ANNUAL REPORT 2019/20

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ZEISS Group

Seeing beyond

Key Figures
(IFRS)

	2019/20		2018/19		2017/18	
	€ m	%	€ m	%	€ m	%
Revenue	**6,297**	**100**	6,428	100	5,817	100
» Germany	598	9	663	10	610	10
» Other countries	5,699	91	5,765	90	5,207	90
Research and development expenses	**812**	**13**	705	11	642	11
EBIT	**922**	**15**	1,063	17	772	13
Consolidated profit	**616**	**10**	748	12	535	9
Cash flows from operating activities	**783**		770		576	
Cash flow from investing activities	**-339**		-635		-334	
Cash flow from financing activities	**-313**		-234		-89	

	30 Sep 20		30 Sep 19		30 Sep 18	
	€ m	%	€ m	%	€ m	%
Total assets	**9,171**	**100**	9,142	100	7,903	100
Property, plant and equipment	**1,623**	**18**	1,466	16	1,028	13
» Capital expenditures	484		437		244	
» Depreciation	256		234		164	
Inventories	**1,736**	**19**	1,622	18	1,391	18
Equity	**4,287**	**47**	3,990	44	3,763	48
Net liquidity	**1,531**		1,548		2,120	

	30 Sep 20	30 Sep 19	30 Sep 18
Employees	**32,201**	31,260	29,309
» Germany	13,692	13,310	12,067
» Other countries	18,509	17,950	17,242

For more information, go to:
www.zeiss.com/annualreport

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of Carl Zeiss AG

Dr. Matthias Metz
Head of the Consumer Markets segment

Dr. Markus Weber
Head of the Semiconductor Manufacturing Technology segment

Dr. Jochen Peter
Head of the Industrial Quality & Research segment

Dr. Karl Lamprecht
President and CEO

Dr. Christian Müller
CFO

Dr. Ludwin Monz
Head of the Medical Technology segment

Foreword by the Executive Board

Ladies and Gentlemen,
Dear Readers,

The last few months have been unusual to say the least. This is true for all countries, companies and industries – the COVID-19 pandemic has impacted all of us both personally and financially.


Dr. Karl Lamprecht

For this reason, on behalf of the entire ZEISS Executive Board team I would like to express my sincere gratitude to our customers and partners for continuing to place their trust in us and enabling our successful collaborations. At the same time, I would also like to thank our over 32,000 employees for their exceptional and unwavering commitment, and the tremendous flexibility they have shown. Together, we have ensured that ZEISS can look back on a very good fiscal year 2019/20 overall and emerge from this global crisis stronger than ever.

The ZEISS Group has generated revenue of 6.3 billion euros, which closely approximates the prior year's level. However, the pandemic has meant that we have fallen short of our initial expectations. The EBIT for the ZEISS Group stood at a relatively high 922 million euros (prior year: 1.1 billion euros).

ZEISS had been working on a resilience program prior to the COVID-19 pandemic. The program comprises a series of measures that aim to shore up the company's resilience in the event of an economic downturn. And these measures have proven their worth in the current unusual circumstances. ZEISS is pursuing four aims to limit the impact of the crisis: To protect its employees' health, ensure smart business continuity to the greatest possible extent, and support its customers worldwide. At the same time, the company will be demonstrating its resilience in combating the economic impact of the pandemic as best it can, and leveraging the market opportunities that arise from the current changes.

This year's results in detail
The four ZEISS segments have developed differently in the past fiscal year due to the COVID-19 pandemic. However, thanks to its innovative EUV lithography, the Semiconductor Manufacturing Technology segment was largely unaffected by the economic impact of the COVID-19 pandemic. Meanwhile, the Industrial Quality & Research, Medical Technology and Consumer Markets segments were faced with different challenges as a result of the pandemic: weak development in the automobile industry, the postponement of non-essential surgeries and the lockdown meant business in these segments suffered a great deal.

Innovative power is a success factor for ZEISS as a global technology leader. This also becomes evident if we consider its sizeable expenditure in research and development. We have not put the brakes on spending in these areas in the past fiscal year. They account for 13 percent of revenue and are a key investment in the future.

ZEISS' focused investment strategy is one of the company's cornerstones. We will continue to invest in the ramped-up digitalization – that is, in providing digital solutions for our customers – and in digitalization at the company. In March 2020 we successfully acquired software company Saxonia Systems AG (Munich). This has allowed ZEISS to systematically expand its software know-how and secure further expertise and resources to realize digital projects of strategic significance.

Particularly during the lockdown it was important to remain in close contact with our customers and be able to offer them the level of service they have come to expect. Virtual technology conferences and trade shows were very well received as new communication formats. Our remote services will enable software installation, updates and real-time support for ZEISS products without the need for an on-site appointment. Furthermore, remote services will play an even bigger role in the future as smart services, i.e. real-time system monitoring and preventive maintenance, become increasingly commonplace. We will continue with these digital formats until it is possible to meet in person again.

As a foundation-owned company, we also bear a special responsibility for training our employees – and for helping them achieve further qualifications. Due to the dynamic situation induced by the COVID-19 pandemic, many ZEISS employees were forced to adapt to new working conditions with very little warning. We have also continued to expand the offering on our digital learning platform ZEISS CurioZ. The company is thus investing in employee qualification in the current situation. After all, additional skills will help both ZEISS and its employees to emerge from the COVID-19 crisis stronger than ever. At the end of the reporting period on 30 September 2020, 473 apprentices and students in Germany were doing their training at ZEISS – 19 more than in the prior year.

A positive outlook

The ability to adapt, be flexible, learn new things and apply your own core strengths all go hand in hand. And the resilience programs we've established have already begun to bear fruit. We will pursue these in order to continue bolstering the company's ability to adapt and be resilient.

And we can see and feel the great opportunities that such a major blow like the COVID-19 pandemic can have on our daily business. The work behind this is taking place increasingly in the digital realm – and the tools to accompany this are working very well indeed. The COVID-19 pandemic has accelerated this development. And perhaps this has given us the push we needed to consistently deploy digital methods throughout the company. We have certainly picked up the pace, and will continue to power ahead – with digital topics, digital solutions, digital products, remote services and web-based communication formats that will take ZEISS and our customers into the future. The ZEISS Group will continue down the course it has charted – and it will emerge from the crisis stronger than ever.

Of course, it is still difficult to predict the full economic impact that the COVID-19 pandemic will have on ZEISS. But thanks to our clear strategic alignment, as set out in the ZEISS Agenda, and a portfolio guided by megatrends the company’s global footprint and additional opportunities created by the crisis, the entire ZEISS Executive Board team and I have every reason to be optimistic about the future.

At the same time, 2020 is a cause for celebration at ZEISS: 175 years ago, Carl Zeiss laid the foundations for a company that has grown into a technology leader and, as expressed in our tagline "Seeing Beyond," proves time and again that it can excel through its innovative strength and certainly think outside the box.

Stay healthy.

Sincerely,

Dr. Karl Lamprecht
President & CEO of Carl Zeiss AG

175
years

Solutions to Shape the Future
Segments of the ZEISS Group

The ZEISS Group is one of the world's leading technology companies. It has a balanced portfolio that is geared toward attractive future-oriented markets in optics, precision mechanics and optoelectronics. For nearly 175 years, the company has been shaping technological progress, advancing the world of optics with solutions from its four segments and meeting its customers' needs.

Semiconductor Manufacturing Technology

- **Semiconductor Manufacturing Optics**
- **Semiconductor Mask Solutions**
- **Process Control Solutions**

Industrial Quality & Research

- **Industrial Quality Solutions**
- **Research Microscopy Solutions**

Medical Technology

- **Ophthalmic Devices**
- **Microsurgery**

Consumer Markets

- **Vision Care**
- **Consumer Products**

Semiconductor Manufacturing Technology
A large proportion of all microchips are produced using ZEISS technologies. As a technology leader in the field of semiconductor manufacturing equipment, ZEISS enables the production of ever smaller, increasingly powerful, more energy-efficient and more economical microchips, and thus plays a pivotal role in the age of micro- and nanoelectronics.

Industrial Quality & Research
ZEISS ensures quality standards and enables scientific research wherever maximum precision is indispensable: with coordinate measuring machines, microscope systems and smart software for research and material inspection. ZEISS plays its part by ensuring that even the tiniest structures and processes become visible.

Medical Technology

With its products and solutions for ophthalmology, neurosurgery, ENT surgery, spine surgery, dentistry and oncology, ZEISS helps drive progress in medicine and assists doctors all over the world in enhancing their patients' quality of life.

Consumer Markets

As one of the world's leading manufacturers of eyeglass lenses, ZEISS stands for maximum visual comfort. ZEISS movie and camera lenses, binoculars, spotting scopes and riflescopes offer outstanding optical quality for users with exacting requirements. In every moment that counts.

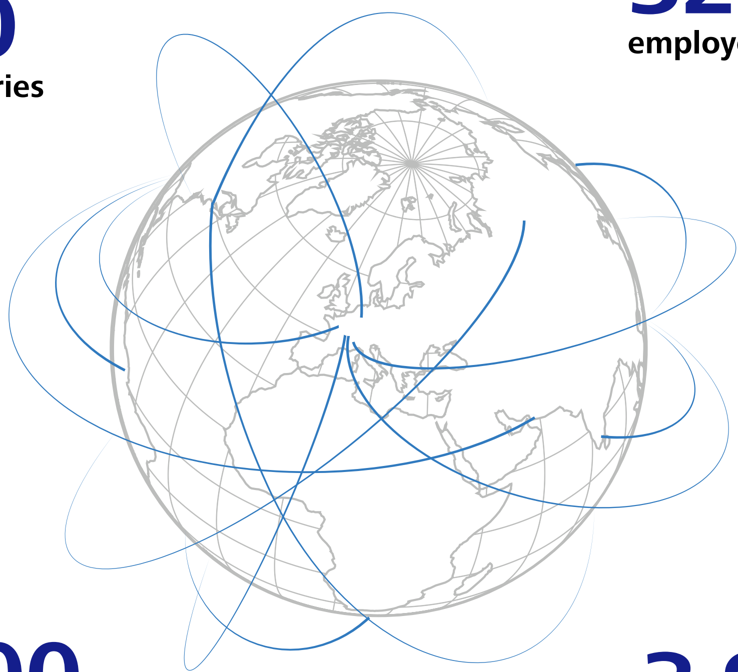
At Home
across the Globe

A lot has happened since ZEISS opened its first branch outside Germany in London in 1893. Today, the ZEISS Group is represented in almost 50 countries. Over 32,000 employees worldwide work at around 30 production sites, 60 sales and service locations and 27 research and development facilities. The company is headquartered in Oberkochen (Baden-Württemberg, Germany).

Around
9,800
patents
globally

Directly represented in almost
50
countries

More than
32,000
employees



Around
100
locations
worldwide

13
percent of revenue is invested in research and development

Almost
1,000
new jobs created

3,910
employees in research and development

520
apprentices
worldwide

A Global Strategy to Beat a Global Pandemic

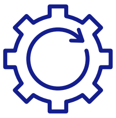
How ZEISS is Dealing with the Challenges of the COVID-19 Pandemic

The coronavirus is changing plenty of aspects in our lives. But the ZEISS Group has taken a responsible approach to this, by seeing beyond and running a host of different activities to combat the COVID-19 pandemic. This allows the company not only to protect its employees and customers, but also to ensure that business remains stable – and is also making a contribution to society by playing to its strengths.

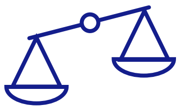
The four objectives of the ZEISS Task Force

ZEISS formed a central task force early on, in January 2020. The ZEISS Group measures were derived in the pursuit of four objectives that aim to alleviate the impact of the coronavirus-induced crisis.

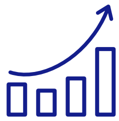
Safety
To protect the health of all employees



Continuity
To ensure smart business continuity to the greatest possible extent and support customers across the globe



Stability
To combat the economic impact of the pandemic on the company in a targeted manner



Recovery
To leverage market opportunities and strategic options arising from the new situation

Fast, pragmatic and responsible

How to successfully manage a crisis in a highly dynamic situation
by Heiko Winkler, Head of the ZEISS Task Force

For a global company like ZEISS, the outbreak of the coronavirus was a challenging time full of uncertainty and unknowns, and we wanted to help our colleagues around the world navigate it as safely as possible. The central task force was immediately formed, which allowed us to feel a great sense of responsibility in terms of ensuring that we protect our more than 32,000 employees worldwide as best we can.

Our four-pillar strategy helped us to protect the health and safety of all those at the company while safeguarding our business and all of our jobs. We had to act in a fast, flexible and agile way in order to ensure this. Every day brought a new challenge. We made sure to closely monitor the pandemic's evolution at all times, evaluate its impact and immediately take appropriate action – throughout the entire ZEISS Group. Through close coordination with local and area-specific units, we coordinated and took measures across the board, for the entire Group. To do this, we worked closely with the Executive Board of Carl Zeiss AG, who supported us every step of the way. It was also important that the different countries and segments were able to respond to their particular situation as needed.

It was ultimately a team effort but the hurdles will certainly keep coming. We are very proud of how ZEISS has not only admirably brought the situation under control, but also how we have contributed our own know-how, expertise, and the technologies produced by our segments to the global fight against the coronavirus.

Heiko Winkler is Head of Corporate Security at ZEISS. He has been in charge of all safety and security topics at ZEISS for just shy of a decade. While he started out alone, he now heads up an international team. When COVID-19 was declared a global pandemic, the Executive Board of Carl Zeiss AG asked him to lead the central task force, whose members include representatives from the Company Medical Center, HR and Communications departments, as well as from the Business Services & Infrastructure division.

Standing by all our employees

ZEISS' top priority is to ensure the health of its employees. Nevertheless, the steady stream of new findings related to the pandemic and the coronavirus were cause for concern – as were the new hygiene and social distancing rules. The task force compiled some strict requirements and binding rules for the workplace, and issued recommendations regarding proper conduct in the private sphere. Together with the physicians from the Company Medical Center, a wealth of comprehensive information was provided and contact persons appointed.

ZEISS also invested in employee qualification. The ZEISS CurioZ learning platform was used to offer optional further training at no charge during the COVID-19 pandemic. Topics included language learning and relevant content for those working in Sales, Project Management and Design and Innovation, as well as problem-solving techniques and leadership fundamentals. ZEISS' credo during this time is to ensure that both the company and its employees emerge from the COVID-19 crisis stronger than ever, through the acquisition of additional competencies and skills.

Digitalizaton – a solid foundation

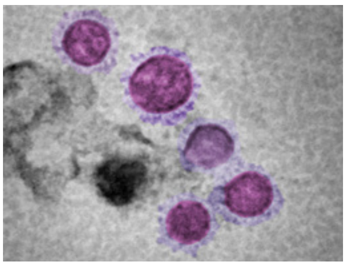
ZEISS was highly digitalized long before the COVID-19 pandemic. Corporate IT had been consistently driving digitalization for several years, thus pursuing a strategic course that the ZEISS Agenda had defined for the evolution of the Group. The option to work remotely, coupled with the digital collaboration platforms, had not yet been fully harnessed at this time, but all that changed with the coronavirus-induced lockdown. In mid-March, almost 90 percent of employees went overnight from working at the office to working from home. And the company's solid IT infrastructure ensured this could be done problem-free.

So while offices stood empty, the company was able to continue operating. And if our colleagues experienced any technical difficulties while working from home, our IT experts were able to step in thanks to our remote services. This model is benefitting an increasing number of ZEISS customers: The ZEISS Medical Technology and ZEISS Industrial Quality & Research segments were able to use our remote services even during the COVID-19 pandemic – many measuring machines, medical devices and microscopy systems from ZEISS were maintained remotely.

ZEISS' contribution

The coronavirus is posing major challenges for healthcare systems and medical institutions. And ZEISS is supporting them through its know-how, materials, technical devices and plenty of volunteers.

A better understanding of the virus
Fast diagnosis and effective treatment are essential for helping COVID-19 patients and containing the pandemic. As a company that has closely partnered with researchers for so long, ZEISS is involved in scientific discussions that arise through joint research projects and it provides optimum technical lab equipment like the ZEISS Celldiscoverer 7.



The COVID-19 virus enhanced with artificial dye, captured using a ZEISS GeminiSEM 560, aSTEM detector. Used with permission from Matthew Hannah, Virus Reference Department, Public Health England, United Kingdom

Assisting with intubation for COVID-19 patients
Since the start of the pandemic, ZEISS Medical Technology has been working on solutions that shield medical staff from infections. The ZEISS NURA video laryngoscope, for example, enables healthcare professionals to maintain a greater distance between themselves and patients, thereby reducing the risk of infection.

Highlights from Fiscal Year 2019/20

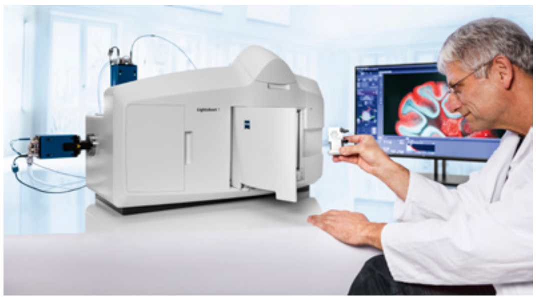
Shaping the Future

Thanks to its long-term investment strategy, balanced portfolio, international footprint and globally oriented value chains, the ZEISS Group can look forward to a bright future. In the prior fiscal year, targeted investments helped ZEISS shape the future. Here are just some of the highlights from fiscal year 2019/20.

ZEISS redefines digital workflow
The ZEISS Integrated Diagnostic Imaging platform is a multimodal software solution that collects, combines and orders data from different diagnostics devices. The platform generates a digital workflow that expands the range of treatment options and enhances quality. It enables doctors to better treat their patients according to their individual needs. ZEISS is using this platform to create a digital workflow with solutions like the ZEISS CIRRUS® 6000 and ZEISS Glaucoma Workplace.

ZEISS forges global partnership with Microsoft
The ZEISS Group and Microsoft Corp. have forged a longstanding strategic partnership in order to accelerate the expansion of digital services with ZEISS' cloud-first approach. Thanks to the standardization of its products and processes in line with Microsoft Azure as the preferred cloud platform, ZEISS will be able to offer its customers an improved digital experience and react more quickly to changing market requirements.

