expected to be lower than in fiscal 2019, due to an expected continuation of the downturn in the short-cycle markets, economic uncertainty in a number of countries due to trade conflicts, and other factors.

Beginning with fiscal 2020, the distribution transformer business will be transferred to the Operating Company Gas and Power. If this organizational structure had already existed in fiscal 2019, Smart Infrastructure would have posted orders of €15.590 billion, revenue of €14.597 billion, Adjusted EBITA of €1.465 billion and an Adjusted EBITA margin of 10.0%.

A.3.4 Gas and Power

The Operating Company **Gas and Power** offers a broad spectrum of products and solutions for generating electricity, for production, transport and downstream operations involving oil and gas, and for installing and operating transmission grids. In addition, it offers a comprehensive set of services related to these products and solutions such as performance enhancements, maintenance services, customer training and professional consulting. Finally, Gas and Power offers comprehensive turnkey solutions that integrate the products and systems from its businesses. Gas and Power was formed in fiscal 2019 through a combination of the former Power and Gas and Power Generation Services Divisions with the transmission products, systems and solutions businesses of the former Energy Management Division. Due to the broad range of its offerings, the revenue mix for Gas and Power may vary from reporting period to reporting period depending on the share of revenue attributable to products, solutions and services. Because profitability levels typically differ among these three revenue sources, the revenue mix in a reporting period accordingly affects Adjusted EBITA of Gas and Power for that period.

In the power generation and oil and gas businesses, the portfolio includes gas turbines, steam turbines, generators for gas or steam power plants, turbo and reciprocating compressor trains, reciprocating engines, modular power supply and integrated power plant solutions, and instrumentation and control systems for power generation. Customers include public utilities and independent power producers; companies in engineering, procurement and construction (EPC) that serve utilities and power producers; sovereign and multinational oil companies; midstream operators; independent oil and gas, petrochemical and chemical companies, and industrial customers that generate power and heat for their own consumption (prosumers). The competition consists mainly of two groups: a relatively small number of original equipment manufacturers (OEM), some with very strong positions in their domestic markets, and on the other hand a large number of EPC contractors.

In the transmission business, the portfolio includes products, systems and solutions that enable multi-vendor and bidirectional flow of energy and information. These offerings are key building blocks of modernized energy grids, which must integrate renewable sources with their fluctuating levels of power generation and also incorporate efficient electrical storage and sophisticated load management. The portfolio also includes power transformers, high voltage switchgear and components, high-voltage direct current (HVDC) products and HVDC and grid access solutions as well as relevant transmission services. The transmission business serves a broad range of customers including power producers, transmission and distribution system operators, and industrial and infrastructure customers in industries such as oil and gas, chemicals, mining, data centers, airports, and rail companies. Competitors in the transmission business consist mainly of a small number of large multinational companies, increasingly joined by smaller, fast-growing manufacturers in emerging countries including China, India and Korea.

Several **trends** are affecting the businesses of the Operating Company. In the power generation business, the ongoing strong growth in demand for power from renewable sources – which come with associated short-term fluctuations in power generation levels – is shifting market demand from fossil baseload generation to more flexible, highly efficient and affordable gas power plants with low emissions, in particular in Europe, Latin America and Asia. A second trend is that the development and execution of large projects increasingly requires financing by the OEM, including equity participation. For Gas and Power, this role is fulfilled by Financial Services, which can offer customers a range of financing and equity options backed by domain know-how. In general, the markets for the Operating Company are strongly affected by changes in national energy regulations, such as support of renewable energy, the security of supply through capacity markets or strategic reserve capacity, carbon pricing and climate change targets, and modernization of energy and electricity markets. Fuel efficiency standards in the U.S. and the European Union are expected to weigh on future demand for fossil transportation fuels in these regions, contrasting with strong growth in transportation-related fuel use in other world regions, particularly in Asia.

In Oil and Gas, the role of natural gas compared to other fossil fuels is growing from the mid- to long-term perspective, facilitated by its lower carbon footprint. Furthermore, declining production from maturing oil and gas fields, or depletion, requires improved recovery technologies as well as additional mechanical and electrical power, necessitating continuous investments. At the same time, oil and gas companies increasingly focus on asset economics and emission footprint, requiring products and solutions offering an improved balance of high asset productivity with safety and environmental performance. Generally, our oil and gas business benefits from these major market trends. At the same time, our diversified and global presence across the oil and gas value chain and other industries – each following their own business cycles – offers stable opportunities for our business.

The transmission business generally benefits from major trends and changes in global electrical power systems, in particular decarbonization, digitalization and global electrification. Decarbonization is shifting the focus of generation to both central and decentral renewables. This shift increases demand for offshore connectivity and grid stability, requiring environmentally friendly products and systems. The integration of wind power, photovoltaics, biomass, storage and other intermittent or distributed energy resources into efficient and reliable power networks increases grid complexity. Holistic asset transparency to increase efficiency of existing grid assets and performance, enabled by digitalization, is becoming increasingly important. Digitalization involves increased product and system connectivity and providing intelligent solutions for the management of complex energy networks. Connected assets provide value potential for additional services and enhanced asset operation. The continuously growing demand for electricity worldwide requires stable transportation of greener bulk power with minimal losses from the location of generation to different demand load centers, some of which may even be located in other countries.

R&D activities of the power generation and oil and gas businesses concentrate on developing products and solutions for enhancing efficiency and flexibility, and for reducing greenhouse gas emissions in power generation and in the oil and gas industry. These products and solutions include turbomachinery – primarily high-performance, low-emission gas turbines for simple-cycle operation or for combined-cycle power plants – and compressor solutions combining electrical, automation, and digitalization offerings for oil and gas as well as process industries. A field of activity is using hydrogen as a renewable fuel in gas turbines. Gas and Power is also intensifying R&D in innovative materials, advanced manufacturing methods and plant optimization. In the transmission business, R&D activities focus on preparing the portfolio for a deregulated environment in which total cost of ownership is decisive. Innovations accordingly focus on product digitalization, power electronics, software-driven power control, environmentally friendly products and systems, and grid stabilization. The increasing infeed of renewable energy to power grids, with distributed generation on the rise, requires those grids to become more flexible and efficient. The **investments** of Gas and Power are focused on enhancing productivity through automation and increasing customer proximity via strategic localization of capacity. Investing activities mainly relate to gas turbines and turbine components.

	Fiscal year		% Change	
(in millions of €)	2019	2018	Actual	Comp.
Orders	**19,975**	18,451	8%	7%
Revenue	**17,663**	18,125	(3)%	(4)%
therein: service business	***8,025***	*7,756*	*3%*	*2%*
Adjusted EBITA	**679**	722	(6)%	
Adjusted EBITA margin	**3.8%**	4.0%		

Orders were up clearly year-over-year, due mainly to higher orders in the new-unit business. Volume from large orders increased significantly year-over-year; among the contract wins was a €0.4 billion order for a combined-cycle power plant, including service in France; a HVDC order worth €0.4 billion in Germany; a €0.3 billion order for a large offshore grid connection project in the U.K.; and a €0.3 billion order in the solutions business in Brazil. Order intake increased in all three reporting regions, with the Americas posting double-digit growth. Gas and Power's **revenue** decreased moderately year-over-year in a continuing difficult market environment as the new-unit businesses recorded lower revenue compared to fiscal 2018 following weak order entry in prior years. On a geographic basis, revenue decreased in the regions Europe, C.I.S., Africa, Middle East and Asia, Australia, partly offset by growth in the Americas. Despite a continuing strong contribution from the service business and positive effects from project execution and completion, **Adjusted EBITA** was down year-over-year on lower revenue, price declines and reduced capacity utilization. In addition, Adjusted EBITA in fiscal 2018 benefited from gains totaling €166 million from two divestments. Severance charges were €242 million in fiscal 2019 compared to €374 million in fiscal 2018. Gas and Power's order backlog was €51 billion at the end of the fiscal year, of which €13 billion are expected to be converted into revenue in fiscal 2020.

These results reflected a highly competitive **market** environment. We expect the power generation market overall to remain challenging with market volume stabilizing at the current level. After years of continuous decline, the volume of the gas turbine market in fiscal 2019 remained on the prior-year level, again being impacted by customer delays of large projects in Asia, Australia, particularly in China, and strong price pressure resulting from intense competition. Customers also showed restraint due to ongoing weak growth in demand for power, combined with uncertainty regarding regulatory developments. The gas turbine market is experiencing overcapacity among OEMs and EPC contractors, which is fostering market consolidation. In the market for large steam turbines for power generation, volume shrank further year-over-year from an already low basis of comparison due to an ongoing shift from coal-fired to gas-fired and renewable power generation, as well as to carbon emission regulation. We expect these developments to continue in fiscal 2020. In contrast, markets for industrial steam turbines were stable in fiscal 2019, and the market segment is expected to be flat in fiscal 2020.

Oil and gas markets developed positively in fiscal 2019, driven by a recovery in liquefied natural gas. They are expected to grow again in fiscal 2020, driven by the liquefied natural gas and upstream markets. Both markets for offshore and onshore exploration are anticipated to recover further based on a growing number of expected project approvals. Pipelines, downstream, and oil and gas-related markets are expected to remain stable in fiscal 2020.

Markets served by our transmission businesses grew slightly in fiscal 2019, recovering from the weakness a year earlier as customers continued their effort to strengthen transmission and distribution grids to integrate the growing amount of decentralized energy. We expect this growth to continue in fiscal 2020, with markets in Asia anticipated to show the highest growth rates. The Middle East is expected to benefit from a price recovery in the oil and gas markets and investments in large infrastructure projects. Tighter decarbonization goals and grid extensions are expected to drive growth in Europe, while utilities in North America are expected to strongly invest in grid modernization and optimization.

Effective with the beginning of fiscal 2020, several businesses will be transferred to Gas and Power: certain businesses previously included in Portfolio Companies; the distribution transformers business previously included in Smart Infrastructure; and the hydrogen solution unit and research activities within the technology field Power 2X and storage previously included in Corporate Items. If this organizational structure had already existed in fiscal 2019, Gas and Power would have posted orders of €21.711 billion, revenue of €19.304 billion, Adjusted EBITA of €732 million and an Adjusted EBITA margin of 3.8%.

A.3.5 Mobility

The Strategic Company **Mobility** combines all Siemens businesses in the area of passenger and freight transportation, including rail vehicles, rail automation systems, rail electrification systems, road traffic technology, digital solutions and related services. It also provides its customers with consulting, planning, financing, construction, service and operation of turnkey mobility systems. Moreover, Mobility offers integrated mobility solutions for networking of different types of traffic systems. It sells its products, systems and solutions through its worldwide network of sales 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. Mobility's principal competitors are multinational companies. Consolidation among Mobility's competitors is continuing. In February 2019, the European Commission announced its decision to prohibit the proposed combination of Alstom SA, France (Alstom) with Siemens' mobility businesses. In August 2019, a large Chinese competitor signed a contract to acquire a locomotives business in Germany, enabling the Chinese competitor to gain a foothold in Europe, in line with its ambitious growth and internationalization strategy. If this transaction were to be carried out, the above described sequence of events would probably lead to significantly increased competitive pressure for all European rail transport businesses, including those of Mobility.

Trends in Mobility's markets are characterized by the need for solutions that make daily mobility simpler, faster, and more flexible, reliable and affordable. Cities and national economies face the challenge of reducing the costs, space requirements, noise and CO_2 emissions of transportation. The pressure on mobility providers and policymakers to meet these mobility and transportation needs is growing as urban populations are expected to continuously rise.

Mobility's **R&D** strategy is focused on providing maximum availability of trains and infrastructures, thereby increasing its customers' return on investment and improving passenger experience. Decarbonization and seamlessly connected (e-)mobility are key factors for the future of transportation. Mobility's major R&D areas include the development of efficient vehicle platforms with optimized lifecycle cost and maximum customization flexibility; eco-friendly, alternative power supplies for trains (batteries, fuel cells, dual mode) and trucks (eHighway); digital services for railways via its Railigent application suite powered by MindSphere; "signaling in the cloud", a new system architecture for rail infrastructure and IoT/cloud-based concepts; solutions for higher automated and autonomous driving for rail and road; and digital technologies and solutions like cyber security, connectivity, digital twin, AI, additive manufacturing or intermodal apps and platforms. Mobility's **investments** focus mainly on maintaining or enhancing its production facilities and on meeting project demands.

	Fiscal year		% Change	
(in millions of €)	2019	2018	Actual	Comp.
Orders	**12,894**	11,025	17%	16%
Revenue	**8,916**	8,821	1%	0%
Adjusted EBITA	**983**	958	3%	
Adjusted EBITA margin	**11.0%**	10.9%		

Orders at Mobility grew to a record high on a sharp increase in volume from large orders, which the Strategic Company won across the businesses, most notably in the rolling stock and the customer services businesses. Among the major contract wins were a €1.6 billion order for metro trains in the U.K., a €1.2 billion contract for high-speed trains including maintenance in Russia, a €0.8 billion order for trainsets including service in Canada, a €0.7 billion contract for diesel-electric locomotives including a service agreement in the U.S. and two orders in Germany worth €0.4 billion and €0.3 billion, respectively, for regional multiple-unit trainsets. In fiscal 2018, Mobility also gained a number of significant contracts across the regions. **Revenue** grew slightly as double-digit growth in the customer services business was largely offset by a decline in the rail infrastructure business. Revenue in the rolling stock business remained close to the prior-year level due to unfavorable timing effects related to the execution of large rail projects, which the business began to ramp up late in the fiscal year. On a geographic basis, revenue growth in the Asia, Australia region was held back by slight declines in Europe, C.I.S., Africa, Middle East and the Americas. Mobility continued to operate with high profitability in fiscal 2019, including a strong contribution to **Adjusted EBITA** from the services business. Severance charges were €20 million, up from €14 million in fiscal 2018. Mobility's order backlog was €33 billion at the end of the fiscal year, of which €8 billion are expected to be converted into revenue in fiscal 2020.

Order growth reflected overall strong **markets** for Mobility in fiscal 2019, with different dynamics among the regions. Market development in Europe was characterized by continuing awards of mid-size and large orders, particularly in the U.K., Germany and Austria. Within the C.I.S., large projects for high-speed trains and services were awarded in Russia. Demand in the Middle East and Africa was held back by ongoing uncertainties related to budget constraints and political climates. In the Americas region, stable investment activities were driven by demand for mainline and urban transport, especially in the U.S. and Canada. Within the Asia, Australia region, Chinese markets saw ongoing investments in high-speed trains, urban transport, freight logistics and rail infrastructure, while India continues to invest in modernizing the country's transportation infrastructure. For fiscal 2020, we expect markets served by Mobility to grow moderately with increasing demand for digital solutions. Overall, rail transport and intermodal mobility solutions are expected to remain a focus as urbanization continues to progress around the world. In emerging countries, rising incomes are expected to result in greater demand for public transport solutions.

A.3.6 Siemens Healthineers

Siemens as majority shareholder holds 85% of the shares of the publicly listed **Siemens Healthineers** AG, Germany (Siemens Healthineers). Siemens Healthineers is a global provider of technology to the healthcare industry. It provides medical technology and software solutions as well as clinical consulting services, supported by an extensive set of training and service offerings. In its imaging business, the most important products are equipment for magnetic resonance, computed tomography, X-ray systems, molecular imaging and ultrasound. Its diagnostics business offers in-vitro diagnostic products and services to healthcare providers in laboratory, molecular and point-of-care diagnostics. The products in its advanced therapies business facilitate image-guided minimally invasive treatments, in areas such as cardiology, interventional radiology, surgery and radiation oncology. This comprehensive portfolio supports customers along the care continuum, from prevention and early detection to diagnosis, treatment and follow-up care. Customers range from public and private healthcare providers to pharmaceutical companies and clinical research institutes. Competition in the imaging 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 internationally across market segments, but that also face competition from 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 as 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, including reimbursement, and on geopolitical developments, including regulatory topics, around the world.

The addressable markets of Siemens Healthineers are shaped by several major **trends**. The first is demographic, in particular the growing and aging global population. This development poses major challenges for global healthcare systems and, at the same time, offers opportunities as the demand for cost-efficient healthcare solutions continues to intensify. The second trend is the economic development in emerging countries, which opens up improved access to healthcare for many people. As the middle class continues to grow, 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 as well as environmental and lifestyle-related changes. This development creates additional pressure on health systems and leads to increased costs to address these challenges. The fourth global trend, the transformation of healthcare providers, is resulting from a combination of societal and market forces. These 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 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 and rapid scientific progress. As a result, 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. Driven by the need of healthcare systems worldwide to deliver better outcomes at lower costs, regulatory schemes around the world increasingly seek to introduce new remuneration models for healthcare services, leading to a shift of healthcare reimbursement systems away from a pay-per-procedure model towards an outcome-based model. Most developed countries are currently considering regulatory changes within their healthcare systems.

R&D activities at Siemens Healthineers are ultimately geared towards delivering innovative, sustainable solutions to its customers while safeguarding its competitiveness. Particularly in the field of artificial intelligence, it has further expanded its activities and has more than 40 products and applications on the market that further improve its customers' productivity, while enabling clinical decisions to be more precise and tailored to the individual patient. Artificial intelligence-based technology is also used in sample handling and classification in its Atellica Solution laboratory system. As part of growing its portfolio of digital services, the systematic expansion of the cloud-based Teamplay collaboration platform is a major step to support customers in their transition to outcome-focused care. In the future, it will cover clinical, operational and financial activities and functions in the healthcare field, and connect healthcare providers and solution providers as well as bringing together their data, applications and services. In addition to continually updating its portfolio, Siemens Healthineers also improves existing products and solutions. 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 China and the U.S., and for additions to intangible assets, including capitalized development expenses for further products related to Atellica Solution.

	Fiscal year		% Change	
(in millions of €)	2019	2018	Actual	Comp.
Orders	**15,853**	14,506	9%	7%
Revenue	**14,517**	13,425	8%	6%
Adjusted EBITA	**2,461**	2,221	11%	
Adjusted EBITA margin	**17.0%**	16.5%		

Orders and **revenue** showed strong and similar development in fiscal 2019: clear growth; increases in all businesses led by the imaging business, and growth in all three reporting regions, notably including in China and in the U.S. which benefited from positive currency translation effects. **Adjusted EBITA** was clearly up compared to fiscal 2018, with increases in the imaging and advance therapies businesses. The diagnostics business recorded lower Adjusted EBITA year-over-year due mainly to increases in costs related to its Atellica Solution platform. Severance charges were €57 million in fiscal 2019 and €96 million in fiscal 2018. The order backlog for Siemens Healthineers was €18 billion at the end of the fiscal year, of which €6 billion are expected to be converted into revenue in fiscal 2020.

While demand in the **markets** served by Siemens Healthineers continued to grow in fiscal 2019, these markets also showed price pressure on new purchases and increased utilization rates for installed systems. All major served markets were in a healthy state, which contributed to a slightly higher market growth in Europe, C.I.S., Africa, Middle East and the Americas, most notably in the imaging and advanced therapies markets. The markets in Asia, Australia grew moderately. Markets in the U.S. showed slight growth in the imaging and clear growth in the advanced therapies business, with continued moderate market growth in diagnostics. Still, the U.S. market environment remained challenging as pressure on reimbursement systems and the focus on more extended utilization of equipment at customers' sites persist. Government initiatives and programs, together with a growing private market segment contributed to the re-stabilization and growth of markets in China. For the healthcare industry as a whole, the trend towards consolidation continued in fiscal 2019, leading to higher utilization rates at customers' sites, which are counterbalancing procedure volume growth in developed markets. Competition among the leading healthcare companies remained at a high level. For fiscal 2020, Siemens Healthineers expects the imaging and advanced therapies equipment markets to stay on a moderate growth path, while the diagnostics market is expected to grow clearly. Siemens Healthineers' markets will continue to benefit from the long-term trends mentioned above, but are restricted by public spending constraints and by consolidation among healthcare providers. On a geographic basis, Siemens Healthineers expects markets in the region Asia, Australia to be the major growth driver. For China, Siemens Healthineers expects continuing strong growth due to rising government spending on healthcare, promotion of the private segment and wider access to healthcare services nationwide, pronounced effects of an aging population, and a growing incidence of chronic diseases. Growth in the U.S. is expected to be held back by continued pressure to increase utilization of existing equipment, reduced reimbursement rates and uncertainty about policies. For Europe, Siemens Healthineers expects slight growth, with a likely increased emphasis on equipment replacement and business with large customers such as hospital chains.

A.3.7 Siemens Gamesa Renewable Energy

Siemens as majority shareholder holds 59% of the shares of the publicly listed **Siemens Gamesa Renewable Energy**, S.A., Spain **(SGRE)**. SGRE designs, develops and manufactures wind turbines for various wind conditions, and is active in the development, construction and sale of wind farms. In addition, SGRE provides services for the management, operation and maintenance of wind farms. Its primary customers are large utilities and independent power producers. The competitive situation in wind power differs in the two major market segments. In the markets for onshore wind farms, competition is rather dispersed without any one company holding a dominant share of the market, while markets for offshore wind farms continue to be served by a few experienced players. Consolidation is moving forward in both on- and offshore markets. The key drivers of consolidation are scale as well as technology and market access challenges. SGRE's revenue mix may vary from reporting period to reporting period depending on the mix of onshore and offshore projects in the respective periods.