New ZEISS Digital Innovation site in Dresden
ZEISS has successfully concluded its acquisition of Saxonia Systems AG, a specialist for customized software solutions. The company will now operate as ZEISS Digital Innovation. The new ZEISS Digital Innovation will further support the ZEISS segments with their digital projects and play a leading role in terms of innovation.



ZEISS Lightsheet 7: new light sheet fluorescence microscope
With its unique illumination principle, light sheet fluorescence microscopy enables the fast and gentle imaging of large living organisms, as well as tissue and cells as they develop. Thanks to the exceptional stability of the ZEISS Lightsheet 7, researchers can observe living specimens over extended periods of time with less phototoxicity than ever before.

ZEISS Innovation Hub @ KIT
The ZEISS Innovation Hub on the campus of the Karlsruhe Institute of Technology has seen a number of successful collaborations and projects since it opened in early 2020. ZEISS wants the hub to house high-tech and digital start-ups, as well as its own innovations and new business activities. The most recent example of the company's close links to science is a newly launched thesis project on machine learning.

German Future Prize 2020: Two ZEISS Teams Make Shortlist
The team from the ZEISS Medical Technology segment was nominated for a German Future Prize 2020 for the ZEISS KINEVO 900 Robotic Visualization System and thus made the shortlist. The team of developers from the ZEISS Semiconductor Manufacturing Technology segment, Trumpf and Fraunhofer won the German Federal President's award for technology and innovation for the development and industrial maturity of EUV lithography.

ZEISS runs first virtual trade show booth at Virtual Cine Expo
ZEISS used interactive content and live presentations to provide insights into new products and ongoing projects at the Virtual Cine Expo. The immersive experience offered visitors the chance to discover its wide range of solutions in a way they have come to expect from a trade show booth. Interactive touch-points gave visitors different options for engaging with ZEISS and participating in different conversa-tions or lectures.

ZEISS SmartLife: New Eyeglass Lens Portfolio Fit for a Networked Lifestyle
We are now more networked than ever and can get online anywhere, anytime. Our perspective shifts constantly between a display in the distance, to the side, then downwards, then forwards. Our eyes are much busier than they used to be, and our modern, dynamic lives are changing our visual habits. ZEISS has developed a new, complete eyeglass lens portfolio for all ages that takes these new visual requirements into account in its design.

More information:
www.zeiss.com/newsroom

Sustainable Development

Corporate Responsibility

For ZEISS, business success is directly linked to corporate responsibility. The Carl Zeiss Foundation statutes have served as our guideline for over 130 years. Across five fields of action, ZEISS is building on its historical values and defining its responsibility for ensuring sustainable development.

Fields of action for sustainable development

Integrity and Compliance
Business activities that satisfy statutory regulations and internal rules are an integral part of the open and respectful corporate culture at ZEISS. For this reason, legality, fair competition and the equitable treatment of business partners and employees are indispensable elements of successful business operations. A compliance management system ensures that any errors are identified and corrected.

Available in
13 languages,

the e-learning module on compliance topics can be accessed by employees all around the world.

Products and Value Added
Product solutions by ZEISS contribute to medical advances in eye care, neurosurgery and ENT surgery, and support doctors as they improve their patients' quality of life. ZEISS eyeglass lenses improve the eyesight of people all around the world. And intelligent measuring systems from ZEISS help increase efficiency at a host of companies. But product responsibility means more than simply delivering innovative, effective, and safe products. For ZEISS, it also includes responsible value chain creation – from raw materials to product sales.

Around 50 percent

of the external purchasing volume is provided by key strategic suppliers. These suppliers must accept the Responsible Business Alliance's Code of Conduct and forward it to their subcontractors.

Employees
Precision, innovation, and unparalleled quality can only be achieved with motivated and qualified employees. ZEISS invests continually in the promotion and professional development of its employees and positions itself as an attractive employer in the race to attract talented individuals. The company benefits from its reputation as a global and innovative foundation-owned company with a strong focus on values that have been enshrined in the corporate culture.

473 young people

were doing an apprenticeship or combined degree-and-vocational training program at the company's sites in Germany at the end of the reporting period.

Environment
Effective environmental protection and the responsible use of resources are important concerns for the ZEISS Group. ZEISS continues to work on reducing its

consumption and emissions and has set specific reduction targets to do so. In order to achieve these, ZEISS pays attention to the efficient use of materials and energy from product development through to application at its customers' companies. When selecting and using raw materials, technologies and production processes, ZEISS considers their environmental compatibility. Wherever possible, potentially hazardous materials are replaced with less harmful substances.

32 business units
at 15 ZEISS Group production facilities were certified in accordance with the environmental management system ISO 14001 in 2019/20.

Social and societal engagement
As part of its responsibilities as a foundation-owned company, ZEISS promotes scientific and technological progress and campaigns for better living conditions worldwide. Through the ZEISS Promotion Fund, the company supports social projects, initiatives and facilities at its main sites in Germany. By joining forces with German and international aid organizations such as the Christoffel Mission for the Blind (CBM) and Mercy Ships, ZEISS helps to improve medical care for people in all regions of the world. With the goal of bringing young people closer to science and research, ZEISS has been sponsoring Jugend forscht, Germany’s oldest and best-known competition for young researchers, for more than 20 years.

ZEISS provided funding of almost
1 million euros
for 107 projects at the sites in Germany.

The Aloka team in Sabroom, Tripura (India), near the Bangladesh border.

Aloka Vision Programme

In rural parts of India, glasses are regarded an unaffordable and non-essential way of correcting visual impairments. That's because an eye exam, glasses and ophthalmological treatment would only be available at great effort and cost, and only very few people know enough about the benefits. Since 2015, ZEISS has been teaming up with non-governmental organizations (NGOs), foundations and small local businesses to deliver basic eye care to underserved parts of rural India.

Our partners in India perform eye exams and provide glasses to the local populations through on-site training and online support from the Aloka team and qualified optometrists. The money they earn from this social business directly benefits them, helping them to earn their bread and butter. And when it comes to quality, no compromises are made. High quality is ensured through professional associations and optometrists, who evaluate and standardize this on an ongoing basis. Regular customer surveys demonstrate a high level of satisfaction with the service and glasses provided through Aloka. The number of patients referred to partner hospitals for cataract surgery and other treatments is constantly rising. Pre-pandemic, this meant many thousands of rural families and underprivileged kids were able to receive eye care.

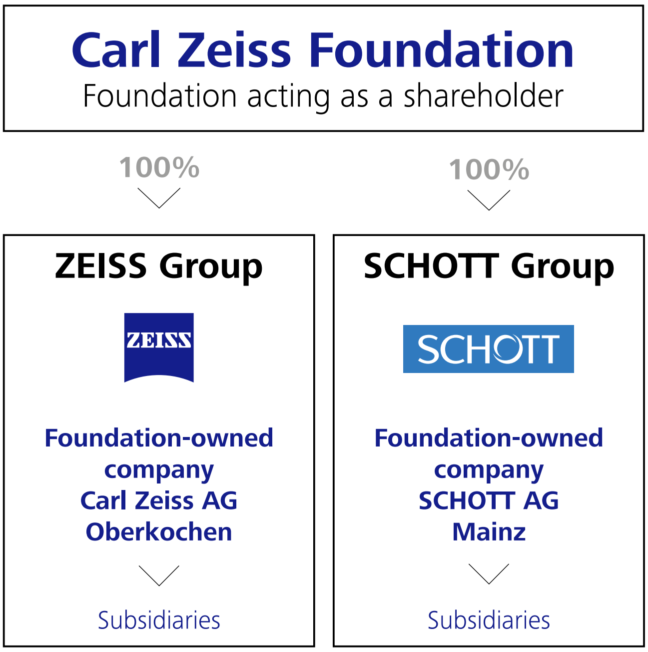
But the COVID-19 pandemic and the lockdown in India paused all of these activities. NGOs and ZEISS then focused on the essentials: providing food to those families who had lost their source of income due to the lockdown and simultaneously occurring natural disasters. But the Aloka Vision Programme has now adapted its processes in line with the relevant hygiene practices and ZEISS has resumed the initiative.

For more information, go to:
www.zeiss.com/responsibility

Starting 29 January 2021, the Sustainability Report will be accompanied by a separate non-financial report compiled for the ZEISS Group.

Carl Zeiss Foundation
Promoting Science

The Carl Zeiss Foundation is the sole shareholder of Carl Zeiss AG. This special ownership structure ensures stability and enables the company to create long-term prospects. The Foundation statutes prohibit the sale of shares, e.g. through an initial public offering. For that reason, the company's shares are not listed on any stock exchange.



In 1889, physicist and entrepreneur Ernst Abbe created the Carl Zeiss Foundation to which both Carl Zeiss AG and SCHOTT AG belong. The objectives of the Foundation, as stipulated by Abbe, remain valid to this very day:

» Safeguarding the future and responsible management of the two Foundation companies
» Fulfilling its special responsibility toward employees
» Meeting its responsibility toward society through the commitment of its member companies to non-profit activities in their surrounding regions
» Promoting science

With this unique corporate model, the Carl Zeiss Foundation and its two member companies made industrial and social history in Germany. Since 2004, the foundation has received dividends of EUR 321 million from Carl Zeiss AG in order to achieve its goals. The Foundation uses the dividends generated by Carl Zeiss AG and SCHOTT AG to promote science – particularly the natural sciences and engineering, mathematics and information technology – at universities in the German federal states of Baden-Württemberg, Rhineland-Palatinate and Thuringia. Today, the Carl Zeiss Foundation is one of Germany's largest foundations focused on the promotion of science.

For more information, go to:
www.carl-zeiss-stiftung.de/english

Corporate Governance

For ZEISS, acting lawfully and responsibly and managing the company in a transparent manner that is focused on its long-term success are fundamental principles of corporate policy.

With its corporate governance structure, ZEISS ensures that legal provisions, the constitution of the Carl Zeiss Foundation and the company's internal directives are observed in line with compliance stipulations.

The Code of Conduct is a core element of the compliance management system of the ZEISS Group. It summarizes the rudiments and principles of action that form the basis of responsible conduct. The Code of Conduct is binding upon all ZEISS employees and is published on the company's website.

Report by the Supervisory Board

Dear Sir or Madam,

This year the COVID-19 pandemic has slowed down revenue growth at ZEISS, just like it has in almost all our markets. However, rapidly advancing digitalization accelerated the Semiconductor Manufacturing Technology segment's above-average development, which almost makes up for the decline in revenue in our direct-to-market segments. In spite of the current economic uncertainties of the COVID-19 pandemic, ZEISS continues to pursue its path to growth. Through significant investments, we continue to leverage our innovative power with the aim, particularly in the area of digitalization, of developing new business models and attracting new customers. At the same time, our resilience initiatives allow us to optimize the management and transparency within the company so that we can, as needed, achieve a rapid, focused response to any changes in the economy.

Prof. Dr. Dieter Kurz

In the past fiscal year the Supervisory Board oversaw and advised the Executive Board in accordance with the duties entrusted to supervisory boards by law, the articles of association and rules of internal procedure. The Executive Board provided the Supervisory Board with written and verbal information about the business situation and development, current profits, current risk factors and risk management, short-term and long-term planning, investments and organizational measures. The Chairman of the Supervisory Board was in close contact with the Executive Board and was regularly informed about the development of the business situation and important business transactions. The Supervisory Board was involved in all decisions of importance and passed the resolutions required by law, the articles of association and our internal procedures. The decisions of the Supervisory Board were based on the reports and decisions proposed by the Executive Board, which the Supervisory Board subjected to in-depth scrutiny. The Executive Board and Supervisory Board have joined forces to ensure ZEISS continues to develop successfully.

Topics from the Supervisory Board meetings

The Supervisory Board held three meetings during fiscal year 2019/20.

In December 2019, in addition to the annual financial statements, ZEISS's acquisition strategy was discussed. With this strategy, ZEISS aims to acquire highly innovative solutions, technologies and companies in a targeted manner.

At the meeting in May 2020, concrete measures were presented as a way of dealing with COVID-19. These were derived from the resilience initiative and have helped the company to manage the crisis. Against this background, the opportunities and development fields that have emerged from the crisis have been identified, and special attention will be paid to pursuing them.

At the suggestion of the Supervisory Board, the strategy meeting in July 2020 served as a strategy review. As the transition period for the new President and CEO was completed in April 2020, no comprehensive strategy process with an accompanying spring strategy was conducted. Nevertheless, at the strategy meeting, the Executive Board presented a clear strategic plan that continues the long-term positive development of the individual segments with the support of the management and employees. It also looked at the changes that have arisen as a result of the COVID-19 pandemic.

The budget plan for fiscal year 2020/21 was approved on 1 October 2020 at the first meeting of fiscal year 2020/21.

Changes to the Executive Board
After the Supervisory Board had, during the final meeting of fiscal year 2018/19, appointed Dr. Karl Lamprecht as the successor to Prof. Dr. Michael Kaschke effective 1 April 2020, and had appointed Dr. Markus Weber as Dr. Lamprecht's successor as member of the Executive Board responsible for the Semiconductor Manufacturing Technology segment effective 1 October 2019, Prof. Dr. Kaschke handed over the position of ZEISS President and CEO to Dr. Lamprecht on 1 April 2020 after a six-month transition period.

Dr. Lamprecht and his Executive Board team were immediately faced with the challenges presented by the COVID-19 pandemic in April 2020. ZEISS successfully coped with these challenges, supported by the resilience measures already in place. The company could therefore be stabilized despite the difficult circumstances. Meanwhile the Executive Board, during its preparations for the strategy meeting in July 2020, made the necessary changes to the strategy, which also consider the COVID-19 situation. These were presented to the Supervisory Board in a transparent manner.

Work of the Supervisory Board committees
The Audit Committee met three times as scheduled. It evaluated the effectiveness of risk management and discussed topics such as compliance, internal auditing, the internal control system, accounting and the key issues of the annual audit as well as the annual and consolidated financial statements. The Chairman's Committee also convened three times. The achievement of targets and Executive Board remuneration were subjected to the regular review. In the Supervisory Board meetings, the Chairmen of the Audit and Chairman's Committees provided regular reports on the work of their committees. The Mediation Committee did not convene during the year under review.

Changes to the Supervisory Board
Due to the departure of Maria Menzel from the Supervisory Board on 30 September 2019, Gerhard Bösner was appointed member of the Audit Committee for the new fiscal year. Silke Müller joined the Supervisory Board on 1 October 2019 as Maria Menzel's successor.

Audit of the annual and consolidated financial statements
The auditing firm Ernst & Young GmbH, Stuttgart, has audited the consolidated financial statements of Carl Zeiss AG, including the management report, for fiscal year 2019/20 prepared pursuant to Sec. 315e (3) German Commercial Code (HGB) in accordance with International Financial Reporting Standards (IFRSs) and issued an unqualified auditor's report in each case. Auditing firm Ernst & Young GmbH, Stuttgart, also audited the dependent company report prepared by the Executive Board.

All members of the Supervisory Board received the independent auditor's documents and audit reports in good time. The Supervisory Board examined the documents and discussed the annual and consolidated financial statements at the meeting of the Audit Committee on 9 December 2020 and at the Supervisory

Board meeting held on 10 December 2020. The independent auditor attended both meetings, presented the major results of the audit, provided supplementary information and answered questions. At the plenary assembly, the Chairman of the Audit Committee reported on the result of the examination of the consolidated financial statements by the Audit Committee. After examining the documents, the Supervisory Board endorsed the results obtained by the auditor and approved the financial statements prepared by the Executive Board. The annual and consolidated financial statements of Carl Zeiss AG were thereby adopted, effective 30 September 2020.

Pursuant to Sec. 312 German Stock Corporations Act (AktG), the Executive Board has prepared the above-mentioned dependent company report for the period from 1 October 2019 to 30 September 2020. The independent auditors have issued the following opinion on the findings of their audit of the dependent company report: "Based on our audit, which was carried out in accordance with professional standards, we confirm that

1. The actual disclosures contained in the report are correct.

2. The payments made by the Company in the legal transactions listed in the report were not unreasonably high."

The Supervisory Board agreed with the results of the audit presented by the independent auditors. Following the final result of the review by the Supervisory Board, there were no objections to the Executive Board's concluding statement in the dependent company report.

In addition, the Audit Committee was presented with the separately published non-financial Annual Report of Carl Zeiss AG. The Non-Financial Report was submitted for a voluntary audit to the auditing firm PricewaterhouseCoopers GmbH (PwC) in Munich to obtain limited assurance. As per the recommendation of the Audit Committee, the Supervisory Board confirms the adherence of the Non-Financial Report for the ZEISS Group to the CSR Guideline Implementation Law (EU Directive 2014/95/EU) and approves it.

This year, we will once again pay out a dividend to our sole shareholder, the Carl Zeiss Foundation.

On behalf of the Supervisory Board, I would like to thank the members of the Executive Board and all employees for their exceptional dedication and flexibility in dealing with the impact of the COVID-19 pandemic. Thanks to their ambitious work, knowledge, courage and commitment, ZEISS is extremely well equipped for the future.

Oberkochen, December 2020

On behalf of the Supervisory Board

Prof. Dr. Dieter Kurz
Chairman of the Supervisory Board

Supervisory Board of Carl Zeiss AG

Supervisory Board of Carl Zeiss AG

Dr. Dieter Kurz | Lindau
Chairman
Chairman of the Shareholder Council of the Carl Zeiss Foundation, Heidenheim an der Brenz and Jena

Roland Hamm[1] | Aalen
Deputy Chairman and First Authorized Representative of the IG Metall trade union, Aalen Administration Office, Aalen (until 31 July 2020)

Hariolf Abele[1] | Aalen
Deputy Chairman of the Employee Representative Council of Carl Zeiss Industrielle Messtechnik GmbH, Oberkochen

Prof. Dr. Martin Allespach[1] | Kelkheim
Director and Head of the European Academy of Labour at the University of Frankfurt am Main

Gerhard Bösner[1] | Aalen
Chairman of the Employee Representative Council of Carl Zeiss SMT GmbH, Oberkochen

Dr. Klaus Dieterich | Stuttgart
Former President of the Corporate Sector for Research and Advance Engineering at Robert Bosch GmbH, Stuttgart

Angelika Franzke[1] | Oberkochen
Chairman of the Group Employee Representative Council of Carl Zeiss AG, Oberkochen

Dr.-Ing. Mathias Kammüller | Gerlingen
Managing Partner of TRUMPF GmbH + Co. KG, Ditzingen

Andreas Kopf[1] | Bad Wurzach
Head of Shared Services Consolidation and Accounting at Carl Zeiss AG, Oberkochen

Michael Kramer[1] | Jena
Production supervisor at Carl Zeiss Jena GmbH, Jena

Dr. Joachim Kreuzburg | Hannover
CEO and Chairman of the Executive Board of Sartorius AG, Göttingen

Dr. Carla Kriwet | Munich
Chairman of the Board
BSH Hausgeräte GmbH, Munich

Prof. Dr. Jürgen Mlynek | Berlin
Former President of the Helmholtz Association of German National Research Centres, Berlin

Silke Müller[1] | Jena
Patent Counsel at Jena site of
Carl Zeiss AG, Oberkochen

Dr. Lothar Steinebach | Leverkusen
Former Member of the Management Board of Henkel AG & Co. KGaA, Düsseldorf

Dr. Eberhard Veit | Göppingen
Managing Partner of 4.0-Veit GbR, Göppingen

Committees of the Supervisory Board

Chairman's Committee
Dr. Dieter Kurz (Chairman)
Dr. Klaus Dieterich
Roland Hamm[1]
Angelika Franzke[1]

Audit Committee
Dr. Lothar Steinebach (Chairman)
Hariolf Abele[1]
Dr. Dieter Kurz
Gerhard Bösner[1]

Mediation Committee
Dr. Dieter Kurz (Chairman)
Dr. Mathias Kammüller
Roland Hamm[1]
Andreas Kopf[1]

[1] Employee representative
Status: September 2020

Group Management Report

Group Management Report

THE ZEISS GROUP

Company profile

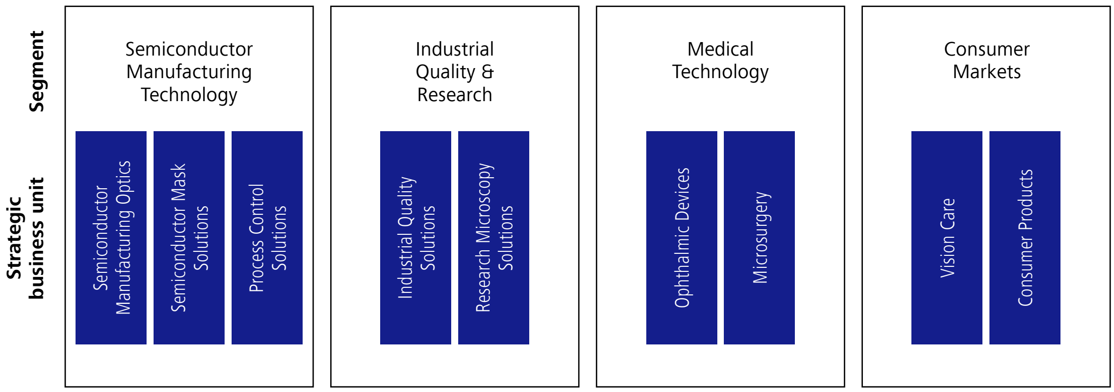
ZEISS is an internationally leading technology enterprise operating in the optics and optoelectronics industries. The ZEISS Group emerged from a workshop for precision mechanics and optics established by company founder Carl Zeiss in Jena (Thuringia) in 1846. Today, ZEISS is headquartered in Oberkochen (Baden-Württemberg).

The ZEISS Group is represented in nearly 50 countries and has some 60 sales and service locations, more than 30 manufacturing sites and 27 research and development centers around the globe.

Carl Zeiss AG is the strategic management holding company that manages the ZEISS Group. It develops the ZEISS Group's corporate business activities and portfolio and provides central management and service functions.

ZEISS comprises 4 segments: Semiconductor Manufacturing Technology, Industrial Quality & Research, Medical Technology and Consumer Markets. The ZEISS Group has a business portfolio that is classified into 9 strategic business units. These strategic business units are allocated to the respective segments.

Business portfolio



The sole owner of the company is the Carl Zeiss Foundation (Carl-Zeiss-Stiftung). As a company operating under the umbrella of the Carl Zeiss Foundation, ZEISS has been implementing the stipulations anchored in the Foundation statutes for over 130 years and constantly develops them further in the present context. Be it with regard to employees, societal and social engagement, the environment, products and value chain or integrity and compliance: Sustainability and business success are inextricably linked for ZEISS as a foundation company. Sustainable value added, which targets innovative solutions, contributes to a positive development in society and enables both long-term and profitable growth, thus making it a core component of the corporate strategy.

ZEISS aims to advance the world of optics and other related fields with its solutions. The ZEISS Group develops, produces and sells semiconductor manufacturing equipment, measuring technology, microscopes, medical technology, eyeglass lenses as well as camera and cine lenses, binoculars and planetarium technology.

Semiconductor Manufacturing Technology
With its product portfolio and globally leading know-how, the Semiconductor Manufacturing Technology segment covers a variety of key processes in the production of microchips. ZEISS develops and manufactures

products using semiconductor manufacturing technology, including lithography optics, photomask systems and process control solutions, key technologies for the manufacture of extremely fine circuit path structures on silicon wafers – the material from which the microchips are made. The technologies from ZEISS enable further miniaturization of semiconductor structures, making microchips smaller, more powerful, energy-efficient and cost-effective. The electronic equipment with which they are equipped fosters global progress in a variety of disciplines, including technology, electronics, communications, entertainment, mobility, energy and artificial intelligence.

Industrial Quality & Research
The products and solutions developed in the Industrial Quality & Research segment are focused on quality assurance in production, increasing productivity and visualizing and manipulating the tiniest of structures in the fields of science and research. The range of coordinate measuring machines, optical and multisensory systems, software solutions, comprehensive service offerings and innovative technologies, such as 3D X-ray measurement in quality assurance, are used in the automobile industry, aircraft construction and mechanical engineering as well as in the plastics industry and medical technology. In the fields of science and research, the segment also covers the entire spectrum of microscopy with light, ion, electron and X-ray microscopes. The products and solutions are used in the life sciences and materials research, as well as for education and in clinical practice.

Medical Technology
The Medical Technology segment develops, manufactures, markets and sells diagnostic and treatment systems, as well as implants and consumables for ophthalmology. The portfolio also includes visualization systems for neuro/ENT and spine surgery as well as for dentistry. Solutions for intraoperative radiotherapy supplement the product offering. The segment’s objective is to help drive progress in medicine and assist doctors all over the world in enhancing their patients' quality of life. Digital technologies with which the segment wants to shape the market for medical technology also play a role here. The segment’s activities are pooled primarily in the listed entity Carl Zeiss Meditec AG, in which Carl Zeiss AG holds a 59.1% stake.

Consumer Markets
The Consumer Markets segment operates in the areas of vision care, photography, cinematography, nature observation and sports optics. ZEISS develops, produces and sells solutions for the entire eyeglass value chain. Alongside ZEISS precision eyeglass lenses, this includes devices for eye examinations and vision testing, digital consultation and measurement applications as well as comprehensive services for eye care professionals. ZEISS is one of the world’s largest manufacturers of eyeglass lenses and offers a combined competence in eye and vision care. With its camera and cine lenses, binoculars, spotting scopes and sports optics, ZEISS offers discerning customers high-end products and applications for their hobbies and professional needs.

Strategy

The ZEISS mission statement is: “As the pioneer of science in optics, we continue to challenge the limits of our imagination. With our passion for excellence, we create value for our customers and inspire the world in new ways.” This statement encapsulates the ZEISS Group’s fundamental objectives: ZEISS aims to leverage its customer focus to consolidate and expand its position as a global technology leader.

ZEISS has a broad and balanced business portfolio focusing on the attractive future-oriented markets of optics, precision mechanics and optoelectronics. The objective of portfolio management is the sustainable business success of the ZEISS Group – this requires a systematic strategy geared to continuously enhancing value added.

The ZEISS Agenda 2020 clearly defines the strategic direction for the development of the ZEISS Group. In addition, it pools the key elements of the portfolio strategy and the individual segments. The 4 cornerstones of the ZEISS Agenda 2020 – CUSTOMER, COMPETITIVE, DIGITAL and TEAM – summarize what is necessary to successfully implement the strategy. The goal is to focus even more sharply on customers, to pay more consistent attention to competitiveness and to fully benefit from the possibilities of digitalization and the potential of the global Team ZEISS. The new ZEISS Agenda 2025 is being gradually rolled out across the whole company from October 2020.

To achieve its objectives, ZEISS relies on the commitment and expertise of its employees, its innovative strength, its culture of innovation and its strong brand.

Corporate management

The ZEISS Group is managed using a comprehensive system of indicators. For ZEISS, revenue growth and EBIT are the most important financial indicators. Other financial indicators are Economic Value Added (EVA®) and Free Cash Flow (FCF). These indicators define the balance between growth, profitability and financial strength as the basis for the company's sustainable development. Alongside these financial indicators, "innovation", "employees" and "sustainability" are important non-financial indicators.

REPORT ON ECONOMIC POSITION

Macroeconomic and segment-specific environment

Macroeconomic environment

In fiscal year 2019/20, an unpredictable recession in the global economy was caused by the COVID-19 pandemic. In many areas, the effects of the COVID-19 pandemic caused an abrupt drop in demand and production, followed by a gradual recovery. However, the various countries and particularly the sectors affected by this development are recovering in varying degrees and at different paces. Economies in industrialized countries and also rapidly developing economies are seeing a major negative impact from the effects of the pandemic. Of the large economies, China is likely to be the only one to record positive economic growth in 2020.

Segment-specific environment

Semiconductor Manufacturing Technology

The market environment of the Semiconductor Manufacturing Technology segment proved largely resilient against the economic effects of the COVID-19 pandemic in the reporting year. Independent of the global economy, revenue in the global semiconductor market grew slightly and there was a shift in business activities. While demand declined on the smartphone, automobile and industrial markets, revenue from online trade hit a record high. Private households bought and installed more electronics or used technologies as cloud solutions. This was due to the fact that many employees worldwide upgraded their office equipment at home in light of the pandemic. Chip manufacturers benefited from the many video conferences, greater demand for network computers and the expansion of the 5G mobile phone networks. They invested further in new technologies for chip manufacture. The high demand for semiconductor manufacturing equipment, especially for extreme ultraviolet (EUV) lithography systems, had a positive effect for ZEISS in fiscal year 2019/20.

Industrial Quality & Research
The market situation in the area of industrial quality assurance cooled off in fiscal year 2019/20. Reluctance to invest – intensified as a result of the COVID-19 pandemic – was felt in the traditional automobile and the associated supplier industries, mechanical engineering and the aerospace industry in particular. In contrast, demand from the medical technology customer segment was stable. Investments in alternative drive technologies were steady. Global research spending was more or less unchanged year on year. Positive impetus stemmed from central research institutions (Core Facilities).

Medical Technology
The market development for medical equipment and accessories is based on generally stable growth drivers. These include medical advances as well as megatrends such as demographic development as a result of increasing life expectancy and population growth. Growing per capita income is increasing demand for basic medical care in the rapidly developing economies. Solutions that increase the efficiency of diagnosis and treatment, improve the effectiveness of patient treatments and reduce the costs for the healthcare system are becoming more crucial in the face of rising health costs and patient numbers. A particular focus is on the intelligent use of diagnosis and treatment data. In addition, the increasing regulatory requirements, and their variance from one region to another, are a growing challenge in the context of product development and licensing. In fiscal year 2019/20, the COVID-19 pandemic has had a substantially negative impact on demand for medical technology products. The temporary restrictions on elective ophthalmic surgeries in many countries in particular have contributed to a short-lived adverse development in the earnings of a number of hospitals and surgery centers.

Consumer Markets
Global market growth in the vision care market remains stable. The rapid collapse caused by the lockdown measures designed to contain the COVID-19 pandemic and the associated closures of shops worldwide was followed by an equally fast recovery. The main growth drivers are increased purchasing power in emerging economies, the global rise in demand for vision care from an aging population, innovations in branded eyeglass lenses and digital customer service as well as the significant increase in short-sightedness (myopia). The global market for eyeglass lenses continues to be characterized by fierce price and competitive pressure and ongoing consolidation activities. After a positive start to the year, the market for cine lenses virtually ceased in fiscal year 2019/20 because almost all film productions worldwide were brought to an abrupt halt by the COVID-19 pandemic. From a long-term perspective, the uninterrupted demand for content will have a positive effect. By contrast, the market for camera lenses shrank significantly and irreversibly, mainly as a result of increasing smartphone photography. The markets for sports optics and nature observation grew slightly and recovered again quickly from the slump during lockdown.

Overall statement on the economic situation of the Group as of fiscal year end

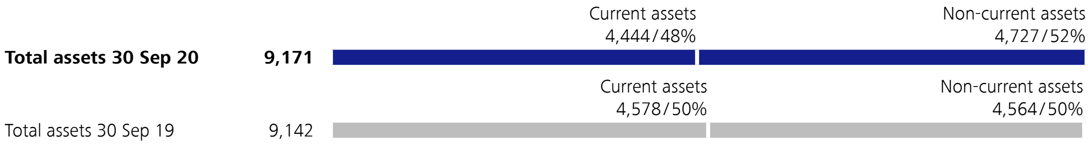
In fiscal year 2019/20, the ZEISS Group generated revenue of €6,297m (prior year: €6,428m) and a return on EBIT of 15% in a challenging economic environment caused by the COVID-19 pandemic.

The slight increase in revenue forecast in the prior year was not achieved, while the forecast return on EBIT of around 13% was exceeded.

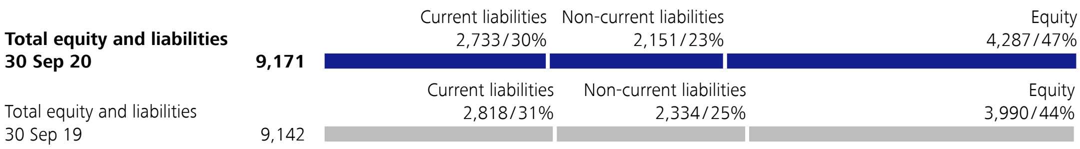
Net assets

Total assets increased by €29m to €9,171m (prior year: €9,142m).

Structure of the statement of financial position – assets in € m / as a % of total assets



Structure of the statement of financial position – equity and liabilities in € m / as a % of total equity and liabilities



Intangible assets

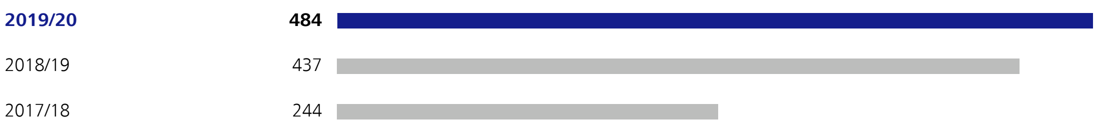
Intangible assets of €1,613m (prior year: €1,663m) mainly contain goodwill of €1,284m (prior year: €1,294m). The €50m decrease in intangible assets is primarily attributable to amortization and effects from foreign currency translation.

The impairment tests performed in the reporting period did not give rise to the need to recognize any impairment losses on goodwill.

Property, plant and equipment

In fiscal year 2019/20, ZEISS invested a total of €484m in property, plant and equipment (prior year: €437m), mainly in expansion and modernization measures relating to infrastructure, production plants and in furniture and fixtures. Depreciation in the reporting period amounted to €256m (prior year: €234m). Since fiscal year 2018/19, property, plant and equipment has included right-of-use assets recognized due to the application of IFRS 16 *Leases*.

Capital expenditures on property, plant and equipment in € m



Other non-current assets

Other non-current assets amounted to €551m (prior year: €489m) and mainly pertained to securities and fixed-term deposits, shares in non-consolidated subsidiaries, loans as well as assets for securing flextime credits via a contractual trust arrangement (CTA).

Working capital
Inventories came to €1,736m as of the reporting date (prior year: €1,622m). Current trade receivables decreased by 9% to €1,153m.

Other current assets amounted to €776m (prior year: €1,004m). The change mainly resulted from time deposits with a short-term investment horizon, which were lower than in the prior year.

Trade payables came to €420m as of the reporting date (prior year: €448m).

Current provisions came to €172m (prior year: €207m) and essentially comprise provisions for warranty obligations.

Accruals of €922m (prior year: €934m) mainly include personnel-related and sales-related obligations as well as outstanding invoices.

Other current liabilities of €785m (prior year: €861m) mainly contain advances received on account of orders and deferred income.

Increase in equity
Equity amounted to €4,287m as of the reporting date (prior year: €3,990m). The consolidated profit of €616m generated in the reporting period increased equity. Countereffects resulted from the differences arising from the currency translation without effect on income, which reduced equity by €100m, and from the dividends paid out of €228m.

The equity ratio was higher than the prior year at 47% (prior year: 44%).

Pension obligations
The financing of the pension obligations in Germany is structured for the most part in the form of a contractual trust arrangement (CTA). Capital to cover pension obligations toward employees is transferred to a dedicated trust, thus clearly separating the funds for operations from those for the pension obligations. This has increased the transparency and international comparability of the Group’s financial reporting. The legally independent trust invests the assets transferred to it on the basis of an appropriate long-term investment strategy. The pension obligations of the corresponding entities remain unchanged.

The CTA assets in Germany, which are separated from operating funds, amounted to €1,442m on the reporting date (prior year: €1,464m). The funded status of the pension obligations was 65% (prior year: 67%) for reasons relating to the cut-off date.

The Group also has pension obligations toward employees of foreign subsidiaries.

In accordance with IAS 19, the pension obligations reported in the statement of financial position match the actual obligations and therefore correspond to the present value of benefit obligations after deducting the fair value of plan assets as of the reporting date. Provisions for pensions are reported at an amount of €1,606m (prior year: €1,570m) in the consolidated statement of financial position. This is equivalent to 18% of total assets (prior year: 17%).

Financial liabilities
The financial liabilities of €648m (prior year: €767m) primarily contain promissory notes and liabilities from dividends and purchase price obligations, and lease liabilities. Among other things, the decrease stems from the repayment of promissory notes as well as the payment of purchase price obligations in connection with acquisitions.