The share of renewable energy in the global energy mix is widely expected to increase, but the **trend** toward evaluating competing power sources using life-cycle costs continues to put pressure on the prices offered by wind power providers. In addition, price pressure arises from the introduction of auctions as a mechanism for allocating renewable energy capacity or production in electricity markets and the resulting increase in competition among wind turbine manufacturers. To address this trend, SGRE focuses on improving its supply chain and significantly decreasing costs by optimizing production within its manufacturing footprint, including the streamlining of its product portfolio. A higher share of renewable energy in electrical grids also increases the demand for predictability of the energy supply and increased capability for integrating it into the overall energy mix. Market development has in the past depended strongly on energy policy, including tax incentives in the U.S. and regulatory frameworks in the European Union. However, with continued technological progress and cost reduction, dependency on subsidy schemes is expected to continue to decrease.

SGRE's **R&D** efforts focus on developing the next generation of technology that leads to improved and more cost-effective products, solutions and services, including becoming a leading company in mastering the balance between power generation and power demand for the renewable sector. To accomplish that goal, SGRE is developing cost-effective energy storage solutions, and solutions for hybridization that are designed to help utility customers optimize utilization of renewable energy and thereby increase profitability. Another focus area is digitalization: advances in this field are expected to enable more intelligent monitoring and analysis of turbine conditions as well as smart diagnostic services. The investments of SGRE in fiscal 2019 focused on production equipment for new blade types and capacity expansion in its factories. Other investments were related to logistic and construction tools in the onshore business, and special equipment for testing and installation of newly launched products in the offshore business.

(in millions of €)	Fiscal year 2019	2018	% Change Actual	Comp.
Orders	**12,749**	11,875	7%	7%
Revenue	**10,227**	9,122	12%	12%
Adjusted EBITA	**482**	483	0%	
Adjusted EBITA margin	**4.7%**	5.3%		

Order intake increased in all businesses year-over-year due to a higher volume from large orders. Sharp order growth in Asia, Australia included two large orders for offshore wind-farms including service in Taiwan totaling €2.3 billion. SGRE also recorded sharply higher orders in the Americas region, driven by several large orders in the onshore business mainly in the U.S. In contrast, orders came in substantially lower in the region Europe, C.I.S., Africa, Middle East which in the prior year had included an order for an offshore wind-farm, including service, in the U.K. worth €1.3 billion. Revenue was up significantly year-over-year, with substantial growth in the offshore and service businesses and clear growth in the onshore business. On a geographic basis, revenue rose substantially in Europe, C.I.S., Africa, Middle East, while it declined clearly in the other two reporting regions. Adjusted EBITA was on the prior-year level as positive effects from productivity improvements and higher revenue were offset by price declines, a less favorable project mix and higher expenses for integration costs and capacity adjustments including severance. Severance charges were €32 million in fiscal 2019 and €77 million in fiscal 2018. SGRE's order backlog was €26 billion at end of the fiscal year, of which €9 billion are expected to be converted into revenue in fiscal 2020.

These results were achieved in markets that grew substantially in fiscal 2019 in terms of installed capacity due to higher demand in both the onshore and offshore markets, with the latter growing faster. Market volume in euros was subject to adverse price development. On a regional basis, growth in the onshore business was again driven primarily by China where the largest national wind market in the world for onshore generation remains largely closed to foreign manufacturers, and secondarily by the U.S. In contrast, the onshore market in Germany declined significantly. In the offshore market, growth was driven by the U.K. and China. SGRE expects global onshore wind installations to grow clearly in fiscal 2020, driven by growth in the U.S. and India. Global offshore wind power markets are expected to grow in fiscal 2020. The driver of this growth is China which offsets a slight decline in European markets. Market volume in euros is expected to be subject to adverse price development in the offshore business, reflecting the trends discussed above, and currency translation effects.

A.3.8 Financial Services

Financial Services supports its customers' investments with leasing solutions and equipment, project and structured financing 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, Financial Services provides financial solutions for Siemens customers as well as other companies.

(in millions of €)	Fiscal year 2019	2018
Earnings before taxes (EBT)	**632**	633
ROE (after taxes)	**19.1%**	19.7%
(in millions of €)	Sep 30, 2019	2018
Total assets	**29,901**	27,628

Financial Services again delivered strong earnings before taxes. While the equity business recorded higher results, the result from the debt business declined, amongst others due to higher credit hits. Total assets increased along with a growth in debt business and in part due to positive currency translation effects.

Financial Services is geared to Siemens' industrial businesses and its markets. As such Financial Services is influenced by the business development of the markets served by our industrial businesses, among other factors. Financial Services will continue to focus its business scope on areas of intense domain know-how.

A.3.9 Portfolio Companies

Portfolio Companies was formed in fiscal 2019 and consists largely of businesses formerly included in the Divisions Process Industries and Drives (mechanical drives, process solutions, large drives applications) and Energy Management (subsea), along with certain other activities that were formerly reported in Centrally managed portfolio activities (Siemens Logistics business and the at-equity investments: Valeo Siemens eAutomotive GmbH, Primetals Technologies Limited, Ethos Energy Group Limited and

Voith Hydro Holding GmbH & Co. KG). Unrealized potential within these businesses, which are managed separately, requires adjustment in their approach with defined measures including internal re-organization, digitalization, cost improvements, and optimizing procurement, production and service activities. After achieving certain threshold performance targets, businesses may transfer to Siemens industrial businesses, combine with external business from the same industry or enter into an external private equity partnership.

Portfolio Companies consists of a broad range of businesses, which at the end of fiscal 2019 mainly included the following fully consolidated units: application specific solutions (process solutions), electric motors, converters and generators (large drive applications), gear units and couplings (mechanical drives) and sorting technology and solutions for mail, parcel, baggage and cargo handling (Siemens Logistics). Within the industries served by fully consolidated units, customer demand generally shows a delayed response to changes in the overall economic environment. The results of fully consolidated units 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. The broad range of fully consolidated units and their heterogenous industrial customer base is reflected in its sales and marketing channels. While the mechanical drives business and Siemens Logistics require a dedicated sales approach based on in-depth understanding of specific industries and customer requirements, the large drives applications business and the process solutions business leverage the shared regional sales organization employed by the Siemens Operating Companies.

(in millions of €)	2019	Fiscal year 2018	Actual	% Change Comp.
Orders	**5,806**	5,569	4%	3%
Revenue	**5,526**	4,930	12%	11%
Adjusted EBITA	**(71)**	(305)	77%	
Adjusted EBITA margin	**(1.3)%**	(6.2)%		

Supported by a recovery in commodity-related markets, **orders** and **revenue** showed broad-based growth year-over-year with strongest increases in the mechanical drives business. Overall, Portfolio Companies businesses made good progress in achieving their targets. **Adjusted EBITA** improved in all fully consolidated units and turned positive in total, mainly driven by the large drives applications business. The result from equity investments in total also improved slightly, though it was negative in both periods under review. Severance charges decreased to €14 million, from €86 million in fiscal 2018. Portfolio Companies' order backlog was €5 billion at the end of the fiscal year, of which €3 billion are expected to be converted into revenue in fiscal 2020. Regarding Portfolio Companies' at-equity investments, volatile results are expected in coming quarters.

Markets for Portfolio Companies are generally impacted by rising uncertainties regarding geopolitical and economic developments, which weaken investment sentiment. Although the broad range of businesses are operating in diverse markets, overall, moderate growth is expected in the coming years for the main markets served by the Portfolio Companies.

Beginning with fiscal 2020, the equity investments Ethos Energy Group Limited and Voith Hydro Holding GmbH & Co. KG, the subsea business, and the majority of the process solutions business will be transferred to the Operating Company Gas and Power. If this organizational structure had already existed in fiscal 2019, Portfolio Companies would have posted orders of €4.746 billion, revenue of €4.558 billion and Adjusted EBITA of €(115) million.

Mitsubishi-Hitachi Metals Machinery (MHMM) and Siemens AG reached an agreement in September 2019, that MHMM will acquire Siemens' stake in Primetals Technologies. Closing of the transaction is subject to customary conditions and is expected by the beginning of calendar 2020.

A.3.10 Reconciliation to Consolidated Financial Statements

Profit

(in millions of €)	2019	Fiscal year 2018
Real Estate Services	**145**	140
Corporate items	**(562)**	631
Centrally carried pension expense	**(264)**	(423)
Amortization of intangible assets acquired in business combinations	**(1,133)**	(1,164)
Eliminations, Corporate Treasury and other reconciling items	**(215)**	(318)
Reconciliation to Consolidated Financial Statements	**(2,028)**	(1,135)

The negative swing in **Corporate items** was mainly due to large positive effects in fiscal 2018 – the gain of €900 million resulting from the transfer of Siemens' shares in Atos SE to Siemens Pension-Trust e.V. and the gain of €655 million from the sale of OSRAM Licht AG shares. These effects substantially outweighed a positive result in fiscal 2019 from the measurement of a major asset retirement obligation, which was previously reported in Centrally managed portfolio activities. Severance charges within Corporate items were €99 million (€159 million in fiscal 2018).

A.4 Results of operations

A.4.1 Orders and revenue by region

Positive currency translation effects added one percentage point each to order and revenue growth; portfolio transactions had only minimal effects on volume growth year-over-year. The resulting ratio of orders to revenue (book-to-bill) for Siemens in fiscal 2019 was a strong 1.13, again well above 1. The order backlog was €146 billion as of September 30, 2019, a new high.

Orders (location of customer)

	Fiscal year		% Change	
(in millions of €)	2019	2018	Actual	Comp.
Europe, C.I.S., Africa, Middle East	**46,086**	46,495	(1)%	(1)%
therein: Germany	*12,021*	*11,254*	*7%*	*7%*
Americas	**29,812**	25,060	19%	14%
therein: U.S.	*21,166*	*18,106*	*17%*	*10%*
Asia, Australia	**22,101**	19,742	12%	11%
therein: China	*8,989*	*8,459*	*6%*	*6%*
Siemens	**97,999**	**91,296**	**7%**	**6%**
therein: emerging markets[1]	*31,720*	*30,564*	*4%*	*4%*

1 As defined by the International Monetary Fund.

Orders related to external customers were clearly up year-over-year on growth in nearly all industrial businesses, led by Mobility. Gas and Power, Siemens Healthineers, Smart Infrastructure and SGRE all posted clear growth, while orders declined slightly in Digital Industries. Volume from large orders for Industrial Businesses overall was up substantially due to a sharp increase at Mobility, but also due to a significant increase in SGRE and Gas and Power. Growth in emerging markets was driven by orders from China, and from Russia where Mobility won a €1.2 billion contract for high-speed trains including maintenance.

Order development was mixed in the **Europe, C.I.S., Africa, Middle East** region. The majority of industrial businesses posted order growth, led by double-digit growth in Mobility, which won several large contracts in the year under review. This increase was more than offset by a substantial decline in SGRE due mainly to a lower volume from large orders and a decrease in Digital Industries. In contrast to the region overall, orders were up clearly in Germany, driven by sharp growth in Gas and Power which recorded, among others, a large high voltage direct current (HVDC) order. Mobility recorded a significant increase in order intake in Germany, while the other industrial businesses posted declines.

Orders in the **Americas** region were up significantly year-over-year, benefiting from positive currency translation effects. Double-digit growth in nearly all industrial businesses was led by SGRE and Mobility with particularly sharp increases. The pattern of order development in the U.S. was largely the same as in the Americas region.

In the **Asia, Australia** region, orders also rose significantly due to growth in nearly all industrial businesses. The primary growth driver was SGRE, which recorded a sharply higher volume from large orders, including two large orders for offshore wind-farms including service in Taiwan totaling €2.3 billion. Orders for Mobility dropped substantially compared to the prior year. Clear growth in China included a majority of industrial businesses.

Revenue (location of customer)

	Fiscal year		% Change	
(in millions of €)	2019	2018	Actual	Comp.
Europe, C.I.S., Africa, Middle East	**44,360**	42,782	4%	4%
therein: Germany	*12,282*	*11,729*	*5%*	*4%*
Americas	**23,796**	22,115	8%	3%
therein: U.S.	*17,993*	*16,012*	*12%*	*6%*
Asia, Australia	**18,693**	18,147	3%	2%
therein: China	*8,405*	*8,102*	*4%*	*3%*
Siemens	**86,849**	**83,044**	**5%**	**3%**
therein: emerging markets[1]	*27,607*	*28,272*	*(2)%*	*(2)%*

1 As defined by the International Monetary Fund.

Revenue related to external customers went up moderately year-over-year on growth in nearly all industrial businesses. SGRE and Siemens Healthineers posted the highest growth rates, while revenue at Gas and Power declined moderately in a difficult market environment. The revenue decline in emerging markets was due mainly to lower revenue in Egypt, where in fiscal 2018 Gas and Power recorded sharply higher revenue from large orders.

Revenue in **Europe, C.I.S., Africa, Middle East** increased moderately on growth in a majority of industrial businesses, driven by substantial growth at SGRE. Gas and Power posted a clear decline in a difficult market environment. In Germany, revenue was up moderately with significant growth in Mobility and Gas and Power, partly offset by a decline in SGRE.

In the **Americas**, revenue came in clearly higher year-over-year, benefiting from positive currency translation effects. Siemens Healthineers, Smart Infrastructure and Gas and Power recorded the largest increases, while SGRE posted clearly lower revenue in the region. In the U.S., all industrial businesses posted higher revenues year-over-year, with SGRE and Smart Infrastructure recording the strongest growth rates.

Revenue in **Asia, Australia** rose moderately year-over-year on growth in the majority of industrial businesses, led by Siemens Healthineers and Digital Industries. Gas and Power and SGRE posted lower revenue year-over-year. In China, revenue was also up in the majority of industrial businesses, led by Siemens Healthineers. In contrast, SGRE posted substantially lower revenue year-over-year in that country.

A.4.2 Income

(in millions of €, earnings per share in €)	Fiscal year 2019	2018	% Change
Digital Industries	**2,880**	2,898	(1)%
Smart Infrastructure	**1,500**	1,574	(5)%
Gas and Power	**679**	722	(6)%
Mobility	**983**	958	3%
Siemens Healthineers	**2,461**	2,221	11%
Siemens Gamesa Renewable Energy	**482**	483	0%
Industrial Businesses	**8,986**	**8,857**	**1%**
Adjusted EBITA margin Industrial Businesses	***10.9%***	*11.1%*	
Financial Services	**632**	633	0%
Portfolio Companies	**(71)**	(305)	77%
Reconciliation to Consolidated Financial Statements	**(2,028)**	(1,135)	(79)%
Income from continuing operations before income taxes	**7,518**	**8,050**	**(7)%**
Income tax expenses	**(1,872)**	(2,054)	9%
Income from continuing operations	**5,646**	**5,996**	**(6)%**
Income from discontinued operations, net of income taxes	**3**	124	(98)%
Net income	**5,648**	**6,120**	**(8)%**
Basic earnings per share	**6.41**	7.12	(10)%
ROCE	**11.1%**	12.6%	

As a result of the development described for the segments, **Income from continuing operations before income taxes** declined 7%. Severance charges for continuing operations were €619 million, of which €492 million were in Industrial Businesses. Accordingly, Adjusted EBITA margin Industrial Businesses excluding severance charges was 11.5% in fiscal 2019. In fiscal 2018, severance charges for continuing operations were €923 million, of which €669 million were in Industrial Businesses.

The tax rate of 25% for fiscal 2019 was below the tax rate of 26% for the prior year, benefiting mainly from the reversal of income tax provisions outside Germany. As a result, **Income from continuing operations** declined 6%.

Income from discontinued operations, net of income taxes in the prior year included positive effects from the release of a provision related to former Communications activities.

The decline in **basic earnings per share** reflects the decrease of Net income attributable to Shareholders of Siemens AG, which was €5,174 million in fiscal 2019 compared to €5,807 million in fiscal 2018, partially offset by a lower number of weighted average shares outstanding. Basic earnings per share excluding severance charges was €6.93.

As expected, **ROCE** at 11.1% was below the target range set in our Siemens Financial Framework, reflecting in particular the effects from portfolio transactions in recent years, including the acquisitions of Mentor and Mendix at Digital Industries and the merger of Siemens' wind power business with Gamesa Corporación Tecnológica, S.A. that created SGRE. The decline year-over-year was due both to lower income before interest after tax and to higher average capital employed.

A.4.3 Research and development

In fiscal 2019, we reported research and development (R&D) expenses of €5.7 billion, compared to €5.6 billion in fiscal 2018. The resulting R&D intensity, defined as the ratio of R&D expenses and revenue, was 6.5% (fiscal 2018: 6.7%). Additions to capitalized development expenses amounted to €0.4 billion in fiscal 2019, compared to €0.3 billion in fiscal 2018. As of September 30, 2019, Siemens held approximately 68,300 granted patents worldwide in its continuing operations. As of September 30, 2018, we held approximately 65,000 granted patents. On average, we had 45,100 R&D employees in fiscal 2019.

Our research and development activities are ultimately geared to developing innovative, sustainable solutions for our customers – and the Siemens businesses – while also strengthening our own competitiveness. Joint implementation by the operating units and Corporate 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. As in fiscal 2018 the following technologies were the focus in fiscal 2019: additive manufacturing, autonomous robotics, blockchain applications, connected (e-)mobility, connectivity and edge devices, cyber security, data analytics and artificial intelligence, distributed energy systems, energy storage, future of automation, materials, power electronics, simulation and digital twins, and software systems and processes.

We further develop technologies through our "open innovation" concept. We are working closely with scholars from leading universities and research institutions, not only under bilateral cooperation agreements but also in publicly funded collective projects. Our focus here is on our strategic research partners, and especially the eight Centers of Knowledge Interchange that we maintain at leading universities 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 fore-knowledge enables Siemens and our customers to grow and thrive in the age of digitalization.

A.5 Net assets position

(in millions of €)	Sep 30, 2019	2018	% Change
Cash and cash equivalents	12,391	11,066	12%
Trade and other receivables	18,894	18,455	2%
Other current financial assets	10,669	9,427	13%
Contract assets	10,309	8,912	16%
Inventories	14,806	13,885	7%
Current income tax assets	1,103	1,010	9%
Other current assets	1,960	1,707	15%
Assets classified as held for disposal	238	94	154%
Total current assets	**70,370**	**64,556**	**9%**
Goodwill	30,160	28,344	6%
Other intangible assets	9,800	10,131	(3)%
Property, plant and equipment	12,183	11,381	7%
Investments accounted for using the equity method	2,244	2,579	(13)%
Other financial assets	19,843	17,774	12%
Deferred tax assets	3,174	2,341	36%
Other assets	2,475	1,810	37%
Total non-current assets	**79,878**	**74,359**	**7%**
Total assets	**150,248**	**138,915**	**8%**

Our total assets at the end of fiscal 2019 were influenced by positive currency translation effects of €4.0 billion (mainly goodwill), primarily involving the U.S. dollar.

The increase in other current financial assets was driven by higher loans receivable at SFS, which were mainly due to new business and reclassification of non-current loans receivable from other financial assets. While higher loans receivable and receivables from finance leases from new business at SFS contributed also to growth in other financial assets, a large extent of the overall increase resulted from increased fair values of derivative financial instruments.

Inventories increased in several industrial businesses, with the build-up most evident at SGRE, Mobility and Siemens Healthineers.

Assets classified as held for disposal increased mainly due to reclassification of two investments from investments accounted for using the equity method.

The increase in goodwill included the acquisition of Mendix.

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

The increase in other assets was driven mainly by higher net defined benefit assets from actuarial gains.

A.6 Financial position

A.6.1 Capital structure

(in millions of €)	2019	Sep 30, 2018	% Change
Short-term debt and current maturities of long-term debt	**6,034**	5,057	19%
Trade payables	**11,409**	10,716	6%
Other current financial liabilities	**1,743**	1,485	17%
Contract liabilities	**16,452**	14,464	14%
Current provisions	**3,682**	3,931	(6)%
Current income tax liabilities	**2,378**	3,102	(23)%
Other current liabilities	**9,023**	9,118	(1)%
Liabilities associated with assets classified as held for disposal	**2**	1	54%
Total current liabilities	**50,723**	**47,874**	**6%**
Long-term debt	**30,414**	27,120	12%
Provisions for pensions and similar obligations	**9,896**	7,684	29%
Deferred tax liabilities	**1,305**	1,092	19%
Provisions	**3,714**	4,216	(12)%
Other financial liabilities	**986**	685	44%
Other liabilities	**2,226**	2,198	1%
Total non-current liabilities	**48,541**	**42,995**	**13%**
Total liabilities	**99,265**	**90,869**	**9%**
Debt ratio	***66%***	*65%*	
Total equity attributable to shareholders of Siemens AG	**48,125**	**45,474**	**6%**
Equity ratio	***34%***	*35%*	
Non-controlling interests	**2,858**	2,573	11%
Total liabilities and equity	**150,248**	**138,915**	**8%**

The increase in **short-term debt and current maturities of long-term debt** was due mainly to reclassifications of long-term euro and U.S. dollar instruments totaling €3.9 billion from long-term debt. This was partly offset by €3.3 billion resulting from the repayment of U.S. dollar instruments.

The decrease in **current income tax liabilities** was driven mainly by the reversal of income tax provisions outside Germany and tax payments in the context of the carve-out activities related to Siemens Healthineers.

Long-term debt increased due primarily to the issuance of euro instruments totaling €6.5 billion and currency translation effects for bonds issued in the U.S. dollar. This was partly offset by the above-mentioned reclassifications of euro and U.S. dollar instruments.

The increase in **provisions for pensions and similar obligations** was due mainly to a lower discount rate. This effect was partly offset by a positive return on plan assets, among other factors.

The main factors for the increase in **total equity attributable to shareholders of Siemens AG** were €5.2 billion in net income attributable to shareholders of Siemens AG; the re-issuance of treasury shares of €1.6 billion; and positive other comprehensive income, net of income taxes of €0.4 billion, resulting mainly from positive currency translation effects of €1.8 billion, partly offset by negative effects from remeasurements of defined benefit plans of €1.1 billion. This increase was partly offset by dividend payments of €3.1 billion (for fiscal 2018) and the repurchase of 13,532,557 treasury shares at an average cost per share of €99.78, totaling €1.4 billion (including incidental transaction charges).

Capital structure ratio

Our capital structure ratio as of September 30, 2019 increased to 0.6 from 0.4 a year earlier, both results being in line with the target established in our Siemens Financial Framework. The change was due primarily to the above-mentioned increases in long-term debt and in provisions for pensions and similar obligations.

Debt and credit facilities

As of September 30, 2019, we recorded, in total, €33.2 billion in notes and bonds (maturing until 2047), €2.3 billion in loans from banks (maturing until 2037), €0.9 billion in other financial indebtedness (maturing until 2029) and €0.1 billion in obligations under finance leases. Notes and bonds were issued mainly in the U.S. dollar and euro, and to a lower extent in the British pound.

We have credit facilities totaling €10.0 billion, thereof €9.5 billion unused as of September 30, 2019.

For further information about our debt see → NOTE 16 in B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS. For further information about the functions and objectives of our financial risk management see → NOTE 25 in B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.

Off-balance-sheet commitments

As of September 30, 2019, the undiscounted amount of maximum potential future payments related primarily to credit guarantees and guarantees of third-party performance amounted to €3.1 billion.

In addition to these commitments, we issued other guarantees. To the extent future claims are not considered remote, maximum future payments from these commitments amounted to €0.4 billion.

Future payment obligations under non-cancellable operating leases amounted to €3.5 billion.

Irrevocable loan commitments amounted to €3.1 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.

Share buyback

Out of the above-mentioned treasury shares repurchased in fiscal 2019, 3,343,479 treasury shares were repurchased under the share buyback initiated in November 2015, which was thus completed with a total volume of €3.0 billion. The amount of 10,189,078 treasury shares were repurchased under the share buyback announced in November 2018 of up to €3.0 billion in volume until November 15, 2021 at the latest.

A.6.2 Cash flows

(in millions of €)	Fiscal year 2019
Cash flows from operating activities	
Net income	5,648
Change in operating net working capital	636
Other reconciling items to cash flows from operating activities – continuing operations	2,198
Cash flows from operating activities – continuing operations	**8,482**
Cash flows from operating activities – discontinued operations	(27)
Cash flows from operating activities – continuing and discontinued operations	**8,456**
Cash flows from investing activities	
Additions to intangible assets and property, plant and equipment	(2,610)
Acquisitions of businesses, net of cash acquired	(958)
Purchase of investments and financial assets for investment purposes	(1,971)
Change in receivables from financing activities of SFS	(1,161)
Other disposals of assets	1,689
Cash flows from investing activities – continuing operations	**(5,012)**
Cash flows from investing activities – discontinued operations	1
Cash flows from investing activities – continuing and discontinued operations	**(5,011)**
Cash flows from financing activities	
Purchase of treasury shares	(1,407)
Re-issuance of treasury shares and other transactions with owners	1,044
Issuance of long-term debt	6,471
Repayment of long-term debt (including current maturities of long-term debt)	(3,205)
Change in short-term debt and other financing activities	(753)
Interest paid	(1,123)
Dividends paid to shareholders of Siemens AG	(3,060)
Dividends attributable to non-controlling interests	(246)
Cash flows from financing activities – continuing operations	**(2,277)**
Cash flows from financing activities – discontinued operations	–
Cash flows from financing activities – continuing and discontinued operations	**(2,277)**

The main contributors to **Cash flows from operating activities** were Digital Industries, followed by Siemens Healthineers and Smart Infrastructure, in line with their contributions to Adjusted EBITA. Regarding cash inflows associated with operating net working capital, a decline in operating net working capital was driven mainly by an increase in contract liabilities. This factor was partly offset by cash outflows related to a buildup of contract assets and inventories, most evidently at SGRE.

Cash outflows from **acquisitions of businesses, net of cash acquired**, mainly included payments of €0.5 billion related to the acquisition of Mendix.

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

The **change in receivables from financing activities of SFS** resulted from growth in SFS' debt business.

Cash inflows from **other disposals of assets** mainly included disposals of above-mentioned eligible collateral and to a minor extent proceeds from real estate disposals, from the sale of businesses or from other investments.

Cash inflows from the re-issuance of treasury shares and other transactions with owners mainly included €1.1 billion from the exercise of warrants in connection with US$1.5 billion bonds with warrant units.

Cash outflows from the change in short-term debt and other financing activities mainly included repayments of loans from banks.

We report Free cash flow as a supplemental liquidity measure:

Free cash flow

			Fiscal year 2019
(in millions of €)	Continuing operations	Discontinued operations	Continuing and discontinued operations
Cash flows from operating activities	8,482	(27)	8,456
Additions to intangible assets and property, plant and equipment	(2,610)	–	(2,610)
Free cash flow	**5,872**	**(27)**	**5,845**

The Free cash flow for the Industrial Businesses amounted to €8,000 millions, resulting in a cash conversation rate of 0.89.

Beginning with fiscal 2020, Siemens adopts IFRS 16, Leases, applying the modified retrospective approach as described in more detail in → NOTE 2 in B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS. As a result, the shift of lease payments from cash flows from operating activities to cash flows from financing activities will have a positive effect on Free cash flow.

With our ability to generate positive operating cash flows, our total liquidity (defined as cash and cash equivalents plus current interest-bearing debt securities) of €13.7 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.

Investing activities

Additions to intangible assets and property, plant and equipment from continuing operations totaled €2.6 billion in fiscal 2019. Within the industrial Businesses, ongoing investments related mainly to technological innovations; maintaining and extending our capacities for designing, manufacturing and marketing new solutions including strategic localization; improving productivity; and replacements of fixed assets. These investments amounted to €2.1 billion in fiscal 2019. The remaining portion related mainly to Real Estate Services, including significant amounts for projects such as new office buildings in Germany. Real Estate Services is responsible for uniform and comprehensive management of Company real estate worldwide and supports the Industrial Businesses and corporate activities with customer-specific real estate solutions; excluded are Siemens Healthineers, SGRE and the carved-out real estate of Mobility.

With regard to capital expenditures for continuing operations, we expect a significant increase in fiscal 2020. In the coming years, up to €0.6 billion are to be invested in "Siemensstadt 2.0". This new project 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 the Siemens Campus Erlangen. In addition, we plan to invest significant amounts in coming years in attractive innovation fields through Siemens' global venture capital unit Next47.

A.7 Overall assessment of the economic position

In fiscal 2019, as part of our new "Vision 2020+" company strategy, we set Siemens' future course by introducing a new organizational structure consisting of three Operating Companies – Digital Industries, Smart Infrastructure and Gas and Power – and three Strategic Companies: Mobility, Siemens Healthineers and SGRE. With this new setup, we are deepening our ownership culture and giving our businesses considerably more entrepreneurial freedom and responsibility under the strong Siemens brand. "Vision 2020+" is primarily a strategic growth concept aimed at further improving the profitability of Siemens' Companies through innovation and efficiency gains. As part of "Vision 2020+," we have set ourselves even more ambitious targets for revenue growth and the Adjusted EBITA margin ranges of our Companies. With "Vision 2020+," we also intend to further strengthen our portfolio through investments in new growth fields such as IoT integration services, distributed energy management and solutions for electric mobility infrastructure. As part of this strategy, we made several acquisitions during the fiscal year, the most important being Mendix, a pioneer and leader in cloud-native low-code application development. The acquisition of Mendix and our entry into the IoT integration services business is enabling us to further expand our market leadership in industrial digitalization. As a next step of "Vision 2020+," we announced our plan to carve out Gas and Power and to publicly list the business under the name Siemens Energy by the end of fiscal 2020, to give it even more independence and entrepreneurial freedom in a rapidly changing market environment. As part of this transaction, Siemens plans to contribute its stake in SGRE to Siemens Energy. As a result, the next generation of Siemens will be made up of three Siemens companies: the industrial Siemens, comprising Digital Industries, Smart Infrastructure and Mobility; Siemens Healthineers, which we successfully listed publicly in fiscal 2018; and Siemens Energy.

Despite increasing macroeconomic headwinds in the course of the fiscal year, particularly for our short-cycle businesses, we again achieved strong results – also in most of our industrial businesses and in Financial Services – and reached all the targets set for our primary measures for fiscal 2019. We achieved revenue growth of 3% net of currency translation and portfolio effects. We delivered basic EPS from net income of €6.41, which included impacts from severance charges amounting to (€0.52) per share. At 11.1%, return on capital employed (ROCE) was in the double-digit range; and our capital structure ratio came in at 0.6.

Orders rose 7% year-over-year to €98.0 billion, for a book-to-bill-ratio of 1.13, thus fulfilling our expectation of a ratio above 1. Five of our six industrial businesses increased orders year-over-year. These increases were led by double-digit growth at Mobility, which again won significant contracts, such as for the new generation of trains for the London Tube and for Velaro RUS high-speed trains, including services, in Russia, and recorded its highest order intake ever. Order growth in Gas and Power was driven by the new-unit business and included significantly higher volume from large orders year-over-year. Siemens Healthineers and Smart Infrastructure achieved broad-based order growth, the former including particularly strong demand for its imaging solutions, the latter including large contract wins in its solutions and services business. Orders in Digital Industries came in slightly lower year-over-year due mainly to increasingly adverse market conditions in key manufacturing industries. Excluding currency translation and portfolio effects, orders for Siemens rose 6%.

Revenue also was higher in five of our industrial businesses and rose to €86.8 billion, up 5% year-over-year. The strongest increase came from SGRE, which posted double-digit growth, driven by its offshore and service businesses. Siemens Healthineers achieved clear revenue growth on increases in all businesses, particularly in its imaging business. Following weak order intake in prior years, revenue at Gas and Power came in moderately lower. Excluding currency translation and portfolio effects, revenue for Siemens grew 3%. For fiscal 2019, we had forecast moderate growth in revenue, net of currency translation and portfolio effects.

Adjusted EBITA Industrial Businesses rose slightly to €9.0 billion, due mainly to double-digit growth in Siemens Healthineers on the strength of its imaging and advanced therapies businesses and to a lesser extent to a moderate increase in Mobility. These increases were partly offset by declines in Gas and Power, due mainly to lower capacity utilization and price declines, and in Smart Infrastructure, due mainly to negative effects related to grid control projects at the beginning of fiscal 2019. Adjusted EBITA in Digital Industries came in close to the strong prior-year-level, despite increasing headwinds in the markets for its short-cycle businesses in the course of the fiscal year. Overall, Adjusted EBITA Industrial Businesses was burdened by severance charges of €0.5 billion, substantially lower than a year earlier. Approximately half of these severance charges were booked at Gas and Power. As planned, we further increased R&D expenses in our industrial businesses, in order to strengthen our capacity for innovation.

The Adjusted EBITA margin of our Industrial Businesses was 10.9%, down from 11.1% in fiscal 2018. Four of our six industrial businesses were within their margin range or – as in the case of Smart Infrastructure – close to it. Excluding severance charges, Adjusted EBITA margin Industrial Businesses was 11.5%, clearly in the range of 11% to 12%, which we had expected it to reach. Financial Services, which is reported outside our Industrial Businesses, concluded another strong fiscal year with a return on equity after tax of 19.1%, which was within its margin range.

The loss outside the Industrial Businesses came in substantially higher year-over-year despite a number of positive developments, including a positive effect related to the measurement of a major asset retirement obligation, a lower loss at Portfolio Companies, lower Centrally carried pension expenses and higher income from Corporate Treasury activities. However, the positive factors were substantially larger in fiscal 2018, most notably a €0.9 billion gain related to the transfer of Siemens' shares in Atos SE to Siemens Pension-Trust e.V. and a €0.7 billion gain from the sale of shares in OSRAM Licht AG.

Net income was €5.6 billion, down 8% year-over-year, and basic EPS from net income declined by €0.71 to €6.41. These declines were due mainly to the aforementioned largely tax-free portfolio gains, which contributed €1.87 per share to basic EPS from net income in fiscal 2018. Basic EPS from net income in fiscal 2019 was burdened by severance charges amounting to €0.52 per share. With basic EPS from net income excluding severance charges of €6.93, we thus met our forecast, which was to achieve basic EPS from net income excluding severance charges in the range of €6.30 to €7.00.

ROCE for fiscal 2019 was 11.1%, down from 12.6% in fiscal 2018. This decline was due to a combination of lower net income and an increase in average capital employed, with the latter being impacted by recent acquisitions, among them Mendix. We thus met our forecast, which was to achieve a double-digit result but to come in below the lower end of our long-term goal of 15% to 20%.

We evaluate our capital structure using the ratio of industrial net debt to EBITDA. For fiscal 2019, this ratio was 0.6, compared to 0.4 in fiscal 2018. We thus reached our forecast, which was to achieve a ratio of up to 1.0.

Free cash flow from continuing and discontinued operations for fiscal 2019 was €5.8 billion, level with the prior year.

We intend to continue providing an attractive return to shareholders. The Siemens Managing Board, in agreement with the Supervisory Board, proposes a dividend of €3.90 per share, up from €3.80 a year earlier.

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

A.8.1 Report on expected developments

A.8.1.1 WORLDWIDE ECONOMY

The outlook for the world economy in fiscal 2020 was subdued at the outset of the fiscal year. Global GDP is projected to expand by 2.5% in calendar 2020, the lowest growth rate since the global financial crisis in 2008/09. Fixed investments should grow by 2.9%, level with 2019.

The main strains on the global economy are expected to be the continued U.S.-China trade conflict and remaining uncertainties from Brexit. Yet fears of a global recession, fueled in part by yield curve inversions in the U.S. in calendar 2019, seem overdone. In most countries domestic demand should remain sound with unemployment on a low level, inflation modest and wages increasing while monetary policy has again taken a more supportive stance.

Despite some moderation, the U.S. economy is expected to be solid and a main pillar of global growth, with GDP expanding 2% supported by strong domestic demand, low unemployment and increasing disposable incomes. China's economy is expected to decelerate markedly, with GDP growth going down from 6.2% in calendar 2019 to 5.7% in calendar 2020. The room for monetary easing is constrained by high debt levels in the economy. GDP growth in Europe is expected to further slow also, to 1.0% in calendar 2020, after 1.2% in calendar 2019. The industrial recession in Europe is expected to end during calendar 2020.

GDP in advanced countries should increase by 1.4% in calendar 2020, after 1.6% in calendar 2019, and for emerging countries by 4.2% in calendar 2020, after 4.1% in calendar 2019, assuming that risk factors (e.g. further escalation of the trade conflict or Brexit, financial crisis in emerging markets or in Eurozone countries, geopolitical conflicts) do not materialize and the industrial recession does not spill over to the rest of the economy.

The forecasts presented here for GDP and fixed investments are based on a report from IHS Markit dated October 15, 2019.

A.8.1.2 SIEMENS GROUP

We are basing our outlook for fiscal 2020 for the Siemens Group and its reportable segments on the above-mentioned expectations and assumptions regarding the overall economic situation as well as the specific market conditions we expect for our respective industrial businesses, as described in → A.3 SEGMENT INFORMATION. Overall, we expect global macroeconomic development to remain subdued in fiscal 2020, with risks particularly related to geopolitical and geoeconomic uncertainties. We assume a moderate decline in market volume for our short-cycle businesses. Also, we assume that a public listing of Siemens Energy will be finalized according to plan by the end of fiscal 2020.

This outlook excludes charges related to legal and regulatory matters.

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 2020, we have improved our natural hedge on a global basis through geographic distribution of our production facilities in the past. Nevertheless, 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 2020. Based on currency exchange rates as of the beginning of November 2019, we expect negative currency translation effects, reducing nominal order and revenue growth slightly in fiscal 2020. We anticipate even smaller currency-related impacts on the Adjusted EBITA margin for our Industrial Businesses in fiscal 2020.

Based on these assumptions and exclusions, our outlook is as follows:

Segments

Digital Industries expects fiscal 2020 comparable revenue to remain level compared to the prior year, outperforming the broader market, despite continued weakness in its most important short-cycle markets, particularly the automotive and machine building industries. Adjusted EBITA margin is expected at 17% to 18%.

Smart Infrastructure expects to achieve moderate comparable revenue growth in fiscal 2020, driven by its longer-cycle solutions and service business, even as its short-cycle industrial products business faces headwinds from a market slowdown. Adjusted EBITA margin is expected at 10% to 11%.

Economic cycles have limited impact on the markets for Mobility, which anticipates mid-single-digit comparable revenue growth in fiscal 2020 driven by its rolling stock business, which ramped up several large rail projects towards the end of fiscal 2019. Adjusted EBITA margin is expected at 10% to 11%.

Siemens Healthineers expects to achieve comparable revenue growth in a mid-single-digit range in fiscal 2020, led by its imaging and advanced therapies businesses. Adjusted EBITA margin for Healthineers excluding severance charges and acquisition-related transaction costs is expected at 17% to 18% in fiscal 2020.

While energy markets are assumed to remain challenging with some signs of stabilization, Gas and Power expects a moderate comparable revenue growth particularly including execution on its large order backlog. Adjusted EBITA margin is expected at 2% to 5%.

SGRE expects comparable revenue growth in the low-single-digit range in fiscal 2020, driven mainly by the onshore business. Adjusted EBITA is expected to be impacted by €200 million in integration and restructuring costs. As a result, Adjusted EBITA margin is expected to come in below its target margin range of 7% to 11% in fiscal 2020.

Financial Services is expected to achieve a return on equity (ROE) (after tax) in its margin range of 17% to 22% in fiscal 2020.

Revenue growth

We expect the Siemens Group to again achieve moderate growth in comparable revenue, net of currency translation and portfolio effects, and a book-to-bill ratio above 1 in fiscal 2020.

As of September 30, 2019, our order backlog totaled €146 billion, and we expect conversion from the backlog to strongly support revenue growth in fiscal 2020. From Siemens' backlog, we expect to convert approximately €50 billion of past orders into current revenue in fiscal 2020. For conversion of order backlog to revenue for our respective segments, see → A.3 SEGMENT INFORMATION.

Profitability

In addition to the above-mentioned expectations for our segments, we expect our fully-consolidated units within Portfolio Companies to be profitable, while its equity investments are expected to be volatile and to continue to generate losses. We anticipate that Real Estate Services will continue with real estate disposals depending on market conditions. Expenses for Corporate items and Centrally carried pension expenses are estimated to be in a range of approximately €1.2 billion to €1.4 billion in fiscal 2020, including significant costs associated with the carve-out of Gas and Power. Amortization of intangible assets acquired in business combinations, which was €1.1 billion in fiscal 2019, and Eliminations, Corporate Treasury and other reconciling items, which were a negative €0.2 billion in fiscal 2019, are expected to remain on similar levels, respectively, in fiscal 2020. We anticipate that net income and corresponding basic EPS will be impacted by sharply higher tax expenses due largely to the planned carve-out of Gas and Power.

As previously announced, we plan to carve out Gas and Power and to contribute our 59% stake in SGRE to create a new entity, Siemens Energy. For this entity, we plan a spin-off and public listing before the end of fiscal 2020, with Siemens Energy becoming part of discontinued operations prior to the spin-off. We expect this to result in substantial positive effects within discontinued operations, including a substantial gain at spin-off, which cannot yet be reliably quantified.

For our EPS guidance we assume these positive effects will offset carve-out costs and tax expenses related to the spin-off and Group-wide severance charges for the fiscal year. Taken together with our previously mentioned expectations for fiscal 2020, we expect this to result in basic EPS from net income in the range from €6.30 to €7.00 compared to €6.41 in fiscal 2019.

Our forecast for net income and corresponding basic EPS takes into account a number of additional factors. We expect the solid project execution to continue in fiscal 2020, and we plan to slightly increase R&D expenses year-over-year to strengthen our capacity for innovation. Severance charges, which were €619 million in fiscal 2019, are expected to be on a similar level in fiscal 2020.

Capital efficiency

Our long-term goal is to achieve a ROCE in the range of 15% to 20%. Due mainly to factors currently influencing net income and average capital employed, particularly recent acquisitions, we expect ROCE to continue to show a double-digit result in fiscal 2020 but to come in below our target range. In addition, we expect effects on ROCE related to the above-mentioned planned spin-off and public listing of Siemens Energy, which cannot yet be reliably quantified.

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 1.0, and expect to achieve this in fiscal 2020. Effects from adoption of IFRS 16, Leases, beginning with fiscal 2020, result in an increase in the ratio as described in more detail in → NOTE 2 in B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS. In addition, we expect effects on capital structure related to the above-mentioned planned spin-off and public listing of Siemens Energy, which cannot yet be reliably quantified.

A.8.1.3 OVERALL ASSESSMENT

We expect global macroeconomic development to remain subdued in fiscal 2020, with risks particularly related to geopolitical and geoeconomic uncertainties. We assume a moderate decline in market volume for our short-cycle businesses. Given the foregoing, we expect the Siemens Group to again achieve moderate growth in comparable revenue, net of currency translation and portfolio effects, and a book-to-bill ratio above 1.

As previously announced, we plan to carve out Gas and Power and to contribute our 59% stake in SGRE to create a new entity, Siemens Energy. For this entity, we plan a spin-off and public listing before the end of fiscal 2020, with Siemens Energy becoming part of discontinued operations prior to the spin-off. We expect this to result in substantial positive effects within discontinued operations, including a substantial gain at spin-off, which cannot yet be reliably quantified.

For our EPS guidance we assume these positive effects will offset carve-out costs and tax expenses related to the spin-off and Group-wide severance charges for the fiscal year. Taken together with our previously mentioned expectations for fiscal 2020, we expect this to result in basic EPS from net income in the range from €6.30 to €7.00 compared to €6.41 in fiscal 2019.