Financial position

The financial position was mainly shaped by the good consolidated profit in the reporting year as well as payments for capital expenditures on property, plant and equipment and dividend payments.

The cash outflows from investing activities were covered in full by the cash inflows from operating activities.

Cash flows from operating activities were primarily determined by the profit for the year and improved to €783m in the reporting year (prior year: €770m). In addition, there were allocations to plan assets in Germany and abroad of €33m (prior year: €148m).

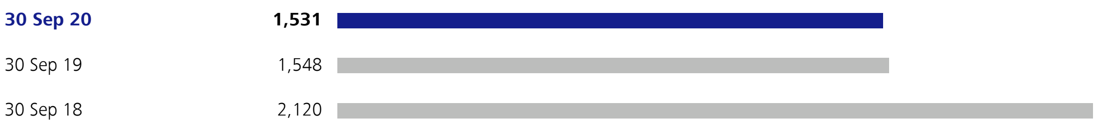
Cash flows from investing activities came to minus €339m in the reporting period (prior year: minus €635m). Payments for capital expenditures on intangible assets and property, plant and equipment increased from €406m to €458m in fiscal year 2019/20. The payments in connection with the acquisition of shares in companies of €95m (prior year: €730m) are counterbalanced by net cash inflow of financial assets of €187m (prior year: €483m).

Cash flows from financing activities came to minus €313m in fiscal year 2019/20 (prior year: minus €234m) and contain payments made for the repayment of loans and lease liabilities. Dividends of €200m (prior year: €164m) were paid out in the reporting year.

Liquidity

Cash and cash equivalents[1] came to €1,654m as of the reporting date (prior year: €1,740m). These contrast with loans payable of €123m (prior year: €192m). Net liquidity[2] thus came to €1,531m (prior year: €1,548m).

Net liquidity in € m



In addition, the ZEISS Group has access to a revolving credit facility with a total volume of €500m that was concluded between Carl Zeiss AG and a syndicate of banks to finance its business operations. This is repayable in full on 2 August 2025 with an option to extend it by 1 year. The revolving credit facility serves as a strategic liquidity reserve for the ZEISS Group and was not utilized in the reporting period.

Goals and principles of financial management

ZEISS has a global financial management system that incorporates all subsidiaries and is coordinated centrally at Group level. The primary objective is to secure and effectively manage the liquidity of the ZEISS Group. In addition, ZEISS strives to continuously improve its financial strength and minimize financial risks. Investments are made principally in securities from issuers with good credit ratings. ZEISS is mainly funded through the operations of the segments, with which the financial activities and strategic orientation are aligned. Even against the background of any other effects from the COVID-19 pandemic, the ZEISS Group currently has sufficient cash and cash equivalents and lines of credit to finance its operational and strategic objectives.

[1] Cash and cash equivalents plus securities and fixed-term deposits
[2] Cash and cash equivalents less loans payable

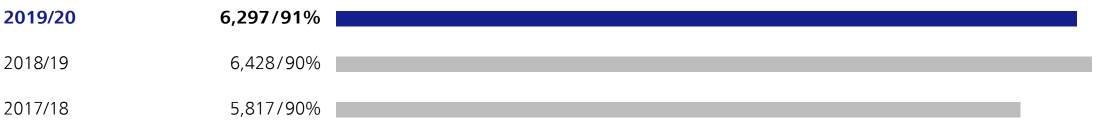
Results of operations

The income statement has been prepared using the cost of sales method that is widely used internationally.

Given the COVID-19 pandemic, the results of operations are characterized by an overall robust business development at Group level and a return on EBIT of 15%.

In the reporting period, the ZEISS Group’s revenue decreased by 2% from €6,428m in the prior year to €6,297m, with the share of international revenue of 91% remaining unchanged at the level seen in prior years. The slight revenue increase forecast in the prior year was not achieved as a result of the COVID-19 pandemic.

Revenue in € m / international share as a %



The ZEISS Group’s incoming orders increased by 4% (adjusted for currency effects: 4%) in the reporting period to €6,814m (prior year: €6,575m). Incoming orders in the instrument segments changed by a total of minus 6% (adjusted for currency effects: minus 5%). The Semiconductor Manufacturing Technology segment recorded an increase in incoming orders of 28% (adjusted for currency effects: 28%) compared to the prior year.

Consolidated revenue by segment

Revenue by segment	**2019/20**	2018/19	Change compared to prior year as a %	
	€ m	€ m		Adjusted for currency effects
Semiconductor Manufacturing Technology	1,833	1,634	12	12
Industrial Quality & Research	1,640	1,742	-6	-5
Medical Technology	1,647	1,760	-6	-6
Consumer Markets	1,099	1,211	-9	-8
Other	78	81	-4	-5
ZEISS Group	**6,297**	**6,428**	**-2**	**-1**

Semiconductor Manufacturing Technology

The Semiconductor Manufacturing Technology segment generated revenue of €1,833m. That is equivalent to an increase of 12% (adjusted for currency effects: 12%) compared to the prior year (€1,634m).

All strategic business units of the Semiconductor Manufacturing Technology segment contributed to this new revenue record, with each generating increases compared to the prior year. The high customer demand for deep ultraviolet (DUV) and EUV lithography systems also continued in fiscal year 2019/20. DUV lithography systems are still a key revenue driver in the segment, also because of demand from the expansion of the semiconductor industry in China. EUV lithography is considered the key technology of the future in the semiconductor industry to enable further miniaturization of microchips. For chip manufacturers, it is also the technology that distinguishes them from the competition.

A major focus of the business activities of the segment and its strategic partner ASML is the extremely challenging development and ramp-up of the next generation of EUV lithography. This future-oriented technology, which has already entered production, should enable the semiconductor industry to produce even more powerful microchips at a lower cost over the next decade.

In the segment's other business with optical components and modules for lithography lasers, demand was still good in fiscal year 2019/20. The market acceptance of EUV lithography resulted in more orders from high-end inspection optics.

The sale of solutions used in the metrology and inspection of photomasks contributed to the segment's growth. The business with products for wafer inspection and process controls was also successful.

As of 30 September 2020, the segment had 4,335 employees worldwide (prior year: 3,979).

Industrial Quality & Research

The Industrial Quality & Research segment generated revenue of €1,640m. That is equivalent to a change of minus 6% (adjusted for currency effects: minus 5%) compared to the prior year (€1,742m).

Demand for products in the Industrial Quality & Research segment was mixed during the reporting period. Revenue and demand declined significantly in the area of industrial quality assurance, despite benefiting from good incoming orders compared to the competition in the first half of the year. In fiscal year 2019/20, the business in the area of optical measuring technology and computer tomography as well as in the software and service business were particularly successful. The decrease in the second half of the reporting period was caused by the global COVID-19 pandemic and the associated lockdowns in many regions in spring 2020 as well as by the automobile industry's shift towards alternative drive technologies. The APAC region saw a quick return to normal business after the outbreak of the COVID-19 pandemic, making the decrease on the prior year comparatively moderate. The business situation in the EMEA region also stabilized towards the end of the second half of the fiscal year. By contrast, the Americas region was highly volatile.

Business with microscopy systems for research and science declined slightly compared to the prior year, likewise as a result of the global COVID-19 pandemic. While the EMEA and Americas regions decreased year on year, the APAC region slightly exceeded the prior-year level as the situation here stabilized noticeably in the second half of the year. Demand for X-ray microscopes developed well. However, year-on-year development in the areas of light and electron microscopy was slightly in decline – although this noticeably and clearly stabilized in the second half of the fiscal year, especially in the high-end business. The service business was on a par with the prior year. The expansion of remote service offerings also made it possible to leverage the installed base, which has grown steadily over the past years, for profitable growth in the service business.

As of 30 September 2020, the segment had 7,173 employees worldwide (prior year: 7,417).

Medical Technology

The Medical Technology segment generated revenue of €1,647m. That is equivalent to a change of minus 6% (adjusted for currency effects: minus 6%) compared to the prior year (€1,760m). Within the segment, the Ophthalmic Devices and Microsurgery strategic business units both saw decreases, primarily attributable to the effects of the COVID-19 pandemic.

The Ophthalmic Devices strategic business unit, which offers products and solutions to diagnose and treat eye diseases as well as systems and consumables, mainly for cataract, retina and refractive surgery, sustained a moderate decrease in revenue overall. A relatively stable development of revenue from consumables prevented a greater drop in revenue. All in all, the Microsurgery strategic business unit, which offers visualization solutions for minimally invasive surgical treatments, recorded a slight decrease in revenue for fiscal year 2019/20. In particular, business developments were negatively affected by the global restrictions on sales activity resulting from the measures designed to contain the COVID-19 pandemic as well as a general reluctance to invest exhibited at many hospitals while the pandemic was peaking in spring 2020.

The APAC region reported a stable development thanks to good contributions to growth from China and South Korea. In the Americas region, the US business in particular fell below the strong prior-year figure in the second half of the year as a result of the COVID-19 pandemic. The largest revenue losses in the EMEA region were sustained in some core markets such as the UK and France, but also the Middle East and North Africa. Northern Europe and the German-speaking countries saw a comparatively stable development.

As of 30 September 2020, the segment had 5,461 employees worldwide (prior year: 5,254).

Due to different bases of consolidation, the figures for the Medical Technology segment deviate from those published for Carl Zeiss Meditec AG.

Consumer Markets

The Consumer Markets segment generated revenue of €1,099m in fiscal year 2019/20. That is equivalent to a change of minus 9% (adjusted for currency effects: minus 8%) compared to the prior year (€1,211m).

In the months without business restrictions due to the pandemic, growth in the Vision Care strategic business unit was generated in all regions in particular with ZEISS branded eyeglass lenses, innovations and digital offerings. Its customer-oriented strategic positioning also aided new customer acquisition. Nevertheless, the temporary closure of eyeglass retailers in all markets caused a drop in revenue and profits, which was only partially compensated for after the restrictions due to the pandemic were lifted to very different degrees in the various regions. The USA, as the largest market, continued to be a challenge, mainly as a result of market entry barriers. Here, revenue with independent eye care professionals is growing. The business in the Consumer Products strategic business unit was characterized by fierce competition in all categories and high price pressure in some. The continuing slump in the market for camera lenses was managed by implementing restructuring measures. The collapse of the hunting and nature market in spring and early summer 2020 as a result of the pandemic has been overcome. The halting of film productions worldwide in the reporting period continues to affect the business with cine lenses.

As of 30 September 2020, the segment had 11,267 employees worldwide (prior year: 10,760).

Consolidated revenue by region

Revenue by region and cooperation partners	**2019/20**	2018/19	Change compared to prior year as a %	
	€ m	€ m		Adjusted for currency effects
EMEA	1,746	1,881	-7	-7
» thereof Germany	588	626	-6	-6
Americas	1,180	1,347	-12	-11
APAC	1,738	1,716	1	2
Cooperation partners	1,633	1,484	10	10
ZEISS Group	**6,297**	**6,428**	**-2**	**-1**

In the economic region of Europe/Middle East/Africa (EMEA), ZEISS reported a change in revenue in the reporting period of minus 7% (adjusted for currency effects: minus 7%) to €1,746m (prior year: €1,881m), with revenue in Germany decreasing by 6% to €588m (prior year: €626m).

Revenue in the Americas region came to €1,180m, which is a change of minus 12% (adjusted for currency effects: minus 11%) compared to the prior year (€1,347m).

Revenue in the Asia-Pacific region (APAC) increased by 1% compared to the prior year (adjusted for currency effects: 2%) to €1,738m (prior year: €1,716m).

Direct business with supra-regional cooperation partners increased by 10% to €1,633m in fiscal year 2019/20 (prior year: €1,484m), due largely to capacity expansions in the semiconductor industry, in particular in the area of EUV lithography.

Functional costs

Cost of sales decreased by €35m in comparison to the prior year and came to €2,892m (prior year: €2,927m). Gross profit fell by €96m from €3,501m to €3,405m in the reporting year. The gross margin was unchanged at 54% (prior year: 54%).

Sales and marketing expenses in fiscal year 2019/20 amounted to €1,248m (prior year: €1,338m) and were below the prior year at 20% of revenue (prior year: 21%) The change mainly relates to the instrument business. General administrative expenses stood at €413m (prior year: €397m) and were slightly above the prior-year level accounting for 7% of revenue (prior year: 6%).

Research and development expenses recognized in the consolidated income statement came to €812m in the reporting year (prior year: €705m).

	2019/20	2018/19
	€ m	€ m
Research and development expenses according to consolidated income statement	812	705
Government and third-party grants	117	126
Capitalized development costs (IAS 38)	13	23
Research and development expenses before subsidies and IAS 38	**942**	**854**

Research and development expenses before subsidies and capitalized development costs (IAS 38) totaled €942m (prior year: €854m). Representing 15% of revenue and above the prior-year level (13%), this figure testifies to the ZEISS Group's continued strong focus on innovation.

Development of earnings

Earnings before interest, taxes, depreciation and amortization (EBITDA) amounted to €1,260m in the reporting year (prior year: €1,382m).

Earnings before interest and taxes (EBIT) of €922m (prior year: €1,063m) with an EBIT margin of 15% (prior year: 17%) were generated in the reporting period. The EBIT margin projected in the prior year was exceeded.

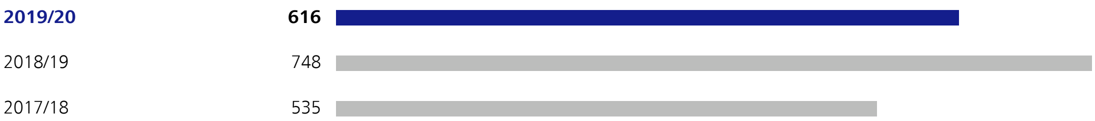
	2019/20	2018/19	2017/18
	€ m	€ m	€ m
EBITDA	1,260	1,382	1,014
» EBITDA margin as a %	20	21	17
EBIT	922	1,063	772
» EBIT margin as a %	15	17	13

The financial result improved by €51m compared to the prior year to minus €41m (prior year: minus €92m). The interest result changed by €2m to minus €43m (prior year: minus €45m). The other financial result changed by €49m to €2m (prior year: minus €47m). This is essentially attributable to measurement effects in connection with foreign currency hedges and financial liabilities in the reporting year.

The tax expense for fiscal year 2019/20 totaled €266m (prior year: €224m), which resulted in a group tax rate of 30% (prior year: 23%). The lower tax rate in the prior year is mainly the result of the deferred tax assets recognized through profit or loss on statement of financial position items and on unused tax losses in the prior year, reducing the tax expense accordingly.

ZEISS thus achieved a consolidated profit of €616m (prior year: €748m).

Consolidated profit/loss in € m



Other financial indicators

Other financial indicators are Economic Value Added (EVA®)[3] and Free Cash Flow (FCF)[4].

ZEISS measures the value added generated using the Economic Value Added (EVA®) indicator. This is the internal measure of the company's success. In fiscal year 2019/20, EVA® amounted to €444m (prior year: €630m)[5]. ZEISS therefore once again achieved considerable value added.

The Free Cash Flow (FCF) indicator used for internal control amounted to €518m in the reporting year (prior year: €806m).

[3] Calculation: EVA® = operating profit (EBIT) after taxes plus amortization of intangible assets resulting from purchase price allocations less cost of capital. Cost of capital is the average capital employed multiplied by the cost of capital rate. Capital employed is the committed business assets adjusted for amortization of intangible assets resulting from purchase price allocations ("gross" asset base). The internal interest rate used to determine the weighted average of cost of capital ranges between 6.5% and 10%, depending on the business involved

[4] Calculation: Free Cash Flow (FCF) = EBIT ± changes in trade receivables ± changes in inventories ± changes in provisions (excluding provisions for pensions) ± changes in current accruals ± changes in trade payables ± changes in advances received ± changes in lease liabilities ± changes in other assets and liabilities - capital expenditures on intangible assets and property, plant and equipment + amortization and depreciation of intangible assets and property, plant and equipment

[5] The prior-year figure was adjusted to the new calculation

NON-FINANCIAL KEY PERFORMANCE INDICATORS

Sustainability

At www.zeiss.com/responsibility, a separate non-financial report as defined by Secs. 315b, 315c in conjunction with Secs. 289c to 289e German Commercial Code (HGB) will also be available for the ZEISS Group from 29 January 2021.

Environment

ZEISS attaches great importance to the sustainable and economical use of resources as well as to protecting the climate and environment. Sustainability is a key consideration – from the development and manufacture of its products, through to packaging, shipment and disposal. To this end, the ZEISS Group has defined corresponding requirements for its units and for its suppliers. Furthermore, ZEISS has set clear targets for reducing energy consumption, carbon emissions, water consumption and waste. ZEISS does justice to its identity as a foundation company by taking concrete measures to reduce carbon emissions and promote climate protection, such as the planned transition to carbon neutrality with regard to energy procurement or new guidelines for low-carbon and carbon-neutral travel.

Product responsibility

At ZEISS, product safety starts in the development, goes hand in hand with the procurement and production process and is a key aspect for customers when using the products and for the after sales service. The product safety warranty is subject to a range of statutory requirements for the development, manufacture, approval and sale of products. Defective products can result in serious damage, primarily for the user, but also to the company's reputation. For ZEISS product responsibility does not only mean that products are innovative, effective and safe. ZEISS also makes sure to use commodities and materials that are harmless to human health and the environment, as well as to produce as few effluents and emissions and as little waste as possible during the manufacture and use of its products. ZEISS aspires to rigorously implement all product safety laws relating to product use and disposal.

Supplier management

Procurement is a key process for the long-term success of the ZEISS Group due to the high contribution to added value in the supply chain. All around the globe, the local procurement organizations purchase materials used both for production and for non-production from local and international suppliers. The company demands that its new and existing principal suppliers recognize the Code of Conduct of the Responsible Business Alliance (RBA) and implement ongoing measures to meet these requirements. The internationally recognized Code of Conduct is based on the UN Guiding Principles for Business and Human Rights and was derived from international labor and environmental standards. ZEISS uses a risk-based approach to monitor suppliers and implement sustainability standards.