This outlook excludes charges related to legal and regulatory matters.

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.

A.8.2 Risk management

A.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. This includes our listed Strategic Companies Siemens Healthineers and SGRE, which are also subject to our group-wide principles for risk management and individually responsible for adhering to those principles.

A.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 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 internal auditors regularly review the adequacy and effectiveness of our risk management. 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 and our internal control 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 control measures. 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 prioritized in terms of impact and likelihood, considering different 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. This top-down element ensures that potential new risks and opportunities are discussed at the management level 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 organizations 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 long-term 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.

A.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, headed 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 themes. Thematic risk and opportunity assessments then form the basis for the evaluation of the company-wide risk and opportunity situation. The Head of Assurance reports quarterly to the Managing Board on matters relating to the implementation, operation and oversight of the risk and internal control system and assists the Managing Board, for example in reporting to the Audit Committee of the Supervisory Board.

A.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.

A.8.3.1 STRATEGIC RISKS

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 and 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, increase in inventory of finished or work-in-progress goods or unexpected price erosion. We see a risk, especially in the energy market, that long-term customer contracts are becoming subject to renegotiation, which might result in less favorable conditions for Siemens. Furthermore, there is a risk that critical suppliers are 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, exporting from low-cost countries to price-sensitive markets, 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.

Economic, political and geopolitical conditions (macroeconomic environment): We see increasing uncertainty regarding the global economic outlook. Despite recent relaxation in the U.S.-Chinese trade conflict, the key risk for the global economic cycle is a further escalation to a full-fledged global trade war, with a significant deterioration of global growth. In particular, protectionist measures taken so far have already caused immense economic damage on global growth. Adverse effects to confidence and investment activity would severely hit Siemens business. Increasing trade barriers would negatively impact production costs and productivity along our many value chains. The recent agreement between the U.K. and the European Union on a revised Withdrawal Agreement lowered risk of a "No-Deal" Brexit. However, the renewed Article 50 extension of the European Union Treaty is spilling over damaging impact on economic activity into fiscal 2020. If the risk of a "No-Deal" Brexit heightens again, increasing business and consumer uncertainty, particularly in the European Union and the U.K., this would reduce investment activity, and pose risks to financial markets. A further and massive loss of economic confidence and a prolonged period of reluctance in investment decisions and awarding of new orders would negatively impact our businesses. We have established a task force continuously monitoring the exit process and coordinating our local and global mitigation measures. We are depending on the economic momentum of specific industries, especially on continued weakness in the automotive sector, caused by both, cyclical and structural forces. Further business risk results from an abrupt weakening of Chinese economic growth. A terrorist mega-attack 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. Further significant risks stem from geopolitical tensions (in particular in the Middle East, but also Hong Kong), the economic vulnerability of several emerging economies (among others Argentina, Turkey, Venezuela), political upheavals, and from an increasing vulnerability of the connected global economy to natural disasters.

In general, due to the significant proportion of long-cycle businesses in our operating 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 of Digital Industries 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.

Company transformation: There are risks in substantially changing company structures, policies or management in the interest of enhancing our speed, agility or company culture. These risks include increased costs, missed financial or performance targets, loss of key personnel, loss of (cost) synergies, and reduced customer and investor confidence. This particularly applies to Gas and Power, for which a spin-off is planned for fiscal 2020. We have set up a team within "Vision 2020+" which closely monitors the transformation process. This includes, for example, the active monitoring of employee attrition rates and execution of adequate counter measures as well as increased management involvement – in maintaining an active dialogue with employees. Furthermore, we implemented a continuous quality monitoring process for critical IT solutions (infrastructure, applications and platforms) and projects.

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, Industry 4.0), there are risks associated with new competitors, substitutions of 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 or duplicates of ours.

Restructuring: We see risks that we may not be flexible enough in adjusting our organizational and manufacturing footprint in order to quickly respond to changing markets. The necessary restructuring might not be executed to the extent or in the timeframe planned (e.g. due to local co-determination regulations), limiting our improvements of our cost position with negative profit impacts and the loss of key personnel. Strikes and disputes with unions and workers councils might result in negative media coverage and delivery problems. Additionally, public criticism related to restructuring might negatively impact Siemens' reputation. We mitigate these risks by closely monitoring the implementation of the planned measures, maintaining strict cost management, and conducting ongoing discussions with all concerned interest groups.

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 equity investments, other investments and strategic alliances, which may have a negative effect on our business. 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.

A.8.3.2 OPERATIONAL RISKS

Cyber/Information security: Digital technologies are deeply integrated into our business portfolio. We observe a global increase of cyber security 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. There can be no assurance that the measures aimed at protecting our Intellectual Property (IP) and portfolio will address these threats under all circumstances. There is a risk that confidential 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. Cyber security 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 are facing active cyber threats from sophisticated adversaries that are supported by organized crime and nation-states engaged in economic espionage or even sabotage. We attempt to mitigate these risks by employing a number of measures, including employee training, comprehensive monitoring of our networks and systems through Cyber Security Defense Centers, and maintenance of backup and protective systems such as firewalls and virus scanners. 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.

Operational optimization and cost reduction 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.

Interruption of the supply chain: The financial performance of our operating units depends on reliable and effective supply chain management for components, sub-assemblies and materials. Capacity constraints and supply shortages resulting from ineffective supply chain management may lead to production bottlenecks, delivery delays 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, 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.

Operational failures and quality problems in our value chain processes: Our value chains comprise all steps in the product life-cycle, from research and development to supply chain management, production, marketing, sales and services. Operational failures in our value chain processes could result in quality problems or potential product safety, labor safety, regulatory or environmental risks. Such risks are particularly present in our operating units in relation to our production and manufacturing facilities, which are located all over the world and have a high degree of organizational and technological complexity. From time to time products we sell could have quality issues resulting from the design or manufacture of these products or the commissioning of these products or the software integrated into them. In addition, we may not be able to fully meet regulatory requirements. Siemens Healthineers, for example, is subject to regulatory authorities including the U.S. Food and Drug Administration and the European Commission's Health and Consumer Policy Department, which require specific efforts to safeguard product safety. If any of our units are not able to comply with regulatory requirements, our business and reputation may be adversely affected. We have established multiple measures for quality improvement and claim prevention. The increased use of quality management tools is improving visibility and enables us to strengthen our root cause and prevention processes.

Cost overruns or additional payment obligations related to the management of our long-term, fixed-priced or turnkey projects and service contracts: A number of our segments conduct activities, especially large projects, under long-term contracts that are awarded on a competitive bidding basis. Such contracts typically arise at Gas and Power, SGRE, Mobility, and in various activities of Smart Infrastructure. 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 the 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, unforeseen 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-priced calculation, can be completed profitably. To tackle those risks, we established a global project management organization to systematically improve the 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 customer.

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 the diversity of our workforce. Our future success depends in part on our continued ability to identify, assess, hire, integrate, develop and retain engineers, digital talent and other qualified personnel. We address this risk for example by strengthening the capabilities and skills of our talent-acquisition teams and have defined a strategy of proactive search for people with the required skills in our respective industries and markets. Technology and digitalization help us to be more effective in attracting and selecting diverse talent as well as improving the efficiency of our processes. Furthermore, we have a focus on structured succession planning, gender diversity, retention and career management.

A.8.3.3 FINANCIAL 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 areas 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.

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 (particularly U.S. dollar) 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 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. Financial Services in particular bears credit risks due to such financing activities if, for example, customers are unable to repay such financing.

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 the 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 change in funding level according to local regulations of our pension plans in these countries and the change of the regulations themselves.

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 B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.

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.

A.8.3.4 COMPLIANCE RISKS

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. 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.

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 American 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.

Siemens conducts a large share of its business with governments and government-owned enterprises. 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 internal audit activities.

Protectionism (including localization): Protectionist trade policies 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; and may expose us 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 appropriate compliance programs.

Regulatory risks and potential sanctions: 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 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, prohibiting investment in and transactions with entities doing business with countries identified by the U.S. Department of State as state sponsors of terrorism. Therefore, it is possible that such policies may result in our being unable 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.

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, 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. The insurance policy, however, does not protect Siemens against reputational damage. Moreover, Siemens may incur losses relating to legal proceedings beyond the limits, or outside the coverage, of such insurance or exceeding any provisions made for losses related to legal 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 B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.

A.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. Risks arising from Cyber/Information Security are the most significant challenge for us.

While our assessments of individual risks have changed during fiscal 2019 due to developments in the external environment, effects of our own mitigation measures and the revision of our plans for assessing risk, the overall risk situation for Siemens did not change significantly as compared to the prior year.

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

A.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.

Value creation by innovation (e.g. automation and digitalization): 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, climate change and globalization 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 digitalization, artificial intelligence, autonomous machines and edge computing. Across our operating units, we are profiting from our undisputed strength in the "Digital Enterprise". Foremost, our cloud-based MindSphere platform enhances the availability of our customers' digital products and systems and improves their productivity and efficiency. We see also significant opportunities to generate additional volume and profit from innovative digital products, services and solutions, including cyber security, applications for optimized energy consumption and operation of highly efficient energy grids and scalable solutions for distributed and renewable energy generation. 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 and share with our Strategic Companies. 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 concrete growth fields in which we see our greatest long-term potential. Hence, we are bundling and developing our resources and capabilities for these growth fields.

Leveraging market potential: Through sales initiatives and masterplans in our operating units, 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.

Favorable political and regulatory environment: We see opportunities for improvement in the geopolitical policy environment, which could quickly restore a more positive industrial investment sentiment that supports the growth of our markets. In addition, government initiatives and subsidies (including tax reforms among others) may lead to more government spending (e.g. infrastructure or digitalization investments) and ultimately result in an opportunity for us to participate in ways that increase our revenue and profit.

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.

Climate change: In line with the global agreement in Paris (COP21) that entered into force in November 2016, Siemens strives to support a trend towards reducing CO_2 emissions both in our own operations and for our customers, based on technologies from our environmental portfolio such as low-carbon power generation from renewable energy sources. As such the transition to a low-carbon economy represents an opportunity for Siemens.

Localizing value chain activities: Localizing certain value chain activities, such as procurement, manufacturing, maintenance and service, in emerging markets could enable us to reduce costs and strengthen our global competitive position, in particular compared to competitors based in countries where they can operate with more favorable cost structures. Moreover, our local footprint in many countries provides the opportunity to take advantage of growth markets and market shifts around the world, which could result in increased market penetration and market share.

Assessment of the overall opportunities situation: The most significant opportunity for Siemens continues to be value creation through innovation (e.g. automation and digitalization) as described above.

While our assessments of individual opportunities have changed during fiscal 2019 due to developments in the external environment, 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.

A.8.5 Significant characteristics of the accounting-related internal control and risk management system

The overarching objective of our accounting-related internal control and risk management system is to ensure that financial reporting is conducted in a proper manner, such that the Consolidated Financial Statements and the Combined Management Report of Siemens group as well as the Annual Financial Statements of Siemens AG as the parent company are prepared in accordance with all relevant regulations.

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 and our internal control 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 accounting-related internal control system is based on the internationally recognized "Internal Control – Integrated Framework" (2013) also developed by COSO. The two systems are complementary.

At the end of each fiscal year, our management performs an evaluation of the effectiveness of the implemented control system, both in design and operating effectiveness. 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.

Our listed Strategic Companies Siemens Healthineers and SGRE are also subject to our group-wide principles for the accounting-related internal control and risk management system and are individually responsible for adhering to those principles. The management of Siemens Healthineers and SGRE provide periodic sign-offs to the Managing Board of Siemens AG, certifying the effectiveness of their respective accounting-related internal control systems as well as the completeness, accuracy, and reliability of the financial data reported to us.

Our internal audit function systematically evaluates our financial reporting integrity, the effectiveness of the control system and the risk management system, and adherence to our compliance policies. Our listed Strategic Companies have their own internal audit departments and annual audit plans. Topics from the respective annual audit plan of our listed Strategic Companies that are also relevant for our Managing Board and Audit Committee first have to be mandated by the listed Strategic Company's Managing Board/Board of Directors and Audit Committee and subsequently be mandated by our Managing Board and Audit Committee. The audit procedures for these topics will be generally executed in joint teams of our and the respective Strategic Company's internal audit function; thus reflecting the interest of both Siemens AG and the respective listed Strategic Company. In addition, the Audit Committee is integrated into our control system. In particular, it oversees the accounting and accounting process and the effectiveness of the internal control system, the risk management system and the internal audit system. Moreover, we have rules for accounting-related complaints.

A.9 Siemens AG

The Annual Financial Statements of Siemens AG have been prepared in accordance with the rules set out in the German Commercial Code (Handelsgesetzbuch).

Siemens AG is the parent company of the Siemens Group. At the end of fiscal 2019, results for Siemens AG comprise the fields of business activities mainly of Digital Industries, Smart Infrastructure, Gas and Power as well as the activities of Portfolio Companies and are significantly influenced by directly or indirectly owned subsidiaries and investments. The business development of Siemens AG is fundamentally subject to the same risks and opportunities as the Siemens Group. Due to the interrelations between Siemens AG and its subsidiaries and the relative size of Siemens AG within the Group, the outlook of the Group also largely reflects our expectations for Siemens AG. Therefore, the foregoing explanations for the Siemens Group apply also for Siemens AG. We expect that income from investments or profit transfer agreements with affiliated companies will significantly influence the profit of Siemens AG.

We intend to continue providing an attractive return to shareholders. Therefore, we intend to propose a dividend whose distribution volume is within a dividend payout range of 40% to 60% of net income of the Siemens Group attributable to shareholders of Siemens AG, which we may adjust for this purpose to exclude selected exceptional non-cash effects. For fiscal 2020, we expect that net income of Siemens AG will be sufficient to fund the distribution of a corresponding dividend. In connection with the planned listing of Siemens Energy, we expect a significant impact on the annual financial statements of Siemens AG: The carve-out of Gas and Power business activities is expected to result in an increase in financial assets and decreases in other assets positions and liabilities. Income and expenses, most notably revenue and cost of sales, are expected to decrease as well. Subject to the approval of the planned spin-off by an extraordinary Siemens shareholders' meeting we expect also a significant withdrawal from retained earnings of Siemens AG, offsetting the disposal of financial assets.

In January 2019, Siemens AG transferred the trademark "Siemens," consisting of a portfolio of trademarks with the component "Siemens," by way of a contribution in kind, to the affiliated company Siemens Trademark GmbH & Co. KG, Germany. Additions to shares in Siemens Trademark GmbH & Co. KG were measured at the fair value of the transferred trademark rights in the amount of €9.5 billion. The contribution resulted in other operating income in the same amount. This was partially offset by a related deferred tax expense of €1.5 billion. Siemens Trademark GmbH & Co. KG has granted Siemens AG a royalty-bearing right to use the trademarks. Expenses of €0.6 billion related to the ongoing royalty for the use of the right are recognized in selling expenses. The contract has an indefinite duration.

As of September 30, 2019, the number of employees was 74,700.

A.9.1 Results of operations

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

(in millions of €)	Fiscal year 2019	2018	% Change
Revenue	**22,104**	28,185	(22)%
Cost of Sales	**(15,825)**	(21,074)	25%
Gross profit	**6,279**	7,111	(12)%
as percentage of revenue	***28%***	*25%*	
Research and development expenses	**(2,362)**	(2,788)	15%
Selling and general administrative expenses	**(3,979)**	(3,767)	(6)%
Other operating income (expenses), net	**9,469**	1	n/a
Financial income, net *thereof Income from investments, net 3,754 (prior year 5,381)*	***3,188***	*4,643*	*(31)%*
Income from business activity	**12,596**	5,199	142%
Income taxes	**(1,377)**	(653)	(111)%
Net income	**11,219**	4,547	147%
Profit carried forward	**170**	134	27%
Allocation to other retained earnings	**(6,005)**	(1,451)	> (200)%
Unappropriated net income	**5,384**	3,230	67%

Beginning of August 2018, Siemens AG carved out its mobility business to Siemens Mobility GmbH by way of singular succession. The decreases in **revenue, cost of sales, gross profit** and **research and development (R&D)** expenses were mainly driven by this carve-out.

On a geographical basis, 75% of revenue was generated in the Europe, C.I.S., Africa, Middle East region, 18% in the Asia, Australia region and 7% in the Americas region. Exports from Germany accounted for 62% of overall revenue. In fiscal 2019, orders for Siemens AG amounted to €21.6 billion. Within Siemens AG, the development of revenue depends strongly on the completion of contracts, primarily in connection with large orders.

The R&D intensity (R&D as a percentage of revenue) increased by 0.8 percentage points year-over-year. The research and development activities of Siemens AG are fundamentally the same as for its fields of business activities within the Siemens Group, respectively. On an average basis, we employed 9,000 people in R&D in fiscal 2019.

The decrease in **Financial income, net** was primarily attributable to lower **income from investments, net**. The main factor for this decrease was a significant income from the profit transfer agreement with Siemens Beteiligungen Inland GmbH, Germany, in fiscal 2018.

A.9.2 Net assets and financial position

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

(in millions of €)	2019	Sep 30, 2018	% Change
Assets			
Non-current assets			
Intangible and tangible assets	**1,884**	1,894	(1)%
Financial assets	**73,158**	55,747	31%
	75,043	57,641	30%
Current assets			
Receivables and other assets	**19,752**	18,236	8%
Cash and cash equivalents, other securities	**4,489**	3,177	41%
	24,241	21,413	13%
Prepaid expenses	**147**	163	(10)%
Deferred tax assets	**829**	2,064	(60)%
Active difference resulting from offsetting	**68**	62	9%
Total assets	**100,328**	81,344	23%
Liabilities and equity			
Equity	**30,428**	22,049	38%
Special reserve with an equity portion	**668**	671	0%
Provisions			
Provisions for pensions and similar commitments	**12,343**	11,885	4%
Provisions for taxes and other provisions	**5,616**	6,011	(7)%
	17,959	17,896	0%
Liabilities			
Liabilities to banks	**27**	53	(49)%
Advance payments received	**1,841**	1,504	22%
Trade payables, liabilities to affiliated companies and other liabilities	**49,079**	38,863	26%
	50,947	40,420	26%
Deferred income	**326**	308	6%
Total liabilities and equity	**100,328**	81,344	23%

The increase in **financial assets** was mainly due to additions to shares in affiliated companies driven by the above-mentioned trademark transfer and by contributions to affiliated companies in connection with reorganization of intra-group financing activities.

The increase in **receivables and other assets** was mainly due to higher trade receivables from affiliated companies as a result of intra-group financing activities.

Cash and cash equivalents, other securities are significantly affected by the liquidity management of the Corporate Treasury 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. Therefore, the change in liquidity of Siemens AG was not driven only by business activities of Siemens AG.

The increase in **equity** was attributable to net income for the year of €11.2 billion, and the issuance of treasury stock related to the fulfillment of exercised warrants in the amount of €1.1 billion and our share-based payments and employee share programs in the amount of €0.4 billion. These factors were partly offset by dividends paid in fiscal 2019 (for fiscal 2018) of €3.1 billion. In addition, equity was reduced due to share buybacks during the year amounting to €1.4 billion. The equity ratio as of September 30, 2019 and 2018 was 30% and 27%, respectively. For the disclosures in accordance with Section 160 para. 1 no. 2 of the German Stock Corporation Act (Aktiengesetz) about treasury shares we refer to ↗ NOTE 15 of our Annual Financial Statements of Siemens AG for the fiscal year ended September 30, 2019.

The increase in **trade payables, liabilities to affiliated companies and other liabilities** was due primarily to higher liabilities to affiliated companies mainly as a result of a contribution to an affiliated company in connection with the reorganization of intra-group financing activities.

A.9.3 Corporate Governance statement

The Corporate Governance statement pursuant to Sections 289f and 315d of the German Commercial Code is an integral part of the Combined Management Report and is presented in → C.4.2 CORPORATE GOVERNANCE STATEMENT PURSUANT TO SECTIONS 289F AND 315D OF THE GERMAN COMMERCIAL CODE.

A.10 Compensation Report

This report is based on the recommendations of the German Corporate Governance Code ("Code") and the requirements of the German Commercial Code (*Handelsgesetzbuch*), German Accounting Standards (*Deutsche Rechnungslegungsstandards*) and International Financial Reporting Standards (IFRS). It also incorporates elements of the requirements that can be foreseen from the currently pending transposition of the European Shareholder Rights Directive into German law, on the basis of the regulations proposed in the German Act Implementing the Second Shareholder Rights Directive (ARUG II).

A.10.1. Compensation of Managing Board members

This report describes the compensation system for the Managing Board members as well as the compensation of the Supervisory Board of Siemens AG for fiscal 2019. It provides detailed and individualized explanations of the structure and amount of the individual components of compensation paid to the members of these bodies.

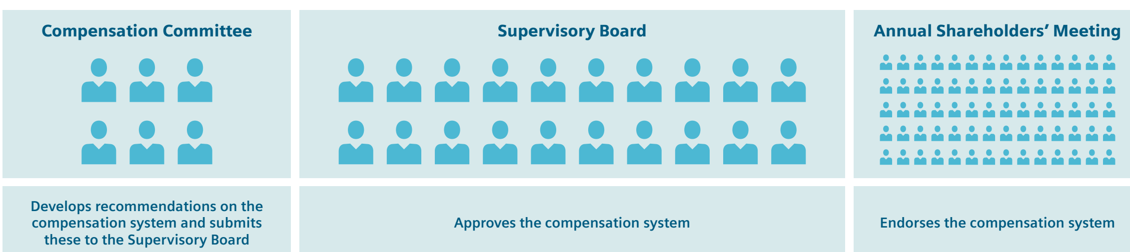
Chapter → 10.1.1 describes the system for remunerating Managing Board members in general. Chapter → 10.1.2 provides comprehensive information about the compensation granted and paid to the Managing Board in fiscal 2019, together with an outlook for fiscal 2020. Chapter → 10.2 describes Supervisory Board compensation.