Societal and social engagement

Millions of people around the world are threatened by preventable blindness or cannot access medical care. ZEISS wants to set new standards in the healthcare sector with solutions in Vision Care and Medical Technology and thus promote medical progress. The aim is to contribute to an improved quality of life for patients in all areas in which ZEISS is active. ZEISS has been cooperating for years with non-profit organizations and given donations in money and in kind to ensure that medical care is available to all people in developing and emerging countries and that their medical professionals receive training.

In addition, ZEISS assumes responsibility and an active role in society. The ZEISS Group supports educational measures and scientific projects and institutions as well as selected social and cultural initiatives and facilities at its locations. Professional associations involved in nature conservation activities and educational programs for children and adults are also supported.

Dividends distributed to the Carl Zeiss Foundation are used within the framework of its aims to promote, in particular, scientific, engineering and mathematical studies in research and teaching.

Employees

Highly qualified, dedicated and motivated employees are the foundation for the long-term success of the ZEISS Group. The Group endeavors to conserve this foundation going forward. The total headcount of the ZEISS Group increased as of 30 September 2020 by 941 worldwide to 32,201 (prior year: 31,260). The largest increase in the number of employees was seen in the APAC region, which accounted for almost half of the total increase.

Diversity is a prerequisite for innovation, which is why it is actively supported and strengthened by ZEISS. Around 57% (prior year: 57%) of the ZEISS workforce – equivalent to 18,509 employees (prior year: 17,950) – work outside Germany.

Education and training is a high priority at ZEISS. As of the reporting date, the ZEISS Group had 473 trainees and students of universities offering dual degree programs (prior year: 454). The further training of employees and leadership development are further areas of focus for ZEISS. Employees can select from a large number of internal and external courses that are available through the global digital learning platform. In addition, ZEISS supports off-the-job training and personnel development measures.

ZEISS promotes occupational health and safety through comprehensive measures. In addition to healthcare management, employees are given advice from occupational health and safety professionals and company doctors. The focus is on the health, motivation and performance of employees. The central fields of activity are workplace design, healthcare competence development among employees and accident prevention.

Also during the COVID-19 pandemic, ZEISS attached great importance to protecting the health of its employees. The company therefore implemented various measures aimed at helping to protect its workforce as best as possible. These included expanding the opportunities for working remotely, modifying the shift systems to avoid contact between shifts and switching to exclusively virtual meetings. ZEISS provided protective masks and hand sanitizer to its employees in the departments. These measures supported social distancing and the containment and slowdown of the spread of the pandemic at ZEISS and in society.

ZEISS used various measures in the specific units and locations to safeguard jobs in response to the changed order situation and the associated lower utilization of many employees as a result of the COVID-19 pandemic. Measures included lending employees to other Group entities, using up overtime or – as a final resort – enacting a reduced working hours policy in Germany or similar programs in other countries. The exception here was the Semiconductor Manufacturing Technology segment, which experienced no decrease in demand or orders.

ZEISS once again allowed employees to share in its business development this year. For the unusual fiscal year 2019/20 caused by the COVID-19 pandemic, employees in Germany received a thank-you bonus of up to a net amount of €1,500 for their work in this more challenging situation. Some companies outside Germany have country-specific arrangements under which employees also participated in the profit for fiscal year 2019/20.

Innovation

Optical technologies are key technologies of the future. ZEISS therefore invests in innovations, which are the foundation for further growth of the ZEISS Group. Innovation is part of ZEISS' strategy and is firmly anchored in its corporate identity. On the one hand, ZEISS carries out traditional research and development activities. On the other, ZEISS encourages all employees to suggest innovative ideas to the company and thus contribute to its business success.

ZEISS employees are constantly working on developing new products and improving existing products, in order to help customers achieve long-lasting success. In addition, the manufacturing and processing procedures are continuously improved so as to remain competitive. Areas of application, business models and processes are always being evaluated. To do this, ZEISS leverages its almost 175 years of experience.

Innovation management

ZEISS uses Group-wide innovation management to ensure that its ongoing and planned activities always meet its customers' needs. ZEISS uses various tools here – for instance, the company evaluates each research and development project using a standardized process and incorporates the findings made into current and future projects.

Employees can submit their ideas for improvement via the company-wide suggestion scheme. The objective is to simplify processes in a cost-efficient way, so as to raise ZEISS' competitiveness in the long term. Ideas are converted into bonus points that can be exchanged for cash or non-cash rewards.

In fiscal year 2019/20, expenses for research and development made up 13% of revenue (prior year: 11%). The ZEISS Group's research and development departments have 3,910 employees (prior year: 3,641 employees), or 12% of the workforce, working on new solutions and technologies for the optics and optoelectronics industries and digital business models.

As of the reporting date, ZEISS held about 9,800 patents worldwide (prior year: 9,400) and applied for new patents for approx. 580 inventions (prior year: approx. 500).

ZEISS Ventures

The strategic business units of the ZEISS Group operate in attractive target markets with long-term growth perspectives. Their focus is supported by megatrends. These megatrends should open up significant possibilities for ZEISS, primarily for future growth.

ZEISS Ventures, a unit of the ZEISS Group, uses these possibilities by making investments and managing a portfolio of start-ups. ZEISS Ventures focuses on possibilities that lie between or beyond the activities of the strategic business units or that would potentially be a disruptive innovation. The aim is to invest in start-ups and form partnerships to establish long-term and sustainable businesses.

The portfolio of ZEISS Ventures contains a range of partnerships and investments. For instance, tooz technologies works with the application potential and future of data glasses for everyday use. Karlsruhe-based company Nanoscribe works in the area of 3D printing designed for the nano and microfabrication of high-precision parts. The inhouse smart glass technology of the ZEISS MicroOptics unit has made it possible to utilize transparent glass or plastic in a whole range of different ways. The see-through surfaces with integrated, invisible micro-structured optics permit a range of different applications, thus enabling innovations like gesture recognition or eye tracking without any visible optical systems. Use in smart homes is also conceivable.

Strategic partnerships and cooperations

The closer networking between business and science allows ZEISS – as an active promoter of science – to make even more intensive use of synergy effects.

In October 2019, ZEISS and Kyoto University announced that they were intensifying their cooperation and had signed a new strategic research agreement. As part of the agreement, the partners have opened the ZEISS iCeMS Innovation Core – a collaborative laboratory at Kyoto University's Institute for Integrated Cell-Material Sciences.

In December 2019, ZEISS opened the ZEISS Innovation Hub @ KIT in Karlsruhe. ZEISS wants the hub to house high-tech and digital start-ups, as well as its own innovation activities. More opportunities to shape the new technologies of the future should open up at KIT as an innovation hotspot in dialog with representatives from science and business.

Digital transformation
Together with Carl Zeiss Digital Innovation GmbH (formerly Saxonia Systems AG), which was acquired in full in March 2020, the ZEISS Digital Innovation Partners unit aims to shape and drive forward ZEISS's digital business transformation with the segments. The acquisition of Carl Zeiss Digital Innovation GmbH, which now operates under the name ZEISS Digital Innovation, is particularly important in this context, as it enables ZEISS to systematically expand its software expertise further and secure the know-how and resources to realize key strategic digital projects.

RISK AND OPPORTUNITY REPORT

Groups with global operations face a large number of entrepreneurial risks and opportunities that can have a sustained impact on planned business performance. The assessment of opportunities and risks and the conscientious handling of entrepreneurial uncertainty are an important part of corporate governance and sustainable operating policies at ZEISS. The following statements in the risk and opportunity report refer to fiscal year 2020/21.

Risk management system

The central risk management system at ZEISS stipulates uniform rules and processes to detect, assess and manage risks at an early stage. The key objective is to exploit business opportunities and manage the associated risks.

Risk management coordinators apply the central policies and procedures. The management of the segments and strategic business units detects, manages and reports on operating and strategic risks. Overall responsibility lies with the Executive Board, which regularly assesses possible scenarios, risks and opportunities and their management at Group level. While the Executive Board examines the appropriateness of the risk management system, the Supervisory Board's Audit Committee monitors the effectiveness of the risk management system.

Internal control system
The internal control system of ZEISS is based on the COSO Enterprise Risk Management Model (COSO ERM model). It integrates organizational, process-related and technical measures to ensure proper operating activities and correct reporting. This enterprise risk management system of the ZEISS Group covers strategic and operational risks, i.e. it does not merely monitor financial risks. For central processes, there are defined key risks and defined control mechanisms, which are evaluated with regard to their effectiveness.

The Executive Board ensures that an adequate and effective internal control system is in place and that it is continuously enhanced. The Supervisory Board's Audit Committee monitors the effectiveness of the internal audit function, risk management and the internal control system as well as the financial reporting process.

Strategic and operational risks

ZEISS systematically analyzes and evaluates risks. Special emphasis is placed on potential economic effects and on probability of occurrence. Risks are thus quantified and classified, and the risk-bearing capacity is identified. Due to the broad portfolio and the ZEISS Group's global presence, the strategic and operational risks are highly diversified.

General risks and opportunities
ZEISS regularly checks for risks and opportunities that can arise from changes in markets and within the supplier and customer environment, including consolidation within the industry, new technologies and competitors, and lower entry barriers for alternative vendors. Risks and opportunities arising from general demands made of companies by society and opportunities due to megatrends, such as digitalization, sustainability and demographic change are also assessed at regular intervals. In addition, ZEISS analyzes economic, legal and political developments or economic sanctions in the economic regions relevant for the ZEISS Group and evaluates possible scenarios. In the event of a crisis, an existing crisis team coordinated measures to minimize the negative effects. International orientation, sustainable operating policies and balanced portfolio help spread the risk. However, the introduction of trade barriers, customs duties and increasing economic uncertainties, government intervention and restrictions as well as protectionism could make conditions for ZEISS more difficult.

Innovation risks and opportunities
The success and reputation of ZEISS are heavily dependent on the development of innovative products and solutions. New technical possibilities, trends and changing customer requirements can give rise to abrupt technology shifts and make new business models necessary. Current findings from science and research accelerate this development. In order to take advantage of these opportunities at an early stage and to minimize the probability of occurrence and the economic impact of the risk, ZEISS cooperates with customers and research institutes, engages in development partnerships including participations and makes targeted technology acquisitions. ZEISS seeks and engages in the targeted promotion of opportunities to extend the existing portfolio with market-shaping innovations. ZEISS Ventures, a business unit of the ZEISS Group, is invested in the development and commercialization of new business models. The ZEISS Digital Innovations Partners and the newly acquired ZEISS Digital Innovation unit support the segments in exploiting the opportunities offered by digitalization for customers and partners. The economic impact and probability of occurrence inherent in digitalization risks are therefore both low.

Personnel risks and opportunities
Demographic change and the evolving requirements of digitalization, as well as the differing training and qualifications standards around the globe, are creating challenges when it comes to filling job vacancies. Increasing demands on potential employers are becoming noticeable. These give rise to moderate economic risks. ZEISS counters these by positioning itself as a target-group-oriented employer alongside a global recruitment strategy and a consistent recruitment process, which leads to a low probability of occurrence. The ZEISS Group offers a broad spectrum of opportunities for development to attract professionals and managers and to retain them in the long term. In addition, a variety of location-based initiatives and social benefits are offered, including health promotion programs and models for reconciling work and family life.

During the COVID-19 pandemic, ZEISS set up a crisis team with a global reach. Steered by the CEO and CFO of the ZEISS Group, it is responsible for the entire crisis management, coordinates all measures including communication and works closely together with the local teams around the world. In order to ensure the safety of employees in the COVID-19 pandemic, attention increasingly turned towards working remotely. Opportunities from the new ways of working mainly related to diversity and attractiveness for current and future employees. ZEISS countered the negative effects, such as the blurring of the gap between personal and professional lives, with regulations on working times, new models for working time accounts, individual consultations and enhanced employee management. The probability of occurrence and the economic impact of personnel risks are therefore estimated to be low.

Risks and opportunities in procurement and production
ZEISS ensures compliance with national and international standards, laws and regulations by means of an integrated management system that addresses the issues of quality, environmental protection, occupational health and safety, and energy management.

The COVID-19 pandemic is a moderate risk for the ZEISS supply chain. Existing disruptions to the supply chain are addressed in the task force. In the area of production, ZEISS counters the moderate risk of partial disruptions to production with corresponding hygiene concepts, such as a multiple-shift model and the strict separation of the individual shifts. As a result, the effects on business activities are currently low.

The risk of a hard Brexit may have an effect on business in the UK as well as on the financial market, customs duties and taxes. A task force is in place to address these risks. The anticipated effects on the supply chain are higher processing costs and longer transportation times. However, ZEISS assesses the effects as being low and the probability of occurrence as moderate.

With regard to the procurement of energy such as electricity and gas ZEISS is taking a more carbon neutral approach. This results in a moderate risk from rising procurement prices for green electricity and compensation for the purchase of CO_2 certificates. There is still a moderate risk on account of increasing energy prices, potential pricing of emission allowances as well as industry-dependent capacity bottlenecks in the supplier chain.

The regulatory requirements for commodities and materials, the growing uncertainty in international trade, unilateral technology restrictions, the growing complexity of purchased parts and the limited number of suppliers (single source) for some technologies give rise to higher costs and a moderate procurement risk. To mitigate this risk, ZEISS continuously adapts its strategic supplier pool as part of product group management. ZEISS conducts systematic audits for these suppliers that also include social standards and environmental aspects. ZEISS classifies the risk of breaches and associated reputational damage in the area of environmental health and safety in the supply chain as low as its partners are monitored regularly and the probability of breaches is low on account of the characteristics of the ZEISS supply chain.

Risks and opportunities of information technology (IT)
ZEISS constantly examines and utilizes the opportunities of digitalization in order to offer customers additional and enhanced services. At the same time, dependence on the IT infrastructure is constantly increasing. During the COVID-19 pandemic, ZEISS focused squarely on remote working models, also to ensure the safety of all employees. The ZEISS Group therefore permanently optimizes its existing IT systems and structures to ensure greater protection, security and availability. Some ZEISS IT systems are operated by external partners. For these service providers, high technical and legal standards regarding the hardware and software deployed, process monitoring and data security have been defined and contractually agreed. ZEISS continuously monitors the implementation of and compliance with these standards. The probability of IT risks occurring is estimated to be low. However, the economic impact, for example from cyber attacks, can be considerable.

Risks and opportunities from acquisitions and investments
Acquisitions or investments offer ZEISS the opportunity to better meet customers' needs. Assessments are made as to how to enlarge the competencies and technology portfolio or increase access to the regional markets. They also help to open up markets faster and accelerate processes. ZEISS systematically checks the associated risks and opportunities. Due diligence reviews aimed at assessing the business development that

can be expected and reducing the economic risks and the likelihood of their occurrence are a key element prior to closing transactions. The economic impact and probability of occurrence are therefore low.

The use of digital technologies is a core component of ZEISS' future strategy. The acquisition of Saxonia Systems AG, a specialist for individual software development, in fiscal year 2019/20 has strengthened ZEISS' digital expertise. The new ZEISS Digital Innovation unit will support the ZEISS segments in digital projects and aims to play a leading role in innovation. The risks and probability of occurrence are therefore classified as low.

Goodwill totaling €1,284m from acquisitions is shown in the consolidated statement of financial position. This goodwill is subject to regular impairment tests. It cannot be ruled out that impairment losses on goodwill may need to be recognized on account of changes in economic conditions, business models or technologies.

Legal risks, patents and intellectual property
ZEISS safeguards its technologies and products through a comprehensive intellectual property rights strategy. If patent and brand rights are infringed by third parties, ZEISS takes legal steps in order to counter the associated high economic risk. The probability of such cases occurring is low.

When developing new products and technologies, ZEISS systematically checks whether the rights of a third party could be affected, develops non-protected solutions if necessary, and acquires the requisite licenses and rights, or seeks other solutions by legal contract. Due to the complexity of possible industrial rights and the increased activity of institutional patent assertion entities, there is a moderate risk of litigation with a moderate economic risk. ZEISS makes appropriate provision in the statement of financial position for any claims arising from unclear patent situations.

There is no pending litigation that poses any risk to the continued existence of ZEISS at present.

Financial risks and opportunities
The liquidity risk of the ZEISS Group represents the risk that Carl Zeiss AG or its subsidiaries may not be able to meet their financial obligations (for example, to repay financial liabilities or make interest payments). ZEISS has sufficient liquidity reserves in the form of cash and lines of credit. An appropriate and conservative investment strategy is in place with a focus on security and short-term availability. In addition, ZEISS ensures that the investments are broadly diversified.

Credit risk stems from an adverse development in the economic conditions of the company's borrowers or counterparties. On the one hand, this gives rise to the risk of default, in full or in part, on contractually agreed payments or performance and, on the other, potentially a need to recognize credit-risk-related impairment losses on financial instruments. These risks may increase as a result of the COVID-19 pandemic. Risks of default are limited by choosing counterparties with good credit ratings given by external rating agencies. Concentration risks are limited and managed by generally conducting transactions with various banks.

The COVID-19 pandemic generally exposes ZEISS to a greater risk of a default on customer receivables or insolvencies at customers. This risk is being monitored. ZEISS intensified its receivables management in order to minimize the risk. The amount of receivables in relation to revenue decreased by 1% in the reporting year. However, a significant increase in defaults has not yet been identified.

On account of its global orientation, the ZEISS Group is exposed to financial market price risks in its operations and the financial results and cash flows reported. This includes currency and interest rate risks. The associated opportunities and risks of the ZEISS Group are managed centrally. ZEISS uses defined risk strategies to minimize risks resulting from changes in exchange rates, interest rates or the value of assets. The ZEISS Group exclusively uses derivative financial instruments to hedge interest rates and currency risks. For this purpose, it enters into standard currency options and forward exchange contracts. These cover the underlying goods and services transactions of Group entities and non-derivative financial transactions (underlyings).

Overall, the ZEISS Group’s financial risks are classified as low with a low probability of occurrence.

In the context of pension obligations, risks could also arise from the further increasing life expectancy of the beneficiaries, from general interest rate developments and from the obligation to regularly adjust the amount of the pensions paid. As capital market interest rates fall, the required pension fund allocations increase. The existing pension agreements could give rise to risks with regard to equity which could in turn restrict scope for strategic action.

ZEISS has transferred the funds to cover pension obligations toward active employees in Germany to a contractual trust arrangement (CTA). The investment strategy is based on long-term commitments.

In principle, further financial risks and risks relating to the statement of financial position can arise from changes to accounting standards.