A.10.1.1 COMPENSATION SYSTEM

Responsibilities and principles for establishing Managing Board compensation

The compensation system for Siemens' Managing Board is established by the Supervisory Board, based on a proposal by the Compensation Committee. After approval by the Supervisory Board, the compensation system is submitted to the Annual Shareholders' Meeting for endorsement ("say on pay").

Process for establishing the compensation system



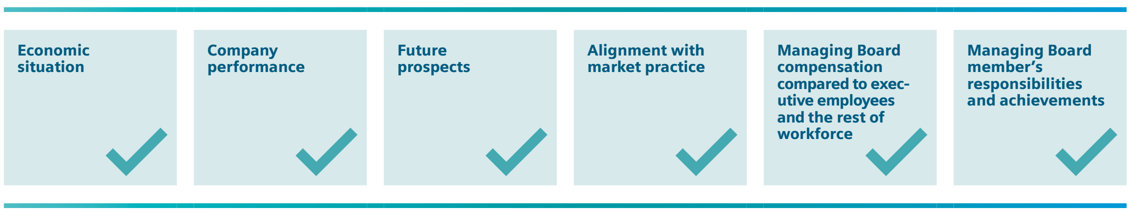
The current system of Managing Board compensation was endorsed at the Annual Shareholders' Meeting on January 27, 2015, by a majority of about 93%.

Managing Board compensation is based on the following principles:

- **Focus on successful, sustainable management of the Company**
  Managing Board members are expected to make a long-term commitment to and on behalf of the Company. As a result, they can benefit from any sustained increase in the Company's value. For this reason, a substantial portion of their total compensation is linked to the long-term performance of the Siemens share.
- **Compensation linked to performance**
  The Company's size and economic position is also to be reflected in Managing Board compensation. Exceptional achievements are to be adequately rewarded, while falling short of targets results in an appreciable reduction in compensation.
- **Ensuring competitiveness**
  In order to attract outstanding candidates for the Managing Board of Siemens AG and to retain them for the long term, compensation should be attractive compared to that offered by competitors.

On the basis of these principles, the Supervisory Board determines the structure, amount and weighting of the individual components of compensation. Regular review by the Supervisory Board ensures that the amount of compensation is appropriate. Several criteria are applied for this purpose:

Criteria for review of appropriateness of compensation



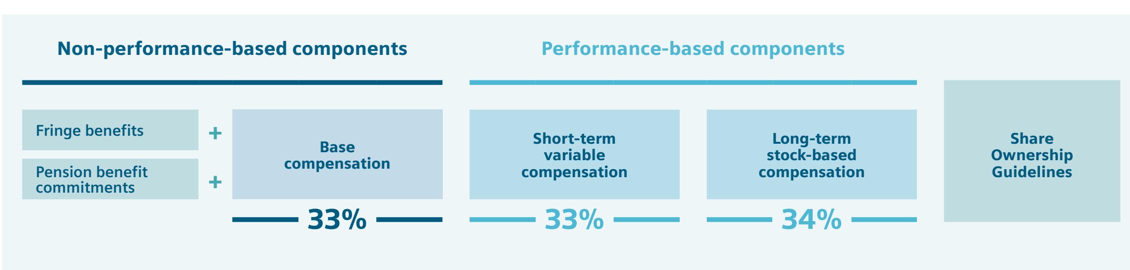
The review of appropriateness is generally based on a comparison with other German companies. The target compensation and the maximum compensation for the Managing Board are first compared to management compensation at the companies listed in the German blue-chip stock index, the DAX. To account for Siemens' international nature, size and complexity, the compensation paid to Managing Board members is also compared to management compensation at companies in the STOXX Europe 50 index. In addition, the Supervisory Board takes account of the evolution of Managing Board compensation in relation to the compensation paid to Siemens' workforce in Germany. In this vertical comparison, the Supervisory Board determines the ratio of Managing Board compensation to the compensation paid to Siemens' executive employees and the rest of the workforce and performs a market comparison with other DAX companies. For this purpose, the Supervisory Board has defined Siemens' executive employees as the employees in the Senior Management and Top Management contract groups. The rest of the workforce comprises both Siemens employees who are and those who are not covered by collective bargaining agreements.

Structure and components of Managing Board compensation

Managing Board compensation comprises both non-performance-based and performance-based elements and is divided into three main, equally weighted components: base compensation, short-term variable compensation and long-term stock-based compensation. Fringe benefits and pension commitments are also part of the compensation system.

The Share Ownership Guidelines, which are a further key component of the compensation system, obligate Managing Board members to continuously hold Siemens shares worth a defined multiple of their base compensation and to acquire additional shares if their holdings fall below the required figure.

Components of the Managing Board compensation system



Non-performance-based components

Non-performance-based compensation comprises base compensation as well as fringe benefits and pension benefit commitments.

Base compensation

Each member of the Managing Board receives base compensation for performing his or her Managing Board duties. This compensation is paid in 12 monthly installments.

Fringe benefits

Fringe benefits include the provision of non-monetary benefits and other perquisites, such as the provision of a company car, contributions toward the cost of insurance, reimbursement of expenses for legal and tax advice and accommodation and moving expenses, including a gross-up provided by the Company for any taxes due in this regard, as well as currency adjustment payments and costs relating to preventive medical examinations.

Pension benefit commitments

Like the employees of Siemens AG in Germany, the members of the Managing Board are included in the Siemens Defined Contribution Pension Plan (BSAV). Under the BSAV, Managing Board members receive contributions that are credited to their individual pension accounts. The level of these annual contributions is based on a predetermined percentage related to their base compensation and the target amount of their Bonuses. The Supervisory Board decides on this percentage annually (most recently 28%). In making its decision, the Supervisory Board takes account of the intended level of benefits for each individual and the length of time he or she has been a Managing Board member as well as the annual and long-term service cost to the Company resulting from those benefits.

Special pension contributions may also be granted to Managing Board members on the basis of individual decisions by the Supervisory Board. Such contributions may be intended, for example, to compensate for forfeited pension entitlements from a previous employer. To the extent that a member of the Managing Board earned a pension benefit entitlement from the Company before the BSAV was introduced, a portion of his or her contributions goes toward financing that prior commitment.

The following table summarizes further significant features of the BSAV for Managing Board members.

Entitlement	› On request, on or after reaching the age of 62, for pension commitments made on or after January 1, 2012 › On request, on or after reaching the age of 60, for pension commitments made before January 1, 2012
Non-forfeitability	› As a rule, in accordance with the provisions of the German Company Pensions Act (*Betriebsrentengesetz*)
Disbursement	› As a rule, in 12 yearly installments; other payment options, on request: a smaller number of installments, a lump sum payment or an annuitization with or without survivors' benefits as well as a combination of these options
Guaranteed interest	› Annual guaranteed interest credited to pension accounts until benefits are first drawn (currently 0.90%)
Disability/death	› The risk that benefits may have to be drawn before the age of 60 due to disability or death is mitigated by crediting contributions from the age at the time benefits are first drawn until the covered individual reaches or would have reached the age of 60.

Due to Lisa Davis's tax status in the U.S., some of the details of her pension benefit commitment – particularly, those regarding funding – differ from the standard provisions.

Like other eligible employees of Siemens AG, Managing Board members who were employed by the Company before September 30, 1983, are entitled to receive transition payments for the first six months after retirement. These payments are equal to the difference between their final base compensation and the retirement benefits payable under the corporate pension plan.

Performance-based components

In keeping with the abovementioned principles, Managing Board compensation is to be coupled with business performance and with sustainable management of the Company. To take due account of both factors, the performance-based component of Managing Board compensation comprises both a short-term and a long-term element: a short-term variable component (Bonus) and a long-term stock-based component (Siemens Stock Awards). The final amount of these two components depends on the extent to which defined targets are attained. If these targets are not attained, the performance-based components may be reduced to zero. If, however, the targets are significantly exceeded, target attainment is subject to a ceiling or "cap."

Short-term variable compensation (Bonus)

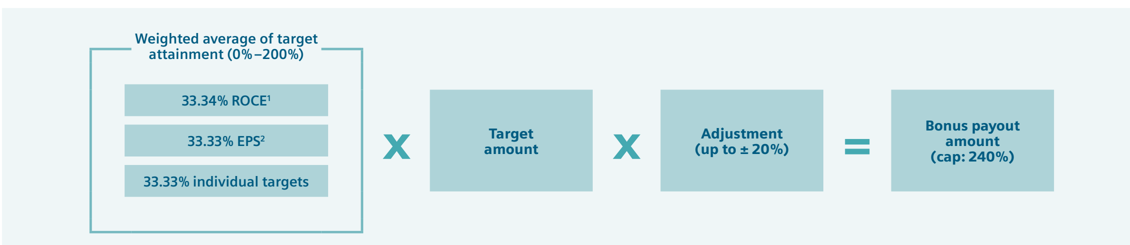
The target amount for the short-term variable component of compensation (Bonus) – that is, the amount paid for 100% target attainment – is currently equal to the amount of a Managing Board member's base compensation. The payout amount of the Bonus depends on the Company's business performance during the past fiscal year, as measured in terms of the attainment of three equally weighted target parameters.

Two of these target parameters are financial parameters that reflect the Company's capital efficiency, measured in terms of return on capital employed (ROCE), and profit, measured in terms of earnings per share (EPS). These parameters constitute operational steering parameters based on the Company's strategic focus and are included in external financial reporting, see Chapter → A.2 FINANCIAL PERFORMANCE SYSTEM.

Based on a proposal by the Compensation Committee, the Supervisory Board also sets a minimum of two and a maximum of five individual, qualitative targets for each member of the Managing Board.

The range of target attainment for these target parameters is 0% to 200% (cap). The Supervisory Board may also adjust the Bonus payout amount upward or downward by as much as 20%, so that the maximum payout for the Bonus is 240% of the target amount. The decision on an adjustment may take account not only of the Company's economic situation but also of such factors as the results of employee or customer satisfaction surveys as well as the Managing Board members' individual achievements.

Determination of Bonus payout amount



1 Return on capital employeed
2 Earnings per share

The Supervisory Board can review and, if appropriate, reduce Bonus payout amounts in the event of a breach of duty or a violation of compliance regulations (clawback).

Long-term stock-based compensation (Siemens Stock Awards)

The Managing Board is expected to make a long-term commitment to and on behalf of the Company. For this reason, a substantial portion of each member's total compensation is tied to the long-term performance of the Siemens share.

At the start of each fiscal year, Siemens grants "Stock Awards" as long-term stock-based compensation. Each Stock Award represents the right to one share of Siemens stock. Stock Awards are settled by the transfer of shares at the end of a defined vesting period of about four years. Subject to target attainment, Managing Board members receive one Siemens share per Stock Award.

Granting of Stock Awards

The annual target amount for a grant of Stock Awards, on the basis of 100% target attainment, is contractually agreed upon with each individual Managing Board member.

The number of Stock Awards actually granted to a Managing Board member at the beginning of a fiscal year is determined by extrapolating the target amount to 200% target attainment ("maximum grant value"). This maximum grant value is then converted to a maximum number of Stock Awards by dividing it by the grant price. These awards are then granted to the Managing Board member. A roughly four-year vesting period begins on the grant date. The grant price is defined as the closing price of the Siemens share in Xetra trading on the grant date, less the discounted estimated dividends during the roughly four-year vesting period.

Since fiscal 2015, the Supervisory Board has had the option of increasing the target amount for each Managing Board member, on an individual basis, by as much as 75% for one fiscal year at a time. This option is intended to take account of each Managing Board member's individual accomplishments and experience as well as the scope and demands of his or her function.

Performance criterion

The number of shares that are actually transferred after the vesting period ends depends on one performance criterion: the performance of the Siemens share compared to the performance of the shares of relevant competitors. Following an initial 12-month "reference" period, stock performance is measured over a subsequent 36-month "performance" period.

More specifically, a starting price, the "reference" price, is first determined for each competitor during the reference period, which is the first 12 months of the vesting period. The 12 end-of-month prices are averaged for Siemens and for each competitor.

During the subsequent three-year performance period, an average price is again calculated from the 36 end-of-month prices for Siemens and each competitor; this is the "performance" price.

Determination of target attainment

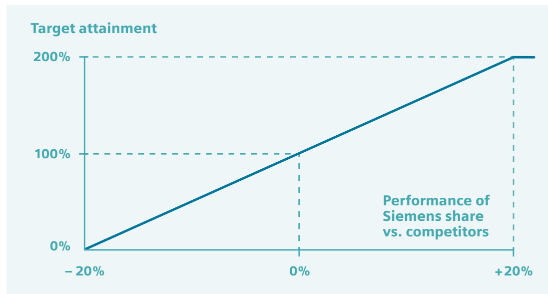
At the end of the vesting period, the Supervisory Board determines the extent to which the performance of the Siemens share price has surpassed or lagged behind that of the share prices of relevant competitors. It then derives target attainment for the relevant Stock Awards tranche on this basis. For this purpose, the reference prices for Siemens and for each competitor are compared to the respective performance prices, and a relative deviation is calculated for each company. In a further step, these deviations are averaged for all competitors. To determine target attainment, the average relative change in the competitors' share prices is then compared to the relative change in the Siemens share price, and the difference is calculated.

Target attainment may vary between 0% and 200% (cap).

- If, during the vesting period, the Siemens share performs ≥20 percentage points better than the share price of the relevant competitors, target attainment is 200%.
- If, during the vesting period, the Siemens share performs the same as the share price of the relevant competitors, target attainment is 100%.
- If, during the vesting period, the Siemens share performs ≥20 percentage points worse than the share price of the relevant competitors, target attainment is 0%.

If the Siemens share performs somewhere between the percentage points cited above, target attainment is determined by a linear interpolation.

Linear curve for determining Stock Award target attainment

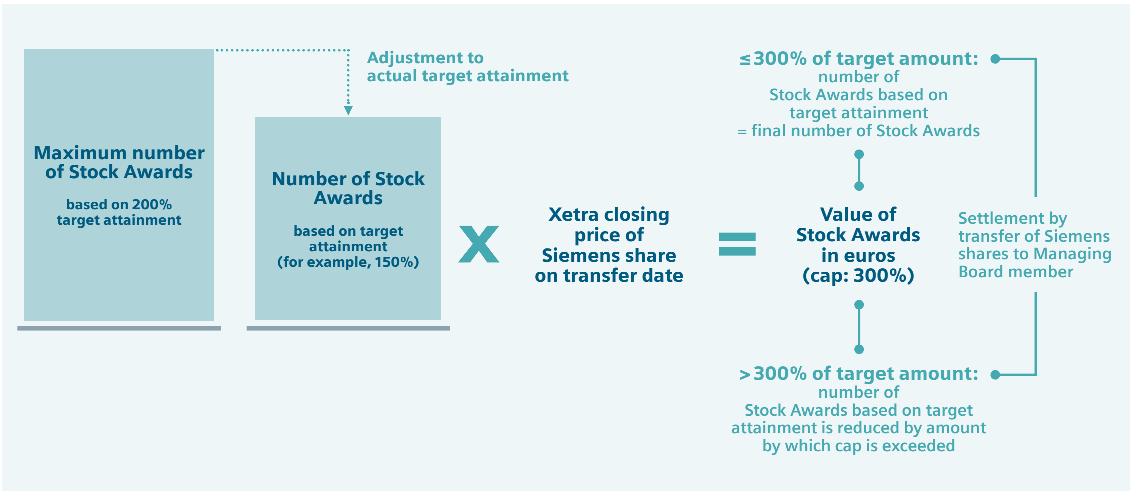


Target attainment is used to determine whether, and to what extent, the maximum number of Stock Awards is to be reduced. For a target attainment of less than 200%, a number of Siemens Stock Awards equivalent to the shortfall are forfeited without refund or replacement.

In addition, the total value (in euros) of the Siemens shares to be transferred is capped at 300% of the relevant target amount. If this cap is exceeded, a corresponding number of Stock Awards are forfeited without refund or replacement.

The remaining Stock Awards are settled by the transfer of Siemens shares to the relevant Managing Board member.

Calculation of the number of Siemens shares



Further provisions for long-term stock-based compensation

If the relevant competitors undergo significant changes during the period under consideration, the Supervisory Board may take these changes into account when compiling the comparison values for those competitors and/or calculating their relevant share prices. In the event of extraordinary, unforeseen developments that impact the Siemens share price, the Supervisory Board may decide to reduce the number of granted Stock Awards retroactively or to pay cash compensation for a defined, limited amount in lieu of a transfer of Siemens shares or to postpone the transfer of Siemens shares for payable Stock Awards until the developments have ceased to impact the share price.

If a Managing Board member violates compliance regulations, the Supervisory Board is entitled, at its duty-bound discretion, to revoke without refund or replacement some or all of his or her Siemens Stock Awards, depending on the gravity of the compliance violation (clawback).

If a Managing Board member's employment contract begins during a fiscal year, an equivalent number of Siemens Phantom Stock Awards will be granted instead of Stock Awards, and only a cash equivalent will be paid at the end of the vesting period. Apart from this exception, the same provisions agreed upon for Stock Awards will apply.

With regard to the further terms of the Stock Awards, the same principles apply in general to the Managing Board and to senior managers. These principles are explained in → NOTE 26 in B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.

Maximum amount of total compensation

In addition to the caps for the Bonus and the Siemens Stock Awards, a maximum amount of total compensation has been agreed upon. This maximum amount is 1.7 times target compensation – which comprises base compensation, the target amount for the Bonus and the target amount for long-term stock-based compensation – plus the maximum expected value of fringe benefits and pension benefit commitments. This latter value corresponds to the fringe benefits and pension benefit commitments from the previous fiscal year multiplied by a factor of 2.0.

If compensation exceeds this maximum, a number of Siemens Stock Awards equivalent in value to the amount by which the maximum was exceeded will be forfeited without refund or replacement.

Share Ownership Guidelines

The Siemens Share Ownership Guidelines are an integral part of the compensation system for the Managing Board and senior executives. These guidelines oblige the Managing Board members – after a four-year build-up phase – to continuously hold Siemens shares worth a multiple of their base compensation – 300% for the President and CEO, 200% for the other members of the Managing Board – throughout their terms of office. The decisive figure in this context is the average base compensation that a member of the Managing Board has received over the four years before the applicable date of proof of adherence. Hence, changes that have been made to base compensation in the meantime are included.

Adherence to these guidelines must be proven for the first time after the four-year build-up phase and thereafter annually. If the value of a Managing Board member's accrued holdings falls below the required minimum due to fluctuations in Siemens' share price, he or she must acquire additional shares.

Secondary activities of Managing Board members

Members of the Managing Board may take on secondary activities – for example, supervisory board positions outside the Company – only with the approval of the Chairman's Committee of the Supervisory Board.

If a Managing Board member holds a position in another Siemens company, no separate compensation is paid since holding such positions is considered to be covered by contractual Managing Board compensation. As a rule, Managing Board members are obligated to waive any compensation that may be due to them in connection with such positions. Should a waiver not be possible, for example, owing to the legal or tax regulations applicable to a Siemens company, the compensation paid to a Managing Board member in connection with such a position will be deducted from the compensation due to him or her in connection with his or her Managing Board activities.

Memberships on supervisory boards whose establishment is required by law or on comparable domestic or foreign controlling bodies of business enterprises are listed in Chapter → C.4.1 MANAGEMENT AND CONTROL STRUCTURE in C.4 CORPORATE GOVERNANCE.

Commitments in connection with the termination of Managing Board membership

The compensation system also governs the amount of compensation paid to a Managing Board member when membership on the Managing Board is terminated early.

When a member leaves office, his or her short-term variable compensation (Bonus) is calculated on a pro rata basis after the end of the fiscal year and is granted on the regular payout date.

If an employment contract is terminated, Stock Awards are governed by the following rules:

- Stock Awards for which the vesting period has not yet ended will be forfeited without refund or replacement if the employment contract is not renewed at the end of a term of office at the Managing Board member's request or if there is serious cause that entitles the Company to revoke the member's appointment or terminate his or her employment contract.
- Stock Awards will not be forfeited, however, if the employment contract is terminated by mutual agreement at the Company's request or in the event of retirement, disability or death or in connection with a spin-off, a transfer to a different company or a change of activity within the Group. Likewise, Stock Awards will not be forfeited if the Managing Board member terminates his or her employment contract for good cause in connection with a change of control at the Company.
- Stock Awards granted at the beginning of the fiscal year in which the Managing Board member leaves office will be calculated and reduced on a pro rata basis.
- When a Managing Board member leaves the Company, any existing Stock Awards will only be transferred at their due date.

The following rules also apply when a Managing Board member leaves office and vary depending on the reason for contract termination:

1. Termination due to regular expiration of the term of office

No severance payments or special BSAV contributions are made.

2. Termination by mutual agreement

In the event of an early termination of membership on the Managing Board by mutual agreement and without serious cause, Managing Board members' employment contracts provide for a severance payment:

Basis for calculation	› Base compensation plus Bonus(es) actually received in the last fiscal year prior to the end of employment, and granted long-term stock-based compensation (annual compensation)
Limit (severance cap)	› Not more than two years' annual compensation and not more than the member would receive for the remaining term of his or her employment contract
Payment	› In the month of departure
Special BSAV contribution; one-time	› Based on the BSAV contribution that the Managing Board member received in the prior year and on the remaining term of his or her appointment › Limited to not more than the contributions for two years (cap)
Increase/discount	› Severance payment will be reduced by 10% if the term of office still has more than six months to run (a lump sum allowance for discounting and for amounts earned elsewhere). › Reduction affects only the portion of the severance payment calculated excluding the first six months of the remaining term of office. › Non-monetary benefits are compensated for by a payment of 5% of the severance amount.