Market risks and opportunities

The broad and balanced ZEISS business portfolio ensures the stability of the ZEISS Group, particularly in times of crisis, and helps spread the risk during the current COVID-19 pandemic. The search for opportunities to expand the portfolio horizontally or vertically results in further market opportunities and a broader risk diversification. The economic risk arising from the differing development of the segments is classified as moderate with a moderate probability of occurrence. In order to further reduce both the probability of occurrence and the economic risk, ZEISS runs programs designed to increase competitiveness and resilience (ability to withstand crises) in certain areas.

The global pandemic, macroeconomic and political uncertainties and volatility of the semiconductor sector entails risks and opportunities for the Semiconductor Manufacturing Technology segment, which ZEISS adapts to in a flexible manner. In particular, the market acceptance of EUV lithography that has been achieved offers considerable growth opportunities while at the same time presenting high inherent technological risks for the segment when developing and manufacturing the next generation of EUV lithography systems. ZEISS therefore collaborates closely with its strategic partner ASML and other development partners in order to jointly steer the next generation of this future-oriented technology to success as well.

The Industrial Quality & Research segment is exposed to risks arising from the dependence on the capital goods industry, particularly the aerospace, automobile and the associated supplier industries. These industries – especially the automobile industry – are undergoing a structural transformation, which has been intensified by the global outbreak of the COVID-19 pandemic. The further development of these industries with regard to their technology roadmap (electromobility) and willingness to invest also harbor risks for the segment. This segment is also exposed to risks from the general development of the international research expenditure in the academic sector. These risks are reduced by continuously developing new application areas, through an innovative product portfolio as well as by stringently expanding the segment's business with customer services and by using digital sales and service options. The segment is therefore improving its product portfolio to tap into new market and customer potential, also by integrating digital solutions. Opportunities arise for Industrial Quality & Research from the more intense research in the area of life sciences and pharmaceutical science worldwide as well as still from increasingly networked production processes (Smart Production), from the unrelenting pursuit of increased productivity as well as from its positioning as a one-stop provider and the expansion of local value chains in the key economic regions.

In the Medical Technology segment, political and regulatory decisions can have a long-term effect on the reimbursement of costs for medical treatment and thus on willingness to invest in new treatment systems. Cuts in public budgets and government interventions (lockdown, prioritizing treatments) can have similar consequences. Refractive surgery is an elective procedure that patients pay for themselves. Demand therefore hinges on the general economic development and access to doctors, especially during a lockdown. Furthermore, new product launches can be delayed or even rejected due to changes in product approval requirements. In principle, patients may be harmed due to malfunctions or misuse of medical devices or may be injured due to improper handling of personal data. This can result in substantial litigation costs and can cause long-term damage to the company's reputation. The steadily growing world population and rising life expectancy, which is likely to lead to increased demand for medical technology, are giving rise to growth opportunities for the Medical Technology segment. The rapidly developing economies offer further potential for growth due to the growing demand for basic medical care.

The Consumer Markets segment is exposed to risks arising from the ongoing problem of lockdowns imposed because of the pandemic as well as fundamental changes in the market, ongoing consolidation in the industry, the change in consumer behavior and the horizontal and vertical integration of large competitors. Other risks include persistent pressure on prices, the potential market entry of new providers previously unknown in the sector, as well as competitors who use alternative sales channels or deploy new technologies to establish their own production capacity. There is also the long-term risk of substitutes to traditional eyeglass lenses being developed. Adjusting the market to the pandemic situation and substitution effects can also lead to risks from a change in consumer behavior. This could give rise to challenges at manufacturing sites and potentially the portfolio. The licensing business in the market for cine, camera and smartphone lenses depends on the attractiveness of the ZEISS brand for partners of the segment. ZEISS counters this risk by means of a consistent brand strategy. There are also opportunities inherent in the technological and systematic digitalization in vision care, the growing global demand to correct visual impairment and, in connection with this, innovative, individualized branded eyeglass lenses, the optimization of the value chain, new industry and technology trends, as well as new digital business and service models.

Overall statement on the risks faced by the company

When this report was prepared, no risks or combination of risks were discernible that could jeopardize the ability of the ZEISS Group to continue as a going concern. The risks in the overall assessment are higher than in the prior year. This is mainly due to the effects of the COVID-19 pandemic as well as the structural transformation in the automobile industry. The Executive Board believes that the ZEISS Group has a solid foundation for further development and uses a systematic strategy and planning process to provide the resources required in order to leverage the opportunities and overcome the risks.

REPORT ON EXPECTED DEVELOPMENTS

Future conditions of business development

At present, economists expect a significant recovery in global economic growth for the coming year, albeit from a much lower starting point because of the recession. The global economy is forecast to almost return to the pre-crisis level in the coming reporting year or calendar year. Strong economic growth is once again anticipated in China.

However, these forecasts are subject to great uncertainty. It cannot currently be predicted how the pandemic will continue to develop, what effects the very high infection figures will have and from when a safe and effective vaccination will be available worldwide. The higher indebtedness in the course of the pandemic may result in a reluctance to invest. Government support schemes in many economies are currently still disguising the magnitude of the crisis.

Furthermore, the rising tensions between the US and China entail a greater risk for the free movement of goods and thus on global economic developments. If the Brexit negotiations between the EU and the UK do not culminate in a trade agreement, then there may be trade restrictions. The low oil price could negatively impact on investment activity of the public sector in the oil-producing countries.

Expected development of the markets and industries relevant for ZEISS

Semiconductor Manufacturing Technology

Despite an uncertain global economic situation and more difficult business conditions, the Semiconductor Manufacturing Technology segment still finds itself in an intact market environment. ZEISS sees growth drivers in global digitalization and technologies, in particular 5G connectivity, autonomous driving, artificial intelligence and more powerful data centers. A good level of incoming orders and order backlog in all the segment’s units is a healthy foundation for fiscal year 2020/21. However, in the medium term, it remains to be seen how the global economy will develop as a result of the pandemic and what the impact for the semiconductor industry and its suppliers will be.

Industrial Quality & Research

ZEISS expects business development in Industrial Quality & Research in a competitive environment that is developing at different speeds to be largely stable. As the economic situation in the APAC region, especially in China, has mostly stabilized and a continued gradual stabilization is expected in the EMEA region, ZEISS anticipates a positive development in these regions for fiscal year 2020/21. By contrast, growth in the Americas region is forecast to be rather more moderate on account of the ongoing volatile situation. Overall however, ZEISS anticipates growth through forward-looking projects, for example in additive manufacturing and electromobility. Additional positive impetus is expected for the industrial application of microscopes and for public subsidies for research, particularly in the life sciences.

Medical Technology

Medical devices and medical equipment will remain an attractive business field in the healthcare sector. ZEISS expects that growth drivers in the market for the Medical Technology segment, such as demographic trends and population growth as well as rising demand from the rapidly developing economies, will continue to exist. They will be supplemented by new technologies and applications, particularly in the area of minimally invasive surgery, which will contribute to the growth of the industry. From the customer’s perspective, a better cost-benefit balance for medical technology products as well as increasing digitalization and systems integration are playing a key role in day-to-day work in doctors’ offices and hospitals. Growth in the low to mid single-digit percentage range is forecast for the medical technology industry as a whole for the coming years. In general, the Medical Technology segment expects further growth for fiscal year 2020/21. However, the forecasts assume that restrictions to contain the COVID-19 pandemic, particularly limitations on elective surgeries, will not occur again on a significant scale.

Consumer Markets
For business in the Consumer Markets segment, ZEISS expects that global growth for vision care, film, hunting and nature observation will remain stable, notwithstanding any pandemic-related slumps, and that consumer behavior will change through digital offerings. Major drivers of the continued positive development of the vision care market are demographic trends, the significant increase in short-sightedness, rising income in the rapidly developing economies, increasing health awareness and growing demand for individualized branded eyeglass lenses for the modern lifestyle. ZEISS expects the advancing digitalization across the entire value chain of vision care – from consumer habits, in the eye care business, in production, lens fitting and eyeglass manufacturing as well as logistics, marketing, sales and customer service – to result in major changes. ZEISS expects the Consumer Products strategic business unit to face even tougher competition. Sales of camera lenses have irreversibly shrunk to a niche market around the world due to consumers switching to smartphone photography. Despite growth in the market for cine lenses, increased competitive pressure is expected due to the entry of new competitors from Asia. ZEISS anticipates that the market for hunting and nature observation will grow slightly and steadily in the long term.

Future research and development

The ZEISS Group makes significant investments in research and development projects. Efficient and targeted development processes play a central role here. The company is looking for new technologies and market trends to then be able to establish new solutions on the market. In order to achieve this, ZEISS includes regional market circumstances and customer needs in the development process from the very beginning. The aim for fiscal year 2020/21 is to achieve a ratio of R&D to revenue on the same high level of the prior years.

Future employee development

In order to also be able to work innovatively and make a profit in the future, qualified and highly motivated employees are indispensable for the company's success. In addition, it is extremely important to invest in the further development of existing employees and employ well-trained professionals and managers in the future. For the coming periods, the company therefore expects an increase in the headcount that correlates with the business development and makes future investments possible.

Overall statement on anticipated development

Based on the strategic focus and positioning of the segments in their respective markets, which ZEISS established and expanded in the past, mainly through its innovative strength, ZEISS plans a slight increase in revenue with an EBIT margin of around 10% for fiscal year 2020/21. Furthermore, ZEISS forecasts Free Cash Flow and Economic Value Added (EVA®) to be below the level of the current fiscal year in the low triple-digit million range.

When these consolidated financial statements for 2019/20 were issued for publication, there was still uncertainty as to the development of the COVID-19 pandemic. Depending on how each country handles the situation, potential levels of lockdown and the associated economic implications may lead to mixed effects in the respective segments. However, the Executive Board of Carl Zeiss AG expects the well-balanced portfolio to be able to compensate for the downturns in the individual segments. At the time of publication, there was no indication that the forecast is not attainable.

Consolidated Financial Statements

Consolidated Income Statement
for the period from 1 October 2019 to 30 September 2020

	Note	2019/20	2018/19
		€ k	€ k
Revenue	7	**6,296,542**	**6,428,055**
Cost of sales		2,891,929	2,926,860
Gross profit		**3,404,613**	**3,501,195**
» Sales and marketing expenses		1,248,335	1,337,569
» General administrative expenses		412,934	397,237
» Research and development expenses		812,286	705,248
» Other income	8	9,041	6,606
» Other expenses	9	18,126	4,413
Earnings before interest and taxes (EBIT)		**921,973**	**1,063,334**
» Interest income	10	14,148	11,283
» Interest expenses	10	57,204	55,889
» Other financial result	10	2,312	-47,203
Financial result		**-40,744**	**-91,809**
Earnings before taxes (EBT)		**881,229**	**971,525**
» Income taxes	11	265,517	223,990
Consolidated profit/loss		**615,712**	**747,535**
» thereof profit/loss attributable to non-controlling interests		186,536	171,849
» thereof profit/loss attributable to the stockholder of the parent company		429,176	575,686

Consolidated Statement of Comprehensive Income
for the period from 1 October 2019 to 30 September 2020

	Note	2019/20	2018/19
		€ k	€ k
Consolidated profit/loss		**615,712**	**747,535**
Other comprehensive income that may be reclassified to consolidated profit/loss in subsequent periods:			
» Currency translation differences		-100,292	61,891
» Gains/losses from financial assets, at fair value through other comprehensive income		292	1,383
» Deferred income tax		-144	-399
Other comprehensive income that will not be reclassified to consolidated profit/loss in subsequent periods:			
» Remeasurement of defined benefit plans		-6,365	-555,638
» Deferred income tax		1,408	162,636
Other comprehensive income (after taxes)		**-105,101**	**-330,127**
Total comprehensive income		**510,611**	**417,408**
» thereof profit/loss attributable to non-controlling interests		177,861	143,000
» thereof profit/loss attributable to the stockholder of the parent company		332,750	274,408

Consolidated Statement of Financial Position
as of 30 September 2020

Assets	Note	30 Sep 20	30 Sep 19
		€ k	€ k
Non-current assets			
» Intangible assets	12	1,612,645	1,663,095
» Property, plant and equipment	13	1,622,823	1,466,429
» Trade and other receivables	24	57,693	46,271
» Other non-current financial assets	14	541,985	477,580
» Other non-current non-financial assets	15	8,586	11,213
» Deferred taxes	11	883,177	899,661
		4,726,909	**4,564,249**
Current assets			
» Inventories	16	1,736,252	1,622,356
» Trade and other receivables	24	1,152,781	1,263,398
» Other current financial assets	14	640,564	853,373
» Income tax refund claims		13,438	38,292
» Other current non-financial assets	15	135,723	150,774
» Cash and cash equivalents	17	764,839	650,033
		4,443,597	**4,578,226**
		9,170,506	**9,142,475**

Equity and liabilities	Note	30 Sep 20	30 Sep 19*
		€ k	€ k
Equity	18		
» Issued capital		120,000	120,000
» Capital reserves		52,770	52,770
» Retained earnings		4,442,908	4,087,107
» Other reserves		-1,059,182	-975,610
» Non-controlling interests		730,859	705,708
		4,287,355	**3,989,975**
Non-current liabilities			
» Provisions for pensions and similar obligations	19	1,605,834	1,569,813
» Other non-current provisions	20	102,124	121,423
» Non-current financial liabilities	22	338,461	519,750
» Other non-current non-financial liabilities	23	32,919	31,847
» Deferred taxes	11	70,930	91,572
		2,150,268	**2,334,405**
Current liabilities			
» Current provisions	20	172,332	206,662
» Current accruals	21	921,747	934,119
» Current financial liabilities	22	309,732	247,623
» Trade payables	24	419,618	447,727
» Current income tax payables		124,849	121,114
» Other current non-financial liabilities	23	784,605	860,850
		2,732,883	**2,818,095**
		9,170,506	**9,142,475**

* Accruals are reported separately and uncertain tax liabilities as income tax payables. The prior-year figures have been restated accordingly. For more information, please refer to note 6 of the notes to the consolidated financial statements.

Consolidated Statement of Changes in Equity

for fiscal year 2019/20[1]

	Issued capital	Capital reserves	Retained earnings	Other reserves: from currency translation	Other reserves: from the remeasure-ment of defined benefit plans	Other reserves: from financial assets, at fair value through other comprehen-sive income	Equity attributable to the stockholder of the parent company	Non-con-trolling interests	Consolidated equity
	€ k	€ k	€ k	€ k	€ k	€ k	€ k	€ k	€ k
1 October 2018	**120,000**	**52,770**	**3,562,915**	**1,696**	**-674,320**	**-1,708**	**3,061,353**	**682,745**	**3,744,098**
» Consolidated profit/loss	0	0	575,686	0	0	0	575,686	171,849	747,535
» Other comprehensive income	0	0	0	54,713	-356,975	984	-301,278	-28,849	-330,127
Total comprehensive income	**0**	**0**	**575,686**	**54,713**	**-356,975**	**984**	**274,408**	**143,000**	**417,408**
Dividends	0	0	-54,328	0	0	0	-54,328	-120,411	-174,739
Changes in basis of consolida-tion	0	0	-1,382	0	0	0	-1,382	0	-1,382
Other changes	0	0	4,216	0	0	0	4,216	374	4,590
30 September 2019	**120,000**	**52,770**	**4,087,107**	**56,409**	**-1,031,295**	**-724**	**3,284,267**	**705,708**	**3,989,975**
» Consolidated profit/loss	0	0	429,176	0	0	0	429,176	186,536	615,712
» Other comprehensive income	0	0	0	-91,846	-4,967	387	-96,426	-8,675	-105,101
Total comprehensive income	**0**	**0**	**429,176**	**-91,846**	**-4,967**	**387**	**332,750**	**177,861**	**510,611**
Dividends	0	0	-75,000	0	0	0	-75,000	-152,710	-227,710
Changes in basis of consolida-tion	0	0	1,625	12,854	0	0	14,479	0	14,479
30 September 2020	**120,000**	**52,770**	**4,442,908**	**-22,583**	**-1,036,262**	**-337**	**3,556,496**	**730,859**	**4,287,355**

[1] For more information on the changes in equity, please refer to note 18 of the notes to the consolidated financial statements.

Consolidated Statement of Cash Flows
for the period from 1 October 2019 to 30 September 2020[1]

	2019/20	2018/19
	€ k	€ k
Consolidated profit/loss	615,712	747,535
Amortization, depreciation and impairment net of reversals of impairment losses	337,881	319,146
Other non-cash income and expenses	13,374	4,211
Changes in provisions for pensions and similar obligations	67,079	12,139
Amounts allocated to the contractual trust arrangement and other plan assets outside Germany	-32,982	-147,606
Changes in other provisions	-47,797	-121,445
Gain/loss from the disposal of intangible assets and property, plant and equipment	112	-154
Loss from the deconsolidation of Carl Zeiss Vision Venezuela Industria Optica C.A., San Diego (Venezuela)	13,581	0
Gain/loss from the disposal of current securities	13	-267
Changes in inventories	-155,335	-171,388
Changes in trade receivables	55,199	-26,574
Changes in deferred taxes	-11,892	-74,661
Changes in other assets	-5,007	-21,543
Changes in trade payables	-19,925	29,896
Changes in current accruals	5,135	141,498
Changes in advances received	-47,066	47,334
Changes in other liabilities	-4,819	31,966
Cash flows from operating activities	**783,263**	**770,087**
Proceeds from the disposal of intangible assets and property, plant and equipment	27,237	19,118
Purchases of intangible assets and property, plant and equipment	-458,397	-406,158
Changes in financial assets	186,699	482,869
Acquisition of subsidiaries, net of cash and cash equivalents received	-94,659	-730,424
Cash flows from investing activities	**-339,120**	**-634,595**
Dividend paid to Carl Zeiss Foundation (Carl-Zeiss-Stiftung)	-75,000	-54,328
Dividends paid to non-controlling interests	-124,579	-109,875
Repayment of loans	-61,780	-24,780
Changes in other bank liabilities	-779	1,645
Repayment of lease liabilities	-51,216	-46,680
Cash flows from financing activities	**-313,354**	**-234,018**
Changes in cash and cash equivalents	130,789	-98,526
Changes in cash and cash equivalents from exchange rate movements and changes in the basis of consolidation	-15,983	19,260
Cash and cash equivalents as of 1 October	650,033	729,299
Cash and cash equivalents as of 30 September	**764,839**	**650,033**

Additional information on the statement of cash flows	2019/20	2018/19
	€ k	€ k
Payments of		
» Income taxes	271,767	264,098
» Interest	14,686	26,551
» Dividends	199,579	164,203
Proceeds from		
» Income taxes	23,150	25,492
» Interest	10,719	11,097
» Dividends	1,558	1,839

[1] For more information on the statement of cash flows, please refer to note 25 of the notes to the consolidated financial statements.

Notes to the Consolidated Financial Statements
for fiscal year 2019/20

BASIS OF PRESENTATION

1 General principles

Carl Zeiss AG is a non-listed stock corporation incorporated under German law and parent company of the ZEISS Group, headquartered at Carl-Zeiss-Strasse 22, 73447 Oberkochen (Germany), and has been entered in the commercial register of Ulm district court (HRB 501555). The Carl Zeiss Foundation (Carl Zeiss Stiftung), Heidenheim an der Brenz and Jena, is the sole stockholder of Carl Zeiss AG.

ZEISS is an internationally leading technology enterprise operating in the optics and optoelectronics industries. The ZEISS Group develops, produces and sells semiconductor manufacturing equipment, measuring technology, microscopes, medical technology, eyeglass lenses as well as camera and cine lenses, binoculars and planetarium technology. ZEISS comprises 4 segments: Semiconductor Manufacturing Technology, Industrial Quality & Research, Medical Technology and Consumer Markets.

Carl Zeiss AG exercises the option afforded by Sec. 315e (3) German Commercial Code (HGB) which, based on the member state option set out in the EU Regulation dated 19 July 2002, also allows companies not geared to the capital market to issue their consolidated financial statements for publication in accordance with International Financial Reporting Standards with exempting effect as defined by this regulation.

The accompanying consolidated financial statements of Carl Zeiss AG, comprising the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of financial position, the consolidated statement of changes in equity, the consolidated statement of cash flows and the notes to the consolidated financial statements, have been prepared in accordance with International Financial Reporting Standards (IFRSs) and the interpretations of the IFRS Interpretations Committee, as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) HGB. All pronouncements of the International Accounting Standards Board (IASB) whose adoption is mandatory have been considered.

The consolidated financial statements are presented in euros (€). Unless otherwise specified, all amounts are stated in thousands of euros (€ k) and rounded in line with common business practice.

In order to improve clarity and transparency, individual items have been combined in the consolidated statement of financial position and the consolidated income statement and broken down and explained separately in these notes.

The consolidated financial statements and group management report prepared as of 30 September 2020 were authorized for issue to the Supervisory Board by the Executive Board on 9 December 2020.

2 Basis of consolidation

The consolidated financial statements comprise the financial statements of Carl Zeiss AG as well as the financial statements of all material subsidiaries, including structured entities, that are directly or indirectly controlled by Carl Zeiss AG. Control exists when the Group can directly or indirectly exercise power over the investee, is exposed to variable returns on its involvement with the investee and has the ability to use its power over the investee to affect the amount of those returns. Subsidiaries that, on account of their lack or low level of business activity, are immaterial for the presentation of a true and fair view of the Group’s net assets, financial position and results of operations, either individually or in their totality, are generally included in the consolidated financial statements at cost.

The consolidated financial statements contain 39 (prior year: 36) fully consolidated German entities (including Carl Zeiss AG) and 116 (prior year: 112) fully consolidated entities in other countries. The entities are generally included in the consolidated financial statements from the date on which control is obtained.

A special fund is included in the consolidated financial statements as a structured entity because the fund activities are prescribed by the investment strategy defined by Carl Zeiss Financial Services GmbH. Carl Zeiss Financial Services GmbH is solely entitled to the earnings generated by the fund.

The entities included in consolidation and shareholdings are all contained in the list of shareholdings in accordance with Sec. 313 (2) HGB.

The number of fully consolidated entities changed as follows in the reporting period:

	Germany	Other countries	**Total**
1 October 2019	36	112	148
Disposals in the reporting period	0	2	2
Additions in the reporting period	3	6	9
30 September 2020	**39**	**116**	**155**

Disposals from the basis of consolidation
The following entities were no longer included in the basis of consolidation in the reporting period:
» Sola Holdings Ireland Limited, Wexford (Ireland)
(liquidated on 26 May 2020)
» Carl Zeiss Vision Venezuela Industria Optica C.A., San Diego (Venezuela)
(resolution to liquidate the entity without operations passed on 30 September 2020)
The disposals from the basis of consolidation did not have any significant impact on the net assets, financial position and results of operations of the ZEISS Group. The disposal of Carl Zeiss Vision Venezuela Industria Optica C.A., San Diego (Venezuela), from the basis of consolidation resulted in other expenses of €13.6m due to the recycling of changes in equity from currency translation previously recognized in other comprehensive income of €12.9m as well as the disposal of goodwill of €0.7m.

Additions to the basis of consolidation
The following entities were included in the consolidated financial statements for the first time:
» Carl Zeiss d.o.o., Zagreb (Croatia)
(from 1 October 2019)
» Carl Zeiss Instruments S.R.L., Bucharest (Romania)
(from 1 October 2019)
» Carl Zeiss Technika Kft., Budapest (Hungary)
(from 1 October 2019)
» Carl Zeiss MultiSEM GmbH, Oberkochen
(from 2 October 2019)
» Carl Zeiss IQS Deutschland GmbH, Oberkochen
(from 16 June 2020)
» Carl Zeiss Microscopy Deutschland GmbH, Oberkochen
(from 19 June 2020)
» Carl Zeiss Meditec Portugal Unipessoal Lda., Lisbon (Portugal)
(from 1 July 2020)
» Photono Oy, Helsinki (Finland)
(from 1 July 2020)
» Carl Zeiss Meditec USA, Inc., Dublin (USA)
(from 22 July 2020)

The additions to the basis of consolidation did not have any significant impact on the net assets, financial position and results of operations of the ZEISS Group.

Acquisition of fully consolidated entities in fiscal year 2019/20

Photono Oy, Helsinki (Finland)
Under an agreement dated and effective as of 1 July 2020, Carl Zeiss Meditec AG, Jena, acquired 20% of the shares in Photono Oy, Helsinki (Finland) ("Photono"). It was also contractually agreed that Carl Zeiss Meditec AG can purchase additional shares up to 100% in Photono in several stages in the next 3 years. The remaining 80% of the shares can also be purchased based on options or also in stages at any time and is not subject to any additional conditions. If Carl Zeiss Meditec AG does not exercise the first stage to purchase shares directly after this (first stage option) by the end of calendar year 2020, all other purchase options expire. Due to the fact that, from today's perspective, full acquisition is possible at any time and would be advantageous at present for Carl Zeiss Meditec AG, Photono has already been fully consolidated with 100% of the shares in the current fiscal year and treated as a business combination.

Photono is an entity specializing in devices to diagnose glaucoma. The acquisition serves to strengthen the technology position and product portfolio of glaucoma preventive measures of the ZEISS Group.

The provisional purchase price of €14.0m comprises a payment made upon acquisition of 20% of the shares for €2.0m as well as €12.0m from options for 80% of the shares to be purchased in the future in several tranches. As of the date of acquisition, the ZEISS Group assumed a discounted expected value of €10.4m for the options and recorded this in the current and non-current financial liabilities (based on the assumption that the existing options are exercised in stages).

At the time of publishing the consolidated financial statements of Carl Zeiss AG as of 30 September 2020, the purchase price had not yet been allocated to the assets and liabilities of the acquired entity because there was still some information outstanding about the assets and liabilities. The preliminary goodwill amounted to €12.3m.

Acquisition of fully consolidated entities in fiscal year 2018/19

GOM GmbH, Braunschweig
Under an agreement dated 9 April 2019, Carl Zeiss IQR GmbH, Oberkochen, acquired 100% of the shares in GOM GmbH, Braunschweig ("GOM").

GOM develops, produces and distributes software, machines and systems for industrial and automated 3D coordinate measuring technology and 3D testing. By acquiring the shares in a leading supplier of hardware and software for automated 3D coordinate measuring technology, Carl ZEISS expands its industrial measuring technology and quality control portfolio in the Industrial Quality & Research segment. GOM's offers leading solutions for surface digitalization which will allow ZEISS to build its strength in this area. The aim of the move is to join forces to further advance this position as a leader in technology, especially in the area of optical digitization systems.

The purchase price allocation in accordance with IFRS 3 was performed in fiscal year 2018/19. The purchase price for 100% of the shares was €668.3m.

Carl Zeiss Meditec Cataract Technology, Inc. (formerly IanTECH, Inc.), Reno (USA)
On 22 October 2018, Carl Zeiss Meditec, Inc., Dublin (USA), signed an agreement to acquire 100% of the shares in IanTECH, Inc., Reno (USA). The acquisition took place on 14 December 2018. With effect on the same day, the company was renamed Carl Zeiss Meditec Cataract Technology, Inc. ("CZM Cataract").

CZM Cataract specializes in technical solutions for microinvasive cataract surgery. The acquisition serves to strengthen the technology position and cataract surgery product portfolio of the Medical Technology segment.

The purchase price allocation in accordance with IFRS 3 was performed in fiscal year 2018/19. The purchase price comprised a fixed component (including an escrow amount) and performance-based components, which reward the achievement of defined revenue and development targets. Some of the components include milestones for successfully completing clinical trials, obtaining approval and achieving a defined cost of goods sold projection. Earn-out components were also arranged for when fixed revenue targets are met.

As of 30 September 2020, the Group revalued the obligation for the performance-based components. On the one hand, approval for a major product of CZM Cataract was obtained ahead of schedule in August 2020. €25.2m was paid for this approval milestone in August 2020. On the other hand, clinical trials are delayed, particularly as a result of the COVID-19 pandemic and can no longer be completed within the agreed performance period. This delay means that the product's market launch is in turn delayed and the business plan postponed accordingly. This means that the milestone to achieve a defined cost of goods sold projection and the revenue-based components of the purchase price are expected to be included in the payment in a lower amount. The net effect from these matters of €23.1m was recorded in the other financial result.

Furthermore, the cost of capital was adjusted for measurement at the currently lower rate as of the reporting date. This resulted in an effect of €16.0m, which was recorded in the interest expense along with the current €9.6m from unwinding the discount.

The purchase price liability totals €78.1m as of the reporting date. This breaks down into a residual payment of the approval milestone of €8.5m made at the beginning of October 2020, the performance-based components for achieving a defined cost of goods sold projection and the earn-out components for the fixed revenue targets of €69.6m.

Changes to shares in subsidiaries currently under control
In fiscal year 2019/20, the following changes were recorded to shares in subsidiaries currently under control:

In the reporting year, Carl Zeiss Industrielle Messtechnik GmbH, Oberkochen, acquired the remaining 30% of Bosello High Technology S.r.l., Cassano Magnago (Italy), for a purchase price of €29.4m, plus a dividend recognized as a purchase price payment of €6.9m, increasing its share in capital from 70% to 100%. As reciprocal put and call options with identical terms and conditions were in place for this 30% of the shares, the non-controlling interests were considered to have been acquired and were accounted for as a financial liability using the anticipated acquisition method.

3 Consolidation principles

The consolidated financial statements are based on the financial statements of the subsidiaries included in the Group as of 30 September 2020, which have been prepared according to uniform accounting policies.

Business combinations are accounted for using the purchase method pursuant to IFRS 3 *Business Combinations*.

The identifiable assets acquired and liabilities assumed in a business combination are measured at their fair values as of the acquisition date regardless of the extent of any non-controlling interests. Non-controlling interests are measured either at the fair value (full goodwill method) or the proportionate share of fair value of the assets acquired and liabilities assumed (partial goodwill method).

The cost of the interests acquired is offset against the Group's proportionate share in the subsidiary's net assets measured at fair value. Any acquisition-related costs incurred are expensed. Any excess of cost over the Group's interest in the net fair value remaining after offsetting is recognized as goodwill under intangible assets. Any excess of the Group's interest in the net fair value over cost is recognized through profit or loss. For business combinations prior to 14 May 2002, the option set forth in IFRS 1.18 in connection with IFRS 1.C1 was exercised by including the previous GAAP accounting for these business combinations in the consolidated financial statements in accordance with IFRSs. Transactions under common control are accounted for by rolling forward the carrying amount. Changes to the investment ratio in a subsidiary which do not lead to a loss of control are treated as transactions between equity providers that do not affect income.

The profit or loss of the subsidiaries acquired in the reporting period is included in the consolidated income statement based on their group affiliation, i.e. from the date on which the Group obtains control.

A subsidiary is deconsolidated on the date on which Carl Zeiss AG loses control over the entity.

The shares in net assets that are attributable to non-controlling interests are reported under non-controlling interests within consolidated equity.

If reciprocal put and call options with the same terms and conditions are agreed in a business combination for the remaining non-controlling interests, an anticipated purchase of these shares is assumed. The same applies to purchase options that can be exercised at any time if their exercise would be advantageous at the current time. As such, no non-controlling interests are recognized. Instead, the conditional purchase price for these shares is reported as a financial liability at fair value.

Intercompany receivables and liabilities between consolidated entities are netted.

Intercompany profits from intercompany trade are eliminated.

The income tax implications are considered in the course of consolidation by recognizing deferred taxes.

Internal revenue and other intercompany income are offset against the corresponding expenses in the consolidated income statement.

Significant companies where the Group is able, directly or indirectly, to significantly influence financial and operating policy decisions (associates), or directly or indirectly shares control (joint ventures), are accounted for using the equity method. Associates and joint ventures that are immaterial are generally carried at cost.

When using the equity method in accordance with IAS 28 *Investments in Associates and Joint Ventures*, the shares are initially recognized at cost in the statement of financial position and subsequently measured at amortized cost to reflect changes in the Group's share of the equity (net assets) after the acquisition date and impairment losses.

4 Summarized financial information of material subsidiaries with non-controlling interests

The summarized financial information presented in the following corresponds to the financial information in the published consolidated financial statements of Carl Zeiss Meditec AG, Jena. The share of non-controlling interests in Carl Zeiss Meditec AG amounts to 40.9%.

	2019/20	2018/19
	€ k	€ k
Revenue	1,335,452	1,459,321
Consolidated profit/loss	123,421	160,579
Other comprehensive income	-31,683	-5,048
Total comprehensive income	91,738	155,531

	30 Sep 20	30 Sep 19
	€ k	€ k
Non-current assets	720,534	717,800
Current assets	1,289,507	1,304,329
Assets held for sale	3,245	0
Non-current liabilities	265,144	265,573
Current liabilities	297,584	339,600
Equity	1,450,558	1,416,956

	2019/20	2018/19
	€ k	€ k
Cash flows from operating activities	178,527	219,634
Cash flows from investing activities	-71,947	-145,846
Cash flows from financing activities	-122,961	-58,637
Changes in cash and cash equivalents from exchange rate movements and changes in the basis of consolidation	-1,056	810
Changes in cash and cash equivalents	-17,437	15,961

	2019/20	2018/19
	€ k	€ k
Consolidated profit/loss attributable to non-controlling interests	50,479	65,677
Total comprehensive income attributable to non-controlling interests	37,521	63,612
Dividends paid to non-controlling interests	23,756	20,101
Equity attributable to non-controlling interests	593,278	579,535

The partnership between the Semiconductor Manufacturing Technology segment and ASML Holding N.V., Veldhoven (Netherlands), was intensified further in fiscal year 2016/17. In connection with this, ASML acquired 24.9% of the shares in Carl Zeiss SMT Holding GmbH & Co. KG and thus participated financially in the business of the Semiconductor Manufacturing Technology segment.

The summarized financial information (IFRS) for Carl Zeiss SMT Holding GmbH & Co. KG and Carl Zeiss SMT GmbH breaks down as follows:

	Carl Zeiss SMT Holding GmbH & Co. KG		Carl Zeiss SMT GmbH	
	30 Sep 20	30 Sep 19	**30 Sep 20**	30 Sep 19
	€ k	€ k	€ k	€ k
Non-current assets	44,988	44,622	464,039	431,531
Current assets	641,555	607,445	1,547,853	1,567,053
Non-current liabilities	2,547	1,589	274,457	257,393
Current liabilities	634,231	600,995	1,645,588	1,682,025
Equity	49,765	49,482	91,847	59,166
Other comprehensive income	-34	-287	-1,466	-92,291
Revenue	3,315	2,024	1,808,550	1,618,327
Profit/loss for the year	514,830	498,767	34,147	44,794

5 Currency translation

The consolidated financial statements are presented in euros. In the annual financial statements of those entities included in consolidation, transactions in foreign currencies are translated at the relevant exchange rate prevailing on the date of the transaction. Monetary items in foreign currencies are revalued at the mean closing rate, with exchange rate gains and losses being recognized in the consolidated income statement under financial result.

Financial statements denominated in foreign currency of the subsidiaries included in consolidation are translated into euros on the basis of the functional currency concept pursuant to IAS 21 *The Effects of Changes in Foreign Exchange Rates*. All assets and liabilities are translated using average closing rates prevailing on the reporting date, whereas equity is translated at historical rates. The income and expense items from the income statement are translated using annual average rates. Any exchange differences arising are recognized through other comprehensive income within other reserves from currency translation.

The functional currency of Carl Zeiss Vision Argentina S.A., Buenos Aires (Argentina), which is included in the consolidated financial statements, is considered to be hyperinflationary in accordance with IAS 29 *Financial Reporting in Hyperinflationary Economies*. However, the effects on the consolidated financial statements are immaterial.

The following key exchange rates for the consolidated financial statements as of 30 September 2020 and 2019 were used for currency translation:

		Closing rate		Average rate	
	€1 =	**30 Sep 20**	30 Sep 19	**2019/20**	2018/19
China	CNY	7.9720	7.7784	7.8456	7.7566
UK	GBP	0.9124	0.8857	0.8785	0.8840
Japan	JPY	123.7600	117.5900	120.7124	124.1669
South Korea	KRW	1,368.5100	1,304.8300	1,337.3468	1,300.9465
USA	USD	1.1708	1.0889	1.1197	1.1281

6 Accounting policies

The financial statements of the entities included in the consolidated financial statements are prepared in accordance with the accounting policies of the ZEISS Group. Adjustments are made as necessary where the local GAAP financial statements of individual entities diverge from these policies. Where the reporting date of subsidiaries is different from the reporting date for the consolidated financial statements, interim financial statements are used.