3. Early termination by mutual agreement at the request of the Managing Board member or if there is serious cause that entitles the Company to terminate the appointment

No severance payments or special BSAV contributions are made.

4. Change of control

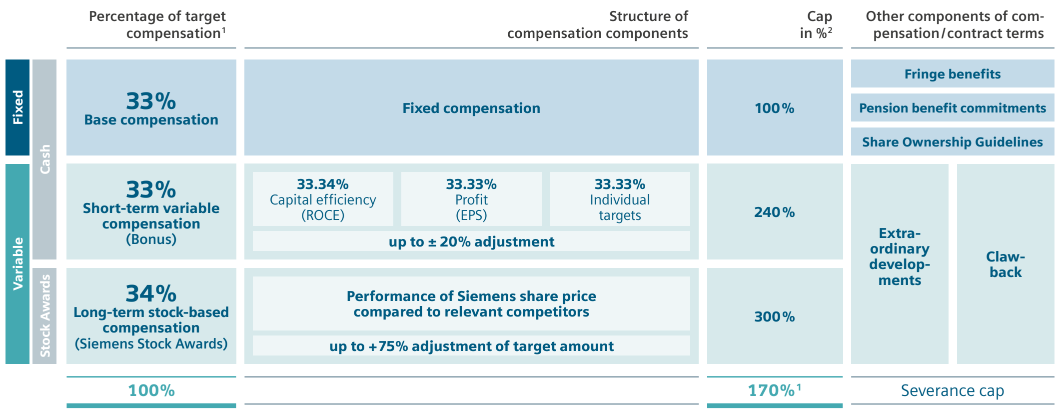
In the event of a change of control that results in a substantial change in a Managing Board member's position, the Managing Board member has the right to terminate his or her employment contract with the Company. A change of control exists if one shareholder or multiple shareholders acting in concert 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 (*Aktiengesetz*) or if Siemens AG is to be merged into another entity. There is no right of termination if the change of control takes place within 12 months before the member retires. If this right of termination is exercised, the Managing Board member is entitled to a severance payment for the remainder of his or her term of office:

Basis for calculation	› Base compensation plus the target amount for the Bonus and the Stock Awards, each based on the last fiscal year before the end of employment (annual compensation)
Limit (severance cap)	› Two years' annual compensation
Payment	› In the month of departure › Benefits are forfeited if the Managing Board member receives benefits from third parties due to or in connection with a change of control.
Increase/discount	› 10% reduction and 5% increase, as in the terms for termination of membership by mutual agreement (see Item 2 "Termination by mutual agreement")

The compensation system at a glance

The following chart provides an overview of the individual components of the compensation system:

The compensation system for Managing Board members at a glance



1 Excluding fringe benefits and pension benefit commitments 2 Basis: target amount (based on 100% target attainment)

A.10.1.2 MANAGING BOARD COMPENSATION FOR FISCAL 2019

The following section provides detailed information and background regarding total Managing Board compensation and individualized disclosures regarding the compensation of each Managing Board member for fiscal 2019.

Total compensation

In accordance with the applicable accounting principles, Managing Board compensation for fiscal 2019 totaled €33.04 million. This amount was 4.2% more than the year before (2018: €31.72 million). Of the total for fiscal 2019, €21.97 million (2018: €21.93 million) was attributable to cash compensation and €11.07 million (2018: €9.79 million) to stock-based compensation.

For fiscal 2019, each Managing Board member's base compensation and the target amount for his or her Bonus and Stock Awards underwent a regular adjustment of +2.0%. This increase was oriented in part on adjustments made to the compensation of other employee groups within Siemens.

Base compensation

Since October 1, 2018, base compensation has been as follows:

- €2,205,000 per year for President and CEO Joe Kaeser
- €1,101,600 per year for the other Managing Board members.

Fringe benefits

Managing Board members were granted fringe benefits for fiscal 2019. Depending on the Managing Board member, these benefits totaled between €16,732 and €751,054.

Pension benefit commitments

For fiscal 2019, Managing Board members were granted contributions under the BSAV totaling €5.6 million (2018: €5.4 million), based on a Supervisory Board decision from November 7, 2019. Of this amount, €0.02 million (2018: €0.03 million) relates to the funding of pension commitments earned prior to the transfer to the BSAV.

The expense recognized in fiscal 2019 as a service cost under IFRS for Managing Board members' entitlements under the BSAV in fiscal 2019 totaled €5.4 million (2018: €5.3 million).

Contributions under the BSAV are added to the individual pension accounts in the January following each fiscal year. Until pension payments begin, members' pension accounts are credited with an annual interest payment (guaranteed interest) on January 1 of each year. The interest rate is currently 0.90%.

The following table shows the individualized contributions (allocations) under the BSAV for fiscal 2019 as well as the defined benefit obligations for pension commitments:

	Total contributions for		Defined benefit obligation for all pension commitments excluding deferred compensation[1]	
(in €)	2019	2018	2019	2018
Managing Board members in office as of September 30, 2019				
Joe Kaeser	**1,234,800**	1,210,440	**14,299,267**	12,970,960
Dr. Roland Busch	**616,896**	604,800	**6,071,233**	5,121,226
Lisa Davis[2]	**616,896**	604,800	**5,701,811**	5,322,537
Klaus Helmrich	**616,896**	604,800	**6,473,904**	5,714,522
Janina Kugel	**616,896**	604,800	**2,674,432**	2,157,427
Cedrik Neike	**616,896**	604,800	**2,349,895**	1,757,258
Michael Sen	**616,896**	604,800	**1,862,660**	1,239,785
Prof. Dr. Ralf P. Thomas	**616,896**	604,800	**6,184,498**	5,235,121
Total	**5,553,072**	5,444,040	**45,617,700**	39,518,836

1 Deferred compensation totals €4,125,612 (2018: €4,115,237), including €3,703,123 for Joe Kaeser (2018: €3,694,439), €361,494 for Klaus Helmrich (2018: €362,606) and €60,995 for Prof. Dr. Ralf P. Thomas (2018: €58,192).

2 In accordance with the provisions of the BSAV, benefits to be paid to Lisa Davis are not in any way secured or funded through the trust associated with the Company's BSAV plan or with any other trust. They represent only an unsecured, unfunded legal obligation on the part of the Company to pay such benefits in the future under certain conditions, and the payout will only be made from the Company's general assets.

In fiscal 2019, former members of the Managing Board and their surviving dependents received emoluments within the meaning of Section 314 para. 1 No. 6b of the German Commercial Code totaling €21.09 million (2018: €39.9 million).

The defined benefit obligation (DBO) of all pension commitments to former members of the Managing Board and their surviving dependents as of September 30, 2019, amounted to €175.7 million (2018: €168.2 million). This figure is included in → NOTE 17 in B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS.

Short-term variable compensation (Bonus)

Since October 1, 2018, the Bonus target amounts have been as follows:

- €2,205,000 per year for President and CEO Joe Kaeser
- €1,101,600 per year for the other Managing Board members.

Target parameter "capital efficiency"

The target setting and target attainment for fiscal 2019 for the target parameter "capital efficiency," which is measured in terms of return on capital employed (ROCE), were as follows:

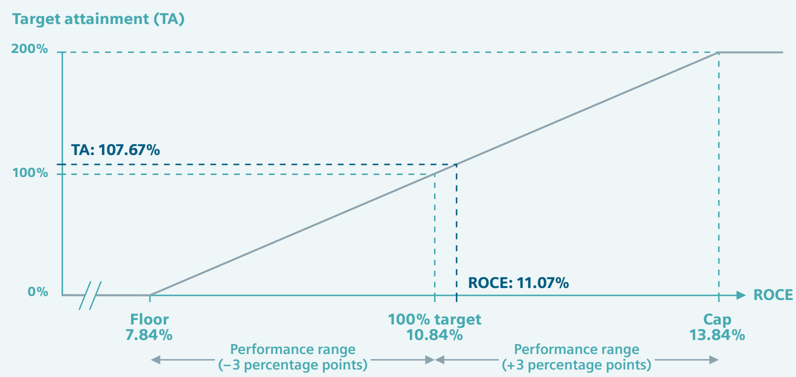
100% target, floor and cap

For fiscal 2019, the ROCE value that would result in 100% target attainment (ROCE target value) was set by the Supervisory Board at 10.84%. The ROCE values that would result in 0% target attainment and 200% target attainment were set for fiscal 2019 at 7.84% and 13.84%, respectively.

Determination of target attainment

ROCE for fiscal 2019 amounted to 11.07%, resulting in target attainment of 107.67%.

Determining target attainment for ROCE



Target parameter "profit"

The target setting and target attainment for fiscal 2019 for the target parameter "profit," measured in terms of earnings per share (EPS), were as follows:

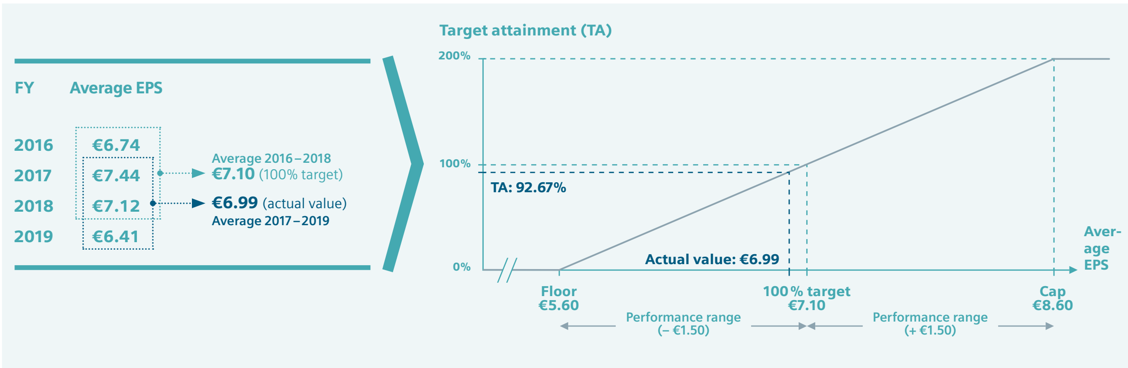
100% target, floor and cap

The EPS value that would result in target attainment of 100% (EPS target value) corresponds to the average of the EPS values for the prior three fiscal years (2016, 2017 and 2018) and amounted to €7.10. The EPS values for target attainment of 0% and 200% were set for fiscal 2019 as follows: an EPS of €5.60 would yield target attainment of 0%, and an EPS of €8.60 would yield target attainment of 200%.

Determination of target attainment

To determine EPS target attainment for fiscal 2019, the EPS target of €7.10 – which is the average of the EPS values for 2016, 2017 and 2018 – was compared to the average of the EPS values for fiscal 2017, 2018 and 2019, which amounted to €6.99. This comparison yielded target attainment of 92.67% for the financial target EPS. The two averages take account of the Company's long-term performance and provide incentives for a sustainable increase in profit.

Determining target attainment for EPS



The target setting and target attainment for the Bonus target parameters for fiscal 2019 are summarized in the following table.

Target attainment for short-term variable compensation (Bonus)

Target parameter	Target value (based on 100% target attainment)	Actual value	Target attainment	Total target attainment
33.34% Return on capital employed (ROCE)[1]	10.84%	11.07%	107.67%	
33.33% Earnings per share (EPS),[1,2] basic	€7.10	€6.99	92.67%	
33.33% Individual targets			110% – 140%	
		Joe Kaeser		113%
		Dr. Roland Busch		107%
		Lisa Davis		103%
		Klaus Helmrich		110%
		Janina Kugel		103%
		Cedrik Neike		110%
		Michael Sen		107%
		Prof. Dr. Ralf P. Thomas		113%

Focus topics 2019:

- Implementation of "Vision 2020+"
- Market coverage
- Business performance
- Optimization / efficiency enhancement

1 Continuing and discontinued operations

2 The target value equals the average EPS value for fiscal 2016, 2017 and 2018. The actual value results from the average EPS values for fiscal 2017, 2018 and 2019.

In fiscal 2019, the Supervisory Board did not exercise its option to adjust target attainment upward or downward by up to 20%.

Long-term stock-based compensation (Siemens Stock Awards)

Information about the grant of the 2019 tranche

Since October 1, 2018, the target amounts for long-term stock-based compensation have been as follows:

- €2,278,000 per year for President and CEO Joe Kaeser
- €1,140,000 per year for the other Managing Board members.

In fiscal 2019, the Supervisory Board exercised its option to increase the target amount for the Stock Awards on an individual basis by as much as 75%. The target amounts for Michael Sen and Prof. Dr. Ralf P. Thomas for fiscal 2019 were increased by 25% on a one-time basis in recognition of their individual accomplishments and experience as well as the scope and demands of their functions, including appointments to positions at Siemens companies that are not entailed by the Managing Board responsibilities directly assigned to them.

The grant price applicable for the 2019 tranche was €85.03. The Supervisory Board set the grant date at November 9, 2018. The target amounts, the maximum grant values and the maximum number of Stock Awards granted to each Managing Board member were, accordingly, as follows:

Information on grant of the 2019 Stock Awards tranche

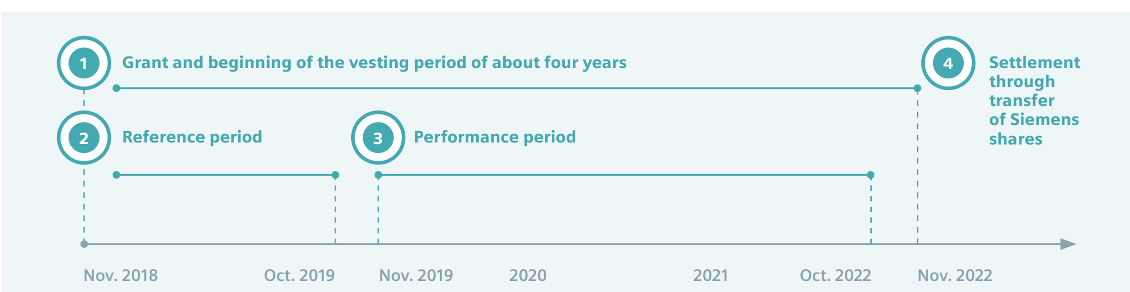
	Target amount (based on 100% target attainment)	Maximum grant value (based on 200% target attainment)	Maximum number of Stock Awards (based on 200% target attainment)
Joe Kaeser	€2,278,000	€4,556,000	53,582
Dr. Roland Busch	€1,140,000	€2,280,000	26,815
Lisa Davis	€1,140,000	€2,280,000	26,815
Klaus Helmrich	€1,140,000	€2,280,000	26,815
Janina Kugel	€1,140,000	€2,280,000	26,815
Cedrik Neike	€1,140,000	€2,280,000	26,815
Michael Sen	€1,425,000	€2,850,000	33,518
Prof. Dr. Ralf P. Thomas	€1,425,000	€2,850,000	33,518

For the 2019 tranche, the Supervisory Board decided to use the stock listings of the following competitors for its comparison of share performance:

- ABB Ltd. (Swiss Exchange, Zürich)
- Eaton Corporation plc. (New York Stock Exchange)
- General Electric Co. (New York Stock Exchange)
- Mitsubishi Heavy Industries Ltd. (Tokyo Stock Exchange)
- Schneider Electric S.A. (Euronext, Paris).

This list of competitors is unchanged from fiscal 2018.

Timetable for the 2019 Stock Awards tranche



Information about the transfer of the 2014 and 2015 tranches

In past years, Managing Board members received Siemens Stock Awards for every fiscal year. Starting with the 2015 tranche, the plan duration of Siemens Stock Awards was reduced to four years, in alignment with prevailing market practices. This reduction resulted in a one-time transfer of two tranches – the 2014 and the 2015 tranches – in November 2018. The increase in paid compensation in fiscal 2019 is primarily attributable to this transfer.

Determination of target attainment for the 2014 tranche

Up to and including the 2014 tranche, the grant of one-half of the Siemens Stock Awards was linked to basic (undiluted) earnings per share (EPS). In November 2014, 50% of the Stock Awards' target amount was adjusted in accordance with the attainment of the EPS target and thereafter converted into a corresponding number of Stock Awards. The remaining 50% of the target amount depended on the performance of the Siemens share compared to the share performance of relevant competitors during the roughly four-year vesting period, which lasted from November 2014 through October 2018.

Target attainment for the 2014 Siemens Stock Awards tranche

50% EPS

EPS target attainment was calculated in November 2014 using the average EPS values for fiscal 2012, 2013 and 2014.

EPS target attainment: 96 %

50% share price performance

	Reference price	Performance price	Reference price vs. performance price
ABB	CHF19.89	CHF21.07	5.92%
Alstom	€25.64	€29.60	15.43%
GE	$26.14	$24.50	(6.29%)
Rockwell	$117.49	$141.48	20.41%
Schneider	€60.66	€62.40	2.87%
Competitors (average)			7.67%
Siemens AG	€95.49	105.11	10.08%

Δ = 2.41 percentage points

Share price target attainment:[1] 100 %

Total target attainment: 98%

1 Up to and including the 2014 tranche of the Siemens Stock Awards, the following target attainment curve applied: a deviation (Δ) of +/– 7.5 percentage points yielded target attainment of 100%.

The following table provides a summary of the key parameters of the 2014 Siemens Stock Awards tranche, which was settled in cash:

Overview of the 2014 Siemens Stock Awards tranche

Managing Board members in office as of September 30, 2019	Target amount (based on 100% target attainment)		EPS SPP[1]	Target attainment: EPS	Target amount per component		Grant price November 7, 2014		Number of SSA[2] granted	Target attainment: SPP[1]	Final number of SSA[2]		Xetra closing price November 12, 2018		Cash payment (in €)
Joe Kaeser	€1,900,000	x	50% 50%	96%	€912,000 €950,000	/	€72.30	=	12,615 13,140	100%	12,615 13,140	x	€100.16	=	€1,263,518 €1,316,102
Dr. Roland Busch	€1,000,000	x	50% 50%	96%	€480,000 €500,000	/	€72.30	=	6,639 6,916	100%	6,639 6,916	x	€100.16	=	€664,962 €692,707
Lisa Davis[3]	€1,814,035	x	50% 50%	96%	€870,737 €907,018	/	€72.30	=	12,044 12,546	100%	12,044 12,546	x	€100.16	=	€1,206,327 €1,256,607
Klaus Helmrich	€1,000,000	x	50% 50%	96%	€480,000 €500,000	/	€72.30	=	6,639 6,916	100%	6,639 6,916	x	€100.16	=	€664,962 €692,707
Prof. Dr. Ralf P. Thomas	€1,000,000	x	50% 50%	96%	€480,000 €500,000	/	€72.30	=	6,639 6,916	100%	6,639 6,916	x	€100.16	=	€664,962 €692,707

1 SPP: share price performance

2 SSA: Siemens Stock Awards

3 The target amount disclosed for Lisa Davis (at 100% target attainment) comprises an amount that was granted to her to compensate for the forfeiture of entitlements granted by her previous employer (€1,647,368.73) as well as a pro-rata grant of Siemens Stock Awards for fiscal 2014 (€166,666.67) in accordance with her employment contract.

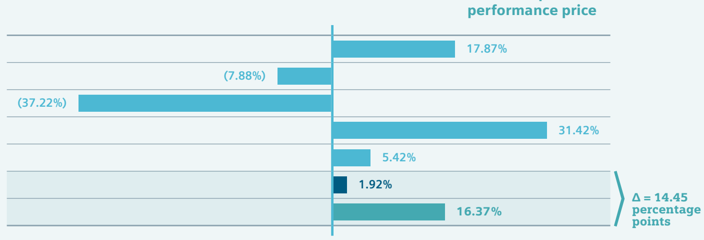
Determination of target attainment for the 2015 tranche

Starting with the 2015 tranche, the Siemens Stock Awards were subject to only one performance criterion – the performance of the Siemens share compared to the share performance of relevant competitors during the roughly four-year vesting period, which lasted from November 2014 through October 2018.

Target attainment for the 2015 Siemens Stock Awards tranche

100 % share price performance

	Reference price	Performance price	Reference price vs. performance price
ABB	CHF18.58	CHF21.90	17.87%
GE	$26.04	$23.98	(7.88%)
MHI/Toshiba[1]	¥6,605.00	¥4,243.35	(37.22%)
Rockwell	$114.49	$150.47	31.42%
Schneider	€59.96	€63.21	5.42%
Competitors (average)			1.92%
Siemens AG	€93.62	€108.95	16.37%



Target attainment: 172%

1 The reported relative deviation of (37.22%) also takes into account Toshiba's performance, which is factored into the reported deviation on a weighted basis for 19 months. Toshiba's reference price was ¥4,382.08, and its performance price was ¥2,694.00, yielding a relative deviation of (38.52%). MHI's relative deviation was (35.76%), with a weighting of 17 months.

The following table provides a summary of the key parameters of the 2015 Siemens Stock Awards tranche, which was settled in cash:

Overview of the 2015 Siemens Stock Awards tranche

	Target amount (based on 100% target attainment)		Grant price November 7, 2014		Number of SSA[1] granted		Target attainment: share price performance		Final number of SSA[1]		Xetra closing price November 12, 2018		Cash payment (in €)
Managing Board members in office as of September 30, 2019													
Joe Kaeser	€1,950,000	/	€72.30	=	26,971	x	172%	=	46,391	x	€100.16	=	€4,646,523
Dr. Roland Busch	€1,040,000	/	€72.30	=	14,385	x	172%	=	24,743	x	€100.16	=	€2,478,259
Lisa Davis	€1,040,000	/	€72.30	=	14,385	x	172%	=	24,743	x	€100.16	=	€2,478,259
Klaus Helmrich	€1,040,000	/	€72.30	=	14,385	x	172%	=	24,743	x	€100.16	=	€2,478,259
Janina Kugel[2]	€693,333	/	€72.30	=	9,590	x	172%	=	16,495	x	€100.16	=	€1,652,139
Prof. Dr. Ralf P. Thomas	€1,040,000	/	€72.30	=	14,385	x	172%	=	24,743	x	€100.16	=	€2,478,259

1 SSA: Siemens Stock Awards

2 Janina Kugel was appointed to the Managing Board effective February 1, 2015. In addition to the Siemens Phantom Stock Awards granted upon her appointment for a portion of fiscal 2015 (see table), Siemens Stock Awards in the amount of €51,300 were granted to her from the 2015 tranche for her position as a member of Top Management.

Information about current target attainment for the 2016 to 2019 tranches

As of October 2019, target attainment for the 2016 to 2019 tranches of the Siemens Stock Awards was as follows:

Target attainment for the 2016 to 2019 Stock Awards tranches (as of October 2019)

Tranche	Vesting period	Reference period	Performance period	Target attainment
2016	Nov. 2015 – Nov. 2019	Nov. 2015 – Oct. 2016	Nov. 2016 – Oct. 2019	131%
2017	Nov. 2016 – Nov. 2020	Nov. 2016 – Oct. 2017	Nov. 2017 – Oct. 2020	95%
2018	Nov. 2017 – Nov. 2021	Nov. 2017 – Oct. 2018	Nov. 2018 – Oct. 2021	83%
2019	Nov. 2018 – Nov. 2022	Nov. 2018 – Oct. 2019	Nov. 2019 – Oct. 2022	–

Share Ownership Guidelines

The deadlines by which the individual Managing Board members must first verify compliance with the Siemens Share Ownership Guidelines vary from member to member, depending on when they were appointed to the Managing Board. For Managing Board members in office as of September 30, 2019, the following table shows the number of Siemens shares each held as of the March 2019 deadline for verifying compliance with the Share Ownership Guidelines. It also shows the number of shares to be held throughout their terms of office with a view toward future deadlines.

Obligations under Share Ownership Guidelines

	Required			Verified		
	Percentage of base compensation[1]	Value[1] in €	Number of shares[2]	Percentage of base compensation[1]	Value[2] in €	Number of shares[3]
Managing Board members in office as of September 30, 2019, and required to verify compliance as of March 8, 2019						
Joe Kaeser	300%	6,254,813	61,672	340%	7,092,605	69,933
Dr. Roland Busch	200%	2,118,100	20,884	217%	2,298,583	22,664
Lisa Davis	200%	2,118,100	20,884	251%	2,658,421	26,212
Klaus Helmrich	200%	2,118,100	20,884	214%	2,261,767	22,301
Janina Kugel	200%	2,043,275	20,147	227%	2,315,317	22,829
Prof. Dr. Ralf P. Thomas	200%	2,118,100	20,884	203%	2,154,262	21,241
Total		**16,770,488**	**165,355**		**18,780,956**	**185,180**

1 The amount of the obligation is based on the average base compensation for the four years prior to the respective dates of verification.

2 Based on the average Xetra opening price of €101.42 for the fourth quarter of 2018 (October – December)

3 As of March 8, 2019 (date of verification)

Other

No loans or advances from the Company are provided to members of the Managing Board.

Benefits granted and payments made in fiscal 2019

The following tables show individually for each Managing Board member the benefits granted in fiscal 2019 and fiscal 2018. The actual amounts paid out are reported under "Benefits received."

The amounts of base compensation, the Bonus and fringe benefits relate to fiscal 2019 and fiscal 2018.

Target compensation for one-year variable compensation (Bonus), including floors and caps, is reported under "Benefits granted." The amounts for multi-year variable compensation (Siemens Stock Awards) granted in fiscal 2019 reflect the fair value on the grant date. The figures for individual maximums for one-year variable compensation (Bonus) and multi-year variable compensation (Siemens Stock Awards) reflect the possible maximum value in accordance with the maximum amounts agreed upon for fiscal 2019 – that is, 240% and 300% of the applicable target amounts. Total maximum compensation for fiscal 2019, which is reported as "Total compensation (Code)," represents the contractual maximum amount of total compensation. The maximum amount of total compensation was 1.7 times target compensation for fiscal 2019 plus two times the value of the fringe benefits and pension commitments in fiscal 2018. The figure of 1.7 times target compensation is reported separately as maximum compensation under "Total non-performance-based/performance-based compensation." Target compensation equals the total of base compensation, the target amount for the one-year variable compensation (Bonus) and the target amount for multi-year variable compensation (Siemens Stock Awards).

Total compensation in accordance with the applicable accounting standards is also reported under "Benefits granted." Instead of the target amount for one-year variable compensation (Bonus) specified by the Code, this figure includes the actual Bonus paid out and excludes the pension service cost.

The payments made in 2019 and 2018 are reported under "Benefits received." The payouts for stock-based compensation refer to grants for fiscal 2015, 2014 and 2013. The benefits received for 2019 are significantly higher because in fiscal 2019 there was a one-time transfer of two tranches of the Siemens Stock Awards (for details, see "Information about the transfer of the 2014 and 2015 tranches").

Joe Kaeser

Appointed: May 2006
President and CEO since August 2013

(Amounts in thousands of €)		Benefits granted 2019	Benefits granted 2019 (Min)	Benefits granted 2019 (Max)	Benefits granted 2018	Benefits received 2019	Benefits received 2018
Non-performance-based compensation	Fixed compensation (base compensation)	**2,205**	2,205	2,205	2,162	**2,205**	2,162
	Fringe benefits	**115**	115	115	115	**115**	115
	Total	**2,320**	2,320	2,320	2,277	**2,320**	2,277
Performance-based compensation	**One-year variable compensation** Bonus	**2,205**	0	5,292	2,162	**2,502**	2,505
	Multi-year variable compensation Stock Awards 2019 (Vesting period: 2018–22)	**2,330**	0	6,834	–	**–**	–
	Stock Awards 2018 (Vesting period: 2017–21)	**–**	–	–	2,175	**–**	–
	Stock Awards 2015 (Vesting period: 2014–18)	**–**	–	–	–	**4,647**	–
	Stock Awards 2014 (Vesting period: 2014–18)	**–**	–	–	–	**2,580**	–
	Stock Awards 2013 (Vesting period: 2013–17)	**–**	–	–	–	**–**	2,800
	Bonus Awards 2014 (Waiting period: 2014–18)	**–**	–	–	–	**931**	–
	Bonus Awards 2013 (Waiting period: 2013–17)	**–**	–	–	–	**–**	809
	Other	**–**	–	–	–	**–**	–
	Total non-performance/performance-based compensation	**6,854**	2,320	11,370	6,613	**12,978**	8,391
	Pension service cost	**1,271**	1,271	1,271	1,207	**1,271**	1,207
	Total compensation (Code)	**8,125**	3,590	14,021	7,820	**14,249**	9,597

Compensation according to applicable reporting standards

		2019		2018
Performance-based compensation	**One-year variable compensation** Bonus (payout amount)	**2,502**		2,505
	Total compensation	**7,151**		6,956

Dr. Roland Busch

Appointed: April 2011
Deputy CEO since October 2019

(Amounts in thousands of €)		Benefits granted 2019	2019 (Min)	2019 (Max)	2018	Benefits received 2019	2018
Non-performance-based compensation	Fixed compensation (base compensation)	**1,102**	1,102	1,102	1,080	**1,102**	1,080
	Fringe benefits	**57**	57	57	55	**57**	55
	Total	**1,159**	1,159	1,159	1,135	**1,159**	1,135
Performance-based compensation	**One-year variable compensation** Bonus	**1,102**	0	2,644	1,080	**1,176**	1,216
	Multi-year variable compensation Stock Awards 2019 (Vesting period: 2018 – 22)	**1,166**	0	3,420	–	**–**	–
	Stock Awards 2018 (Vesting period: 2017 – 21)	**–**	–	–	1,088	**–**	–
	Stock Awards 2015 (Vesting period: 2014 – 18)	**–**	–	–	–	**2,478**	–
	Stock Awards 2014 (Vesting period: 2014 – 18)	**–**	–	–	–	**1,358**	–
	Stock Awards 2013 (Vesting period: 2013 – 17)	**–**	–	–	–	**–**	1,577
	Bonus Awards 2014 (Waiting period: 2014 – 18)	**–**	–	–	–	**559**	–
	Bonus Awards 2013 (Waiting period: 2013 – 17)	**–**	–	–	–	**–**	628
	Other	**–**	–	–	–	**–**	–
	Total non-performance/performance-based compensation	**3,426**	1,159	5,683	3,303	**6,730**	4,556
	Pension service cost	**566**	566	566	593	**566**	593
	Total compensation (Code)	**3,992**	1,725	7,004	3,896	**7,296**	5,149

Compensation according to applicable reporting standards

		2019	2018
Performance-based compensation	**One-year variable compensation** Bonus (payout amount)	**1,176**	1,216
	Total compensation	**3,501**	3,439

Lisa Davis[1]

Appointed: August 2014

(Amounts in thousands of €)		Benefits granted 2019	2019 (Min)	2019 (Max)	2018	Benefits received 2019	2018
Non-performance-based compensation	Fixed compensation (base compensation)	**1,102**	1,102	1,102	1,080	**1,102**	1,080
	Fringe benefits[2]	**751**	751	751	401	**729**	401
	Total	**1,853**	1,853	1,853	1,481	**1,830**	1,481
Performance-based compensation	**One-year variable compensation** Bonus	**1,102**	0	2,644	1,080	**1,140**	1,180
	Multi-year variable compensation Stock Awards 2019 (Vesting period: 2018 – 22)	**1,166**	0	3,420	–	**–**	–
	Stock Awards 2018 (Vesting period: 2017 – 21)	**–**	–	–	1,088	**–**	–
	Stock Awards 2015 (Vesting period: 2014 – 18)	**–**	–	–	–	**2,478**	–
	Stock Awards 2014 (Vesting period: 2014 – 18)[3]	**–**	–	–	–	**2,463**	–
	Stock Awards 2013 (Vesting period: 2013 – 17)	**–**	–	–	–	**–**	–
	Bonus Awards 2014 (Waiting period: 2014 – 18)	**–**	–	–	–	**58**	–
	Bonus Awards 2013 (Waiting period: 2013 – 17)	**–**	–	–	–	**–**	–
	Other	**–**	–	–	–	**–**	–
Total non-performance/performance-based compensation		**4,120**	1,853	5,683	3,649	**7,969**	2,661
Pension service cost		**611**	611	611	581	**611**	581
Total compensation (Code)		**4,731**	2,464	7,696	4,230	**8,580**	3,242

Compensation according to applicable reporting standards

		2019	2018
Performance-based compensation	**One-year variable compensation** Bonus (payout amount)	**1,140**	1,180
	Total compensation	**4,158**	3,749

1 Lisa Davis's compensation is paid out in Germany in euros. It has been agreed that any tax liability that arises due to tax rates that are higher in Germany than in the U. S. will be reimbursed. In addition, a currency adjustment payment was granted for base compensation in calendar years 2017 and 2018 as well as for the Bonus for fiscal years 2017 and 2018.

2 The fringe benefits reported under "Benefits granted" (fiscal 2019) also include fringe benefits of €22,288, which will be paid out in October 2019 (fiscal 2020).

3 The amount reported under "Benefits received" includes €2,236,573 from the settlement of Siemens Stock Awards that were granted to Lisa Davis in fiscal 2014 as compensation for the forfeiture of entitlements granted by her previous employer.

Klaus Helmrich

Appointed: April 2011

(Amounts in thousands of €)		Benefits granted 2019	2019 (Min)	2019 (Max)	2018	Benefits received 2019	2018
Non-performance-based compensation	Fixed compensation (base compensation)	**1,102**	1,102	1,102	1,080	**1,102**	1,080
	Fringe benefits	**45**	45	45	44	**45**	44
	Total	**1,147**	1,147	1,147	1,124	**1,147**	1,124
Performance-based compensation	**One-year variable compensation** Bonus	**1,102**	0	2,644	1,080	**1,213**	1,288
	Multi-year variable compensation Stock Awards 2019 (Vesting period: 2018–22)	**1,166**	0	3,420	–	**–**	–
	Stock Awards 2018 (Vesting period: 2017–21)	**–**	–	–	1,088	**–**	–
	Stock Awards 2015 (Vesting period: 2014–18)	**–**	–	–	–	**2,478**	–
	Stock Awards 2014 (Vesting period: 2014–18)	**–**	–	–	–	**1,358**	–
	Stock Awards 2013 (Vesting period: 2013–17)	**–**	–	–	–	**–**	1,577
	Bonus Awards 2014 (Waiting period: 2014–18)	**–**	–	–	–	**483**	–
	Bonus Awards 2013 (Waiting period: 2013–17)	**–**	–	–	–	**–**	619
	Other	**–**	–	–	–	**–**	–
	Total non-performance/performance-based compensation	**3,415**	1,147	5,683	3,291	**6,679**	4,608
	Pension service cost	**618**	618	618	593	**618**	593
	Total compensation (Code)	**4,033**	1,765	6,980	3,884	**7,297**	5,201

Compensation according to applicable reporting standards

		2019		2018
Performance-based compensation	**One-year variable compensation** Bonus (payout amount)	**1,213**		1,288
	Total compensation	**3,526**		3,499

Janina Kugel

Appointed: February 2015

(Amounts in thousands of €)		Benefits granted 2019	Benefits granted 2019 (Min)	Benefits granted 2019 (Max)	Benefits granted 2018	Benefits received 2019	Benefits received 2018[1]
Non-performance-based compensation	Fixed compensation (base compensation)	1,102	1,102	1,102	1,080	1,102	1,080
	Fringe benefits	41	41	41	40	41	40
	Total	1,142	1,142	1,142	1,120	1,142	1,120
Performance-based compensation	One-year variable compensation						
	Bonus	1,102	0	2,644	1,080	1,140	1,144
	Multi-year variable compensation						
	Stock Awards 2019 (Vesting period: 2018 – 22)	1,166	0	3,420	–	–	–
	Stock Awards 2018 (Vesting period: 2017 – 21)	–	–	–	1,088	–	–
	Stock Awards 2015 (Vesting period: 2014 – 18)	–	–	–	–	1,652	–
	Stock Awards 2014 (Vesting period: 2014 – 18)	–	–	–	–	–	–
	Stock Awards 2013 (Vesting period: 2013 – 17)	–	–	–	–	–	–
	Bonus Awards 2014 (Waiting period: 2014 – 18)	–	–	–	–	–	–
	Bonus Awards 2013 (Waiting period: 2013 – 17)	–	–	–	–	–	–
	Other[2,3]	–	–	–	–	258	453
Total non-performance/performance-based compensation		3,410	1,142	5,683	3,288	4,192	2,718
	Pension service cost	584	584	584	577	584	577
Total compensation (Code)		3,994	1,727	6,974	3,865	4,777	3,295

Compensation according to applicable reporting standards

		2019		2018
Performance-based compensation	One-year variable compensation			
	Bonus (payout amount)	1,140		1,144
	Total compensation	3,448		3,352

1 At the beginning of fiscal 2018, Janina Kugel was also entitled to 2.501 matching shares from the Share Matching Program (see → NOTE 26 in B.6 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS). She had acquired this entitlement when she was an employee of Siemens AG before she became a member of the Managing Board. The entitlement fell due and was settled in February 2018. At the time of transfer, the shares had a value equivalent to €291.37.

2 To compensate for the forfeiture of stock at her previous employer, Janina Kugel was granted a special allocation of 3,999 Siemens Stock Awards in February 2014. This commitment arose out of an entitlement that Janina Kugel had acquired when she was an employee of Siemens AG before she became a member of the Managing Board. In February 2018, after expiration of the four-year vesting period, the Siemens Stock Awards were settled in cash. The value of these Siemens Stock Awards is reported under "Other" (see "Benefits received," fiscal 2018).

3 Janina Kugel was appointed to the Managing Board, effective February 1, 2015. The value of Siemens Phantom Stock Awards granted to Janina Kugel upon her appointment for fiscal 2015 on a pro rata basis and settled in November 2018 following the expiration of the four-year vesting period is reported under "Stock Awards 2015 (Vesting period 2014 –18)." Furthermore, Janina Kugel was entitled to Siemens Stock Awards from the 2014 and 2015 tranches acquired when she was an employee of Siemens AG, before she became a member of the Managing Board. These Stock Awards were also settled in November 2018, and their value is reported under "Other" (see "Benefits received," fiscal 2019).

Cedrik Neike[1]

Appointed: April 2017

(Amounts in thousands of €)		Benefits granted 2019	Benefits granted 2019 (Min)	Benefits granted 2019 (Max)	Benefits granted 2018	Benefits received[2] 2019	Benefits received[2] 2018
Non-performance-based compensation	Fixed compensation (base compensation)	**1,102**	1,102	1,102	1,080	**1,102**	1,080
	Fringe benefits	**17**	17	17	29	**17**	29
	Total	**1,118**	1,118	1,118	1,109	**1,118**	1,109
Performance-based compensation	**One-year variable compensation** Bonus	**1,102**	0	2,644	1,080	**1,213**	1,144
	Multi-year variable compensation Stock Awards 2019 (Vesting period: 2018–22)	**1,166**	0	3,420	–	**–**	–
	Stock Awards 2018 (Vesting period: 2017–21)	**–**	–	–	1,088	**–**	–
	Stock Awards 2015 (Vesting period: 2014–18)	**–**	–	–	–	**–**	–
	Stock Awards 2014 (Vesting period: 2014–18)	**–**	–	–	–	**–**	–
	Stock Awards 2013 (Vesting period: 2013–17)	**–**	–	–	–	**–**	–
	Bonus Awards 2014 (Waiting period: 2014–18)	**–**	–	–	–	**–**	–
	Bonus Awards 2013 (Waiting period: 2013–17)	**–**	–	–	–	**–**	–
	Other	**–**	–	–	–	**–**	1,457
Total non-performance/performance-based compensation		**3,386**	1,118	5,683	3,277	**2,331**	3,710
Pension service cost		**568**	568	568	553	**568**	553
Total compensation (Code)		**3,954**	1,686	6,951	3,830	**2,899**	4,263

Compensation according to applicable reporting standards

		2019	2018
Performance-based compensation	**One-year variable compensation** Bonus (payout amount)	**1,213**	1,144
Total compensation		**3,497**	3,341

1 In addition to his role as a member of the Managing Board of Siemens AG, Cedrik Neike served as Executive Chairman of the Board of Directors of Siemens Ltd. China until March 31, 2019. Of the fixed compensation and payout amount for one-year variable compensation reported here (see "Benefits received"), an amount of €262,260 (2018: €514,725) was granted and paid by Siemens Ltd. China and deducted from the compensation for his Managing Board activities at Siemens AG. Of the multi-year variable compensation and fringe benefits reported here (see "Benefits granted"), amounts of €131,359 (2018: €261,625) and €10,842 (2018: €13,409), respectively, were granted and paid by Siemens Ltd. China. In addition, it has been agreed that Siemens AG will offset, as a net amount, any personal tax burden that, due to Cedrik Neike's two employment relationships, exceeds the burden that he would incur if he paid tax solely on the benefits granted to him under his employment contract with Siemens AG in Germany. Siemens AG will also offset, as a net amount, any burdens due to charges and contributions to social insurance or comparable statutory systems in China additional to those he incurs in Germany. To date, no such offset payments have been made.

2 To compensate for the forfeiture of stock at his previous employer, the Supervisory Board granted Cedrik Neike a one-time amount of €4,200,000 in fiscal 2017. Of this amount, 75% was granted in the form of non-forfeitable Siemens Phantom Stock Awards and the remaining 25% as a special pension benefit contribution. One half of these Siemens Phantom Stock Awards fell due and was settled in September 2017. The other half fell due and was settled in September 2018. The value of these Siemens Phantom Stock Awards depended solely on the performance of the Siemens share.

Michael Sen

Appointed: April 2017

(Amounts in thousands of €)		Benefits granted 2019	Benefits granted 2019 (Min)	Benefits granted 2019 (Max)	Benefits granted 2018	Benefits received 2019	Benefits received 2018
Non-performance-based compensation	Fixed compensation (base compensation)	**1,102**	1,102	1,102	1,080	**1,102**	1,080
	Fringe benefits	**170**	170	170	510	**170**	510
	Total	**1,272**	1,272	1,272	1,590	**1,272**	1,590
Performance-based compensation	**One-year variable compensation** Bonus	**1,102**	0	2,644	1,080	**1,176**	1,252
	Multi-year variable compensation Stock Awards 2019 (Vesting period: 2018–22)	**1,457**	0	4,275	–	**–**	–
	Stock Awards 2018 (Vesting period: 2017–21)	**–**	–	–	1,088	**–**	–
	Stock Awards 2015 (Vesting period: 2014–18)	**–**	–	–	–	**–**	–
	Stock Awards 2014 (Vesting period: 2014–18)	**–**	–	–	–	**–**	–
	Stock Awards 2013 (Vesting period: 2013–17)	**–**	–	–	–	**–**	–
	Bonus Awards 2014 (Waiting period: 2014–18)	**–**	–	–	–	**–**	–
	Bonus Awards 2013 (Waiting period: 2013–17)	**–**	–	–	–	**–**	–
	Other	**–**	–	–	–	**–**	–
	Total non-performance/performance-based compensation	**3,831**	1,272	6,168	3,757	**2,448**	2,841
	Pension service cost	**562**	562	562	559	**562**	559
	Total compensation (Code)	**4,393**	1,834	8,397	4,316	**3,010**	3,400

Compensation according to applicable reporting standards

		2019		2018
Performance-based compensation	**One-year variable compensation** Bonus (payout amount)	**1,176**		1,252
	Total compensation	**3,906**		3,929

Prof. Dr. Ralf P. Thomas
Appointed: September 2013

(Amounts in thousands of €)		Benefits granted 2019	2019 (Min)	2019 (Max)	2018	Benefits received 2019	2018
Non-performance-based compensation	Fixed compensation (base compensation)	**1,102**	1,102	1,102	1,080	**1,102**	1,080
	Fringe benefits	**69**	69	69	72	**69**	72
	Total	**1,171**	1,171	1,171	1,152	**1,171**	1,152
Performance-based compensation	**One-year variable compensation** Bonus	**1,102**	0	2,644	1,080	**1,250**	1,216
	Multi-year variable compensation Stock Awards 2019 (Vesting period: 2018–22)	**1,457**	0	4,275	–	**–**	–
	Stock Awards 2018 (Vesting period: 2017–21)	**–**	–	–	1,088	**–**	–
	Stock Awards 2015 (Vesting period: 2014–18)	**–**	–	–	–	**2,478**	–
	Stock Awards 2014 (Vesting period: 2014–18)	**–**	–	–	–	**1,358**	–
	Stock Awards 2013 (Vesting period: 2013–17)	**–**	–	–	–	**–**	751
	Bonus Awards 2014 (Waiting period: 2014–18)	**–**	–	–	–	**483**	–
	Bonus Awards 2013 (Waiting period: 2013–17)	**–**	–	–	–	**–**	24
	Other	**–**	–	–	–	**–**	–
	Total non-performance/performance-based compensation	**3,730**	1,171	6,168	3,319	**6,740**	3,143
	Pension service cost	**586**	586	586	596	**586**	596
	Total compensation (Code)	**4,315**	1,756	7,521	3,915	**7,325**	3,738

Compensation according to applicable reporting standards		2019			2018
Performance-based compensation	**One-year variable compensation** Bonus (payout amount)	**1,250**			1,216
	Total compensation	**3,878**			3,455

A.10.1.3 ADDITIONAL DISCLOSURES ON STOCK-BASED COMPENSATION INSTRUMENTS IN FISCAL 2019

The following table shows changes in the balance of the Stock Awards held by Managing Board members in fiscal 2019. The table also includes the expenses for each individual Managing Board member arising from stock-based compensation recognized in accordance with IFRS in fiscal 2019 and fiscal 2018.

	Balance at beginning of fiscal 2019		Granted during fiscal year[1]	Vested and settled during fiscal year	Forfeited during fiscal year	Balance at end of fiscal 2019[2]		Expenses for stock-based compensation (in €)	
(Amounts in number of units)	Non-forfeit-able Bonus Awards grants	Forfeitable Stock Awards grants	Forfeitable Stock Awards grants	Bonus Awards and Stock Awards grants	Stock Awards grants	Non-forfeit-able Bonus Awards grants	Forfeitable Stock Awards grants	2019	2018
Managing Board members in office as of September 30, 2019									
Joe Kaeser	**9,296**	**127,189**	53,582	62,022	–	–	**128,045**	1,231,410	3,474,486
Dr. Roland Busch	**5,578**	**65,441**	26,815	33,518	–	–	**64,316**	606,684	1,785,096
Lisa Davis	**576**	**76,476**	26,815	39,551	–	–	**64,316**	605,764	1,701,198
Klaus Helmrich	**4,824**	**65,441**	26,815	32,764	–	–	**64,316**	606,940	1,785,401
Janina Kugel	–	**48,135**	26,815	11,656	–	–	**63,294**	578,552	1,566,652
Cedrik Neike[3]	–	**17,192**	26,815	–	–	–	**44,007**	557,575	419,403
Michael Sen	–	**22,394**	33,518	–	–	–	**55,912**	716,334	653,500
Prof. Dr. Ralf P. Thomas	**4,824**	**65,441**	33,518	32,764	–	–	**71,019**	679,797	1,855,216
Total	**25,098**	**487,709**	254,693	212,275	–	–	**555,225**	5,583,058	13,240,953

1 The resulting fair value per awarded share at grant date in fiscal 2019 was €43.48.

2 The figures take into account the Stock Awards granted in November 2018 for fiscal 2019.

3 The reported figures include the Stock Awards granted to Cedrik Neike for his position as Executive Chairman of the Board of Directors of Siemens Ltd. China.

In fiscal 2019, a gain from stock-based compensation for former members of the Managing Board amounting to €928,067 was recognized in accordance with IFRS. The gain was due to the reversal of accrued provisions, which were recognized as income. These provisions exceeded the payout for the Stock Awards and Bonus Awards that were transferred in fiscal 2019 or exceeded the provisions required for the portions of the 2016 and 2017 tranches to be settled in cash. Settlement of Stock Awards for former Managing Board members via the transfer of Siemens shares typically takes place after the expiration of the relevant vesting period.

A.10.1.4 OUTLOOK FOR FISCAL 2020

Due to the strategic realignment of the Siemens Group under "Vision 2020+," the draft version of the German Corporate Governance Code of May 9, 2019, and the draft of the act transposing the second European Shareholder Rights Directive into German law (ARUG II), the compensation system for Managing Board members was thoroughly reviewed and further developed in fiscal 2019. The Compensation Committee prepared a recommendation for a revision of the compensation system that was submitted to the Supervisory Board and approved by that body on September 18, 2019. The revised compensation system applies to all members of the Managing Board in office as of October 1, 2019, and to all new appointments and reappointments thereafter. Plans call for submitting the revised compensation system to the Annual Shareholders' Meeting for endorsement in February 2020.

The key changes in the compensation system for Managing Board members are explained below.

Overview of changes in Managing Board compensation

Compensation system until fiscal 2019	Aspect	Compensation system starting in fiscal 2020
Uniform allocation of target direct compensation: Base compensation 33% Bonus 33% Stock Awards 34%	Compensation structure	› Reinforcement of long-term focus by increasing percentage of Stock Awards › Supervisory Board can differentiate compensation structure by function as long as long-term focus is guaranteed
■ 33.33% EPS ■ 33.34% ROCE ■ 33.33% individual targets Adjustment option up to ± 20% Payout cap: 240%	Bonus	**Functional responsibilities** ■ 33.34% Group (generally EPS) ■ 33.33% Group (generally ROCE) ■ 33.33% individual targets **Business responsibilities** ■ 33.34% Group (generally EPS) ■ 33.33% business (generally profit margin) ■ 33.33% individual targets No adjustment option Payout cap: 200%
100% share price performance vs. comparison group of five competitors	Stock Awards	80% based on TSR vs. MSCI World Industrials 20% based on a Siemens-internal ESG / Sustainability Index comprising three key performance indicators, such as CO_2 emissions
Bonus and Stock Awards	Malus/clawback	Bonus and Stock Awards, expanded scope
Expense reimbursement	Fringe benefits	Expense reimbursement up to an amount defined by the Supervisory Board
BSAV contribution as percentage of target cash compensation	Pension benefit commitments	Defined BSAV contribution in euros; option for new appointees to receive amount for use at their discretion

"Vision 2020+"/sustainable company development

With "Vision 2020+," Siemens has set the course for sustainable value creation through accelerated growth and stronger profitability. The aim of "Vision 2020+" is to give the Company's individual businesses considerably more entrepreneurial freedom and more responsibility for their results. This realignment requires a Managing Board compensation system that takes greater account of Managing Board members' individual achievements and responsibilities and provides incentives for Siemens' sustainable, profitable development as a whole. As an important step in the move to tie compensation more closely to long-term Company development, the proportion of Stock Awards in target total compensation will be increased for all Managing Board members. In addition, the Share Ownership Guidelines, which are already ambitious, will be retained.

In addition, the following key changes will be made to the system:

- The short-term variable component (Bonus) will continue to be based on two key financial figures, each of which will have a one-third weighting. For Managing Board members with responsibilities for an individual business one of these two key figures will be measured at the level of that business in order to take due account of the operational implementation of the Company strategy. For Managing Board members with primarily functional responsibilities (for example, finance), both key financial figures will continue to be measured at the Group level. Individual targets will still have a one-third weighting.
- For long-term stock-based compensation (Stock Awards), the performance of Siemens AG on the capital market will be compared to a broad sector index (MSCI World Industrials) on the basis of total shareholder return (TSR). In view of the planned and announced changes in the business portfolio of Siemens AG, MSCI World Industrials offers a stable, strategically relevant metric over the term of a tranche. By taking account of share price performance and dividends paid, TSR reflects the overall performance of the Siemens share.
- To anchor environmental, social & governance (ESG) factors and sustainability in the Managing Board compensation system, a second performance criterion will be introduced for the Stock Awards in the form of a Siemens-internal ESG/Sustainability Index, which is based on three equally weighted metrics. The ESG metrics will reflect relevant strategic and socio-political topics.

Compensation caps/contract provisions

The Managing Board compensation system is intended to comply with regulatory requirements as well as to be appropriate and in line with prevailing market practice. As a result, the following adjustments to the design of the compensation system have been or will be implemented as of fiscal 2020:

- The current caps of 200% of the target amount for the Bonus and 300% of the target amount for Stock Awards will be retained. In addition, the Supervisory Board of Siemens AG has defined maximum Managing Board compensation for fiscal 2020.
- The Supervisory Board's option to adjust the Bonus payout amount upwards or downwards by as much as 20% at its duty-bound discretion has been eliminated. As a result, the maximum Bonus payout amount has been reduced from 240% to 200% of the target amount.
- A maximum amount of fringe benefits has been defined relative to base salary. This amount caps the benefits that can be paid to a Managing Board member.
- In the future, the pension benefit contribution will be set as a fixed amount rather than in relation to base compensation plus the Bonus target amount. Furthermore, in lieu of a defined contribution to pension benefits, the Supervisory Board may grant newly appointed Managing Board members an amount to be used at the member's discretion.
- Newly appointed Managing Board members and members whose employment contracts are renewed are not entitled to a severance payment if they terminate their employment in the event of a change of control.
- The existing scope of the clawback and malus regulations will be expanded for both the Bonus and the Stock Awards.

Transparency

With its revised compensation system for the Managing Board and in line with regulatory requirements and feedback from various stakeholders, Siemens has further enhanced its level of transparency. Shareholders and other stakeholders should always be able to understand clearly how the system for compensating Managing Board members helps implement the Company's strategy and fosters its sustainable development.

In the future, the Compensation Report will include the relevant performance criteria for the following fiscal year's Bonus, together with the corresponding key figures. The key figures for the Siemens ESG/Sustainability Index that have been selected for the new tranche of Stock Awards will also be published.

The target values, target ranges and target attainment for the Bonus-related key financial figures in a reporting year will be published retroactively in the Compensation Report. The target values, target ranges and target attainment measured in terms of capital market performance and of the Siemens ESG/Sustainability Index will be published for the relevant Stock Awards tranches after the expiration of the vesting period.

Targets for fiscal 2020

On September 18, 2019, the Supervisory Board of Siemens AG approved the following performance criteria for the short-term variable compensation component (Bonus) for fiscal 2020:

- for "Siemens Group," the performance criterion "profit," measured in terms of basic earnings per share (EPS)
- for "Managing Board portfolio," the performance criterion "profitability/capital efficiency," measured in terms of return on capital employed (ROCE) for Managing Board members with primarily functional responsibility, and in terms of the profit margin of the relevant business for Managing Board members with business responsibility.

The Supervisory Board also approved the following performance criteria for the 2020 Siemens Stock Awards tranche (vesting period: November 2019 to November 2023):

- "long-term value creation," measured in terms of total shareholder return (TSR) relative to the MSCI World Industrials index
- "sustainability," measured in terms of the Siemens ESG/Sustainability Index and taking into account the following three equally weighted key factors: CO_2 emissions (environmental), learning hours per employee (social) and Net Promoter Score (governance).

A.10.2 Compensation of Supervisory Board members

The current compensation policies for the Supervisory Board were authorized at the Annual Shareholders' Meeting on January 28, 2014, and have been in effect since fiscal 2014. Details are set out in Section 17 of the Articles of Association of Siemens AG. Supervisory Board compensation consists entirely of fixed compensation; it reflects the responsibilities and scope of the work of the Supervisory Board members. The Chairman and Deputy Chairs of the Supervisory Board, as well as the chairs and members of the Audit Committee, the Chairman's Committee, the Compensation Committee, the Compliance Committee and the Innovation and Finance Committee receive additional compensation.

Under the current rules, the members of the Supervisory Board receive an annual base compensation, and the members of the Supervisory Board committees receive additional compensation for their committee work.

Compensation of members of the Supervisory Board and its committees

Base compensation of Supervisory Board

Chairman	Deputy Chairs	Member
€280,000	€220,000	€140,000

Additional compensation for committee work

	Audit Committee	Chairman's Committee	Compensation Committee	Innovation and Finance Committee	Compliance Committee
Chair	€160,000	€120,000	€100,000	€80,000	€80,000
Member	€80,000	€80,000	€60,000	€40,000	€40,000

Compensation for work on the Chairman's Committee counts toward compensation for work on the Compensation Committee. No additional compensation is paid for work on the Compliance Committee if a member of that committee is already entitled to compensation for work on the Audit Committee.

If a Supervisory Board member is absent from any Supervisory Board meetings, one-third of the aggregate compensation due to that member is reduced by the percentage of Supervisory Board meetings he or she does not attend in relation to the total number of Supervisory Board meetings held during the fiscal year. In the event of changes in the composition of the Supervisory Board or its committees, compensation is paid on a pro rata basis, rounding up to the next full month.

In addition, the members of the Supervisory Board are entitled to receive a fee of €1,500 for each meeting of the Supervisory Board and/or its committees they attend.

The members of the Supervisory Board are reimbursed for out-of-pocket expenses incurred in connection with their duties and for any value-added taxes to be paid on their compensation. For the performance of his duties, the Chairman of the Supervisory Board is also entitled to an office with secretarial support and the use of a car service. No loans or advances from the Company are provided to members of the Supervisory Board. The compensation shown in the following table was determined for each Supervisory Board member for fiscal 2019 (individualized disclosure).

	2019				2018			
(Amounts in €)	Base compensation	Additional compensation for committee work	Meeting attendance fee	Total	Base compensation	Additional compensation for committee work	Meeting attendance fee	Total
Supervisory Board members in office as of September 30, 2019								
Jim Hagemann Snabe	280,000	280,000	52,500	612,500	245,000	240,000	51,000	536,000
Birgit Steinborn[1]	220,000	200,000	51,000	471,000	220,000	200,000	57,000	477,000
Werner Wenning	220,000	140,000	37,500	397,500	220,000	140,000	43,500	403,500
Dr. Werner Brandt	140,000	160,000	24,000	324,000	105,000	120,000	15,000	240,000
Michael Diekmann	140,000	60,000	15,000	215,000	140,000	60,000	16,500	216,500
Dr. Andrea Fehrmann[1]	140,000	–	9,000	149,000	105,000	–	7,500	112,500
Bettina Haller[1]	140,000	80,000	24,000	244,000	140,000	80,000	24,000	244,000
Robert Kensbock[1]	140,000	180,000	28,500	348,500	140,000	180,000	31,500	351,500
Harald Kern[1]	140,000	80,000	19,500	239,500	140,000	80,000	24,000	244,000
Jürgen Kerner[1]	140,000	200,000	51,000	391,000	140,000	200,000	54,000	394,000
Dr. Nicola Leibinger-Kammüller	140,000	80,000	25,500	245,500	140,000	80,000	28,500	248,500
Benoît Potier	132,222	–	9,000	141,222	105,000	–	7,500	112,500
Hagen Reimer[1,2]	105,000	–	4,500	109,500	–	–	–	–
Dr. Norbert Reithofer	132,222	37,778	12,000	182,000	134,167	38,333	16,500	189,000
Dame Nemat Shafik (DPhil)	132,222	–	7,500	139,722	105,000	–	7,500	112,500
Dr. Nathalie von Siemens	140,000	40,000	13,500	193,500	140,000	30,000	15,000	185,000
Michael Sigmund	140,000	–	9,000	149,000	140,000	–	12,000	152,000
Dorothea Simon[1]	140,000	–	9,000	149,000	140,000	–	12,000	152,000
Matthias Zachert	140,000	80,000	24,000	244,000	105,000	60,000	12,000	177,000
Gunnar Zukunft[1]	140,000	–	9,000	149,000	105,000	–	7,500	112,500
Former members of the Supervisory Board								
Reinhard Hahn[1,2]	46,667	–	4,500	51,167	140,000	–	12,000	152,000
Total[3]	3,088,333	1,617,778	439,500	5,145,611	2,849,167	1,508,333	454,500	4,812,000

1 These employee representatives on the Supervisory Board and the representatives of the trade unions on the Supervisory Board have declared their willingness to transfer their compensation to the Hans Boeckler Foundation, in accordance with the guidelines of the Confederation of German Trade Unions.

2 Hagen Reimer was elected a member of the Supervisory Board, effective at the end of the Annual Shareholders' Meeting on January 30, 2019. He succeeded Reinhard Hahn, who left the Supervisory Board, effective the same date.

3 Compared to the amounts reported in the 2018 Compensation Report, this amount does not include compensation totaling €543,667 for former Supervisory Board members Olaf Bolduan, Dr. Gerhard Cromme, Dr. Hans Michael Gaul, Gérard Mestrallet, Güler Sabançi and Sibylle Wankel.

A.10.3 Other

The Company provides a group insurance policy for Supervisory and Managing Board members and certain other employees of the Siemens Group. The policy is taken out for one year at a time or renewed annually. It covers the personal liability of the insured individuals in cases of financial loss associated with their activities on behalf of the Company. The insurance policy for fiscal 2019 includes a deductible for the members of the Managing Board and the Supervisory Board that complies with the requirements of the German Stock Corporation Act and the Code.

A.11 Takeover-relevant information

(pursuant to Sections 289a para. 1 and 315a para. 1 of the German Commercial Code) and explanatory report

A.11.1 Composition of common stock

As of September 30, 2019, the Company's common stock totaled €2.550 billion. The capital stock is divided into 850 million registered shares of no par value. 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.

A.11.2 Restrictions on voting rights or transfer of shares

At the Shareholders' Meeting, each share of stock has one vote and accounts for the shareholders' 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.

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 program, 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 have to be continuously employed by Siemens AG or another Siemens company. 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 vesting period.

The von Siemens-Vermögensverwaltung GmbH (vSV) has, on a sustained basis, powers of attorney allowing it to exercise the voting rights for 9,862,275 shares (as of September 30, 2019) 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 proposals of a family partnership established by the family's members or of one of this partnership's governing bodies.

A.11.3 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 is 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 of the 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. 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.

A.11.4 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 January 25, 2021 by up to €90 million through the issuance of up to 30 million registered shares of no par value against contributions in cash (Authorized Capital 2016). Subscription rights of existing shareholders are excluded. The new shares shall be issued under the condition that they are offered exclusively to employees of Siemens AG and any of its affiliated companies. To the extent permitted by law, 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 registered shares of no par value against cash contributions and/or contributions in kind (Authorized Capital 2019).

As of September 30, 2019, 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 registered shares of no par value.

By resolutions of the Shareholders' Meetings on January 27, 2015 and January 30, 2019, the Managing Board is authorized to issue bonds with conversion, exchange or option rights or with warrants attached, or a combination of these instruments, each entitling the holders to subscribe to up to 80 million registered shares of Siemens AG of no par value. Based on these two authorizations, the Company or consolidated subsidiaries of the Company may issue bonds until January 26, 2020 and January 29, 2024, 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 2015 and 2019, each by up to 80 million registered shares of no par value (Conditional Capitals 2015 and 2019), i.e. in total by up to €480 million through the issuance of up to 160 million registered shares of no par value.

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 Capital 2019 by a total of more than 10% of the capital stock existing at the time of the Shareholders' Meeting on January 30, 2019, 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 authorization approved on January 30, 2019 with shareholders' subscription rights excluded. This commitment ends no later than January 29, 2024.

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 January 27, 2015, the Shareholders' Meeting authorized the Company to acquire until January 26, 2020 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 or (2) through a public share repurchase offer. 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 January 26, 2020.

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 January 27, 2015 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, with the approval of the Supervisory Board, to third parties 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 issued by the Company or any of its consolidated subsidiaries (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).

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.

In November 2018, the Company announced that it would carry out a share buyback of up to €3 billion in volume until November 15, 2021 at the latest. The buyback commenced on December 3, 2018 using the authorizations given by the Annual Shareholders' Meeting on January 27, 2015. Under this share buyback Siemens repurchased 10,189,078 shares by September 30, 2019. The total consideration paid for these shares amounted to about €982 million (excluding incidental transaction charges). The 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, 2019, the Company held 37,232,048 shares of stock in treasury.

For details on the authorizations referred to above, especially with the restrictions to exclude subscription rights and the terms to include shares when calculating such restrictions, please refer to the relevant resolution and to Section 4 of the Articles of Association.

A.11.5 Significant agreements which take effect, alter or terminate upon a change of control of the Company following a takeover bid

As of September 30, 2019, Siemens AG maintained a line of credit in an amount of €7 billion, which provides its 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).

In addition, in March 2013 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. Each agreement provides its respective lender 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.

A.11.6 Compensation agreements with members of the Managing Board or employees in the event of a takeover bid

As of September 30, 2019, the contracts with the members of the Managing Board 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 shall not contain such right of termination in the future.

A.11.7 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 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.