New and revised financial reporting standards
The following financial reporting standards were adopted for the first time in the reporting period:

Date of issue	Standard/interpretation	Amendment/new standard or interpretation
7 June 2017	IFRIC 23 *Uncertainty over Income Tax Treatments*	Clarification on the accounting treatment of uncertainty relating to income taxes
12 October 2017	IAS 28 *Investments in Associates and Joint Ventures*	Clarification on the application of IFRS 9 to long-term investments in associates and joint ventures not accounted for using the equity method
12 October 2017	IFRS 9 *Financial Instruments*	Amendments to IFRS 9 on prepayment features resulting in negative compensation
12 December 2017	Annual Improvements to IFRSs 2015–2017 Cycle	Clarifications and amendments to IFRS 3 and 11 as well as IAS 12 and 23
7 February 2018	IAS 19 *Employee Benefits*	Clarifications and amendments on effects of plan amendments, curtailments or settlements
28 May 2020	IFRS 16 *Leases*	Option to assess whether or not rental concessions due to the COVID-19 pandemic constitute a lease modification

As a result of IFRIC 23 *Uncertainty over Income Tax Treatments*, even uncertain tax liabilities are reported as income tax payables in the consolidated statement of financial position. In the prior year, provisions for income taxes of €89.6m were included in other provisions. The prior-year presentation was adjusted accordingly.

The ZEISS Group has early adopted the amendment to IFRS 16 *Leases*. The amendments grant lessees relief from assessing whether rental concessions due to the COVID-19 pandemic constitute a lease modification. If the practical expedient is exercised, rental concessions are accounted for in such a way that they would not constitute modifications to the lease agreement. The amendments apply to rental concessions reducing rent payments due on or before 30 June 2021.

The adoption of new and revised financial reporting standards did not have any significant impact on the net assets, financial position and results of operations.

The other accounting policies used were the same as in the prior year.

The IASB and the IFRS Interpretations Committee have issued a number of revised and new standards or interpretations, which did not come into effect in the reporting period. The new or amended rules and regulations mentioned in the following table have not been early adopted in the accompanying consolidated financial statements of Carl Zeiss AG. They are not currently expected to have any significant impact on the net assets, financial position and results of operations of the ZEISS Group. They will be applied when they become mandatory.

Date of issue	Standard/interpretation	Amendment/new standard or interpretation	Effective date	Endorsed by the EU
29 March 2018	Conceptual Framework	Revised definitions of an asset and liability and new guidance on measurement and derecognition, presentation and disclosure	Periods beginning on or after 1 January 2020	Yes
22 October 2018	IFRS 3 *Business Combinations*	Amendments to the provision defining whether a business or a group of assets is acquired	Periods beginning on or after 1 January 2020	Yes
31 October 2018	IAS 1 *Presentation of Financial Statements* and IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*	Clarification and convergence of the definition of materiality in all IFRSs and the Conceptual Framework and an avoidance of the understandability of financial statements being reduced by obscuring material with immaterial information	Periods beginning on or after 1 January 2020	Yes
26 September 2019	IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments: Recognition and Measurement* and IFRS 7 *Financial Instruments: Disclosures*	IBOR Reform Phase 1: issues affecting financial reporting in the period before the replacement of an existing interest rate benchmark with an alternative interest rate	Periods beginning on or after 1 January 2020	Yes
27 August 2020	IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments: Recognition and Measurement*, IFRS 7 *Financial Instruments: Disclosures*, IFRS 4 *Insurance Contracts* and IFRS 16 *Leases*	IBOR Reform Phase 2: issues affecting financial reporting in the period during the replacement of an existing interest rate benchmark with an alternative interest rate	Periods beginning on or after 1 January 2021	No
14 May 2020	IFRS 3 *Business Combinations*	Updates so that the standard refers to the 2018 Conceptual Framework instead of the 1989 Framework as well as additions regarding the identification of liabilities and contingent assets acquired	Periods beginning on or after 1 January 2022	No
14 May 2020	IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*	Defining the “cost of fulfilling a contract”	Periods beginning on or after 1 January 2022	No
14 May 2020	IAS 16 *Property, Plant and Equipment*	Amendments regarding the cost of an item of property, plant and equipment in connection with proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended	Periods beginning on or after 1 January 2022	No
14 May 2020	Annual Improvements to IFRSs 2018–2020 Cycle	Improvements to IFRS 1, 9 and 16 as well as IAS 41	Periods beginning on or after 1 January 2022	No
18 May 2017	IFRS 17 *Insurance Contracts*	Accounting for insurance contracts	Periods beginning on or after 1 January 2023	No
23 January 2020	IAS 1 *Presentation of Financial Statements*	Clarification of the criteria to classify liabilities as current or non-current	Periods beginning on or after 1 January 2023	No

Change in presentation in the statement of financial position

Accruals are disclosed in the consolidated statement of financial position in a separate item. In the prior year, accruals of €934.1m were included in other liabilities. The prior-year presentation was adjusted accordingly.

Use of estimates

The preparation of financial statements in accordance with IFRSs requires management to make estimates and assumptions. These can affect the measurement of assets and liabilities, the nature and scope of contingencies, and the reported amounts of income and expenses during the reporting period. The assumptions and estimates primarily relate to the following matters:

» The determination of uniform useful lives is subject to estimates by management.
» The measurement parameters for impairment testing, in particular regarding goodwill (see note 12 Intangible assets).
» The actuarial parameters on which the calculation of the defined benefit obligations is based (see note 19 Provisions for pensions and similar obligations).
» The recoverability of the future tax relief.
» The timing of recognizing intangible assets pursuant to IAS 38 *Intangible Assets*.

» Assessment of the expected probability of default when assessing trade receivables and other financial assets.
» The measurement of lease liabilities pursuant to IFRS 16 *Leases*. In determining the lease term, all facts and circumstances that create an economic incentive to exercise options to extend the lease or not exercise termination options are taken into account.

In addition, estimates are required when assessing the recoverability of inventories as well as recognizing and measuring provisions. Actual results may differ from these estimates. The estimates and assumptions are regularly reviewed based on past experience. Changes are recognized through profit or loss as and when better information is available.

Change in accounting estimate
Due to a system change at Bloomberg, the portfolio of high-quality corporate bonds that is decisive for determining interest rates will in the future no longer be determined on the basis of the Bloomberg Industry Classification System (BICS), but instead, the BCLASS system. As a result, bonds in the categories "Government-Related" and "Securitized" are removed and "Special Purpose Vehicles" bonds of the "Corporate" sub-category are added. The refined selection of bonds caused the interest rate to fall by around 5 basis points on the date of the changeover as of 30 June 2020. This had no significant impact on pension obligations. As the interest rate is no longer determined using the former database, the effects of this refinement cannot be calculated as of the end of the fiscal year.

Current versus non-current classification
In the statement of financial position, assets and liabilities are classified as current or non-current depending on their maturity.

Revenue recognition and other income
Revenue was generated from products, system solutions, technical and other services for biomedical research, the medical technology, the semiconductor, automobile and mechanical engineering industries, planetariums and high-end consumer articles such as eyeglass lenses, camera and cine lenses and binoculars.

ZEISS recognizes revenue when control over the distinct goods and services is transferred to the customer, i.e., as soon as the customer has the ability to direct the use of, and obtain substantially all of the remaining benefits from the goods or services transferred. The recognition of revenue requires a contractual agreement that creates legally enforceable rights and obligations. The amount of revenue recognized is the expected consideration to which ZEISS is contractually entitled. Where required, revenue is adjusted for variable price components such as cash discounts, price reductions, customer bonuses and rebates. These are mainly volume-based bonuses measured on the basis of estimated future purchase volumes. Rebates are generally allocated to the individual performance obligations on the basis of the relative stand-alone selling prices.

Revenue from the sale of goods is recognized when control is transferred to the customer, which is normally when the goods are delivered. Revenue from services is recognized over the period in which the service is provided because the customer simultaneously receives and consumes the benefits evenly throughout the performance period. An output method is normally used to measure progress. When goods are sold, the customer pays on receiving the invoice after the goods are delivered. Advance payments may be requested from customers. The payment terms vary depending on the customary conditions in the respective countries and industries and usually allow short-term payment terms.

If a single contract with a customer comprises several performance obligations (normally the delivery of a product and related services), the agreed transaction price is allocated to the separate performance obligations in accordance with the contractually stated prices or, more rarely, in accordance with the relative stand-alone selling prices. Since the agreed prices are normally the stand-along selling prices within the meaning of IFRS 15, they do not need to be reallocated to the product delivery and services.

Revenue from the sale of service-type warranties is recognized pro rata temporis over the contractually agreed warranty period.

Revenue from royalties is recognized according to the substance of the underlying contract. They primarily relate to allowances for volume-based royalties.

No financing component is included in the determination of the amount and timing of revenue recognition when the period between transferring the goods or services and the customer paying for the goods or services is 1 year or less.

Incremental costs of obaining contracts with customers (mainly sales commissions) which are amortized over 1 year or less are expensed immediately.

Interest income is recognized pro rata temporis using the effective interest method. Dividends are recognized when the legal right to receive the payment is established.

Expense recognition
Expenses are generally recognized when it is probable that there will be an outflow of economic benefits from the entity.

Research and development costs are expensed as incurred unless they can be capitalized as part of the cost of the asset. Subsidies for research and development costs are deducted from the expenses when they become receivable for services already performed and thus spent.

The company is liable to its customers for flawless functioning of the products sold during the contractual warranty period. The corresponding warranty provisions are recognized by debiting cost of sales when revenue is recognized.

Intangible assets
In accordance with IAS 38 *Intangible Assets*, internally generated intangible assets are recognized only if it is probable that future economic benefits will flow to the entity and the cost of the asset can be measured reliably.

Acquired and internally generated intangible assets are initially measured at cost. Intangible assets with finite useful lives are subsequently measured at cost less any accumulated amortization and any accumulated impairment losses. Amortization is charged over the useful life using the straight-line method. The major part of amortization is contained in cost of sales.

Intangible assets with indefinite useful lives as well as goodwill are not amortized and are therefore recognized at cost less any impairment losses.

Development costs are capitalized if all of the criteria set forth in IAS 38.57 are satisfied. These include, for example, demonstrating the technical feasibility of completing the intangible asset so that it will be available for use or sale. Other criteria relate to the intention to complete the intangible asset and the ability to use or sell it. In addition, it must generate future economic benefits for the company.

The entities of the ZEISS Group perform development work at the limit of the possible and set new technological standards. That is why only a small portion of development costs is capitalized in the ZEISS Group, as the criteria for recognition as part of the cost of an intangible asset are not all satisfied until a relatively late stage.

The costs directly attributable to development, including appropriate development-related overheads, are recognized as part of the cost of an asset. Amortization of capitalized development costs begins when the asset is available for use and is charged using the straight-line method over the expected product life cycle or based on unit numbers defined in business plans. Research costs and development costs that cannot be capitalized are expensed in the period in which they are incurred.

Amortization is based on the following ranges of useful lives:

	Useful life
Patents, industrial rights, licenses, software	2 to 20 years
Development costs	2 to 10 years
Other intangible assets	2 to 10 years

Property, plant and equipment
Property, plant and equipment except for right-of-use assets are measured at cost less any accumulated depreciation and any accumulated impairment losses in accordance with IAS 16 *Property, Plant and Equipment*. The cost of self-constructed assets includes direct costs and a portion of materials and production overheads. The cost of creating qualifying assets, i.e. for assets that take a substantial period of time to produce, includes borrowing costs. Depreciation is charged on a straight-line basis over the asset's useful life.

The property held to earn rentals is immaterial and recognized at cost pursuant to IAS 40 *Investment Property*.

Depreciation is based on the following ranges of useful lives:

	Useful life
Buildings and structures	2 to 50 years
Technical equipment and machinery	2 to 21 years
Other equipment, furniture and fixtures	2 to 25 years

Impairment of intangible assets and property, plant and equipment
IAS 36 *Impairment of Assets* requires assessing at the end of each reporting period whether there is any indication that the assets reported in the statement of financial position may be impaired. In addition, annual impairment testing is required for intangible assets with indefinite useful lives and goodwill. The Group performs impairment testing if any indication of impairment exists or if this is required. This involves estimating the recoverable amount of the asset or cash-generating unit (CGU) in order to determine any need to record an impairment loss. The recoverable amount is the higher of the fair value less costs to sell and the value in use – determined for the individual asset or cash-generating unit in each case.

In assessing value in use, the estimated future cash flows are discounted to their present value using an after-tax risk-adjusted discount rate based on the discounted cash flow method. The discount rates are calculated using the parameters risk-free base interest rate, risk premium (market risk premium, country risk and beta factor), borrowing costs and tax effect, and reflect the capital structure of the cash-generating unit. The detailed planning period for future cash flows covers 3 fiscal years. For the following fiscal years, the cash flows of the third detailed planning year are rolled forward taking into account appropriate growth. An impairment exists when the carrying amount of the asset or cash-generating unit exceeds the recoverable amount. Such impairment loss is recognized in the income statement immediately.

With the exception of goodwill, impairment losses recognized in prior years are reversed if the reasons for recognizing the impairment no longer exist. The reversal is limited to ensure that the carrying amount is not exceeded that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. The reversal of impairment losses recognized on goodwill is not permissible.

Government grants
In accordance with IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*, government grants are only recorded if it is reasonably certain that the conditions attached to the grants will be fulfilled and the grants actually awarded. As a rule, public investment grants are deferred and amortized through profit or loss over the useful lives of the related assets. Grants related to income are offset against the corresponding expenses in the period in which the expenses are incurred. In Germany, grants for social security contributions attributable to a reduced working hours policy in connection with the COVID-19 pandemic are deducted as income from cost of sales and functional costs, depending on which function the corresponding personnel expenses are allocated to.

Leases
IFRS 16 *Leases* requires lessees to recognize all leases in the form of a right-of-use asset and corresponding lease liability. The lease liability is measured at the present value of the outstanding lease payments. They are presented in the income statement as financing activities so that the right-of-use asset is amortized on a straight-line basis and the lease liability is rolled forward using the effective interest method. Renewal, termination and purchase terms are taken into account during initial measurement of the lease liability if their exercise has become reasonably certain (especially property leases). The practical expedients for low-value leased assets and short-term leases will be used.

Sale-and-leaseback agreements are presented using the same principles.

Use is made of the practical expedient to account for rental concessions due to the COVID-19 pandemic in such a way that they would not constitute modifications to the lease agreement. The rental concessions primarily relate to rent-free periods or temporary rent reductions for property and IT leases.

Lessors must assess as of the commencement date whether a lease is a finance lease or an operating lease. The lease is a finance lease if all significant risks and rewards are transferred. In this case, a receivable is recognized in the amount of the net investment in the lease. The corresponding interest income is presented in the financial result. Lease payments under operating leases are recognized in income on a straight-line basis over the lease term.

Financial instruments
A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets and financial liabilities are reported in the consolidated statement of financial position as of the date on which ZEISS becomes party to the contract. Regular way purchases and sales of financial assets are generally recognized on the settlement date. As of the date of initial recognition, financial assets and financial liabilities are measured at fair value and classified in accordance with the provisions of IFRS 9 *Financial Instruments*.

Fair value generally corresponds to the market or quoted value. If no active market exists, fair value is calculated using generally accepted valuation techniques (for example, using the present value method or option pricing models). Amortized cost corresponds to the cost of the financial liabilities adjusted for repayments, impairment and the amortization of any discounts or premiums.

IFRS 9 divides financial assets into the following measurement categories:

» At amortized cost (AC)
» At fair value through profit or loss (FVPL)
» At fair value through other comprehensive income (FVOCI)

The classification and measurement of financial assets is based on the business model and the structure of the cash flows. Classification depends on

» whether the underlying business model is aimed at holding financial assets to collect contractual cash flows ("hold" business model), whether the objective is to both collect contractual cash flows and sell financial assets ("hold and sell" business model) or solely sell the financial assets ("sell" business model) and
» whether the contractual cash flows are solely payments of principal and interest (SPPI).

The business model is determined based on the corporate management of the ZEISS Group. To this end, the financial instruments are combined into groups, each of which have a consistent underlying business model. The characteristics of the contractual cash flows are reviewed at the level of the individual financial instruments.

Financial assets whose contractual cash flows are solely payments of principal and interest on the principal amount and that are held under a "hold" business model are measured at amortized cost. These are trade receivables, cash and cash equivalents, cash at banks, loans, securities and sundry financial assets. The assets are subsequently measured using the effective interest method. Gains and losses from impairment or derecognition are recognized in the income statement.

If the objective is to both collect the contractual cash flows and sell the financial assets ("hold and sell" business model), the financial assets are measured at fair value through other comprehensive income (FVOCI). Unrealized gains and losses are recognized in other comprehensive income. If the assets are sold the cumulative gains and losses from the change in fair value are reclassified to the income statement. Interest income is recognized in profit or loss using the effective interest method.
This mainly relates to securities.

Financial assets that do not meet the SPPI criteria or are held under a "sell" business model are measured at fair value through profit or loss (FVPL). Gains and losses from the change in fair value are recognized directly in the income statement. This mainly relates to securities and derivatives.

Financial instruments classified as equity instruments are allocated at "fair value through profit or loss" (FVTPL) measurement category. Entities may also opt to allocate equity instruments at "fair value through other comprehensive income" (FVOCI) measurement category. If the option is exercised, the gains or losses from this financial instrument are recognized in other comprehensive income and may not be subsequently reclassified to the income statement. For specific assets, the ZEISS Group makes use of the option to recognize them at fair value through other comprehensive income.

Subsidiaries, associates and joint ventures that are not consolidated on the grounds of immateriality do not fall under the scope of IFRS 9 and IFRS 7.

Financial assets are subject to credit risk which is accounted for by recognizing a risk provision or, if losses have already occurred, an impairment loss. Specific allowances and portfolio-based allowances based on the expected credit loss model are recognized to cover the credit risk. The extent of expected losses is categorized according to a 3-stage model (general approach) depending on whether the credit risk of a financial instrument has increased significantly since initial recognition. Stage 1 comprises financial assets that have not deteriorated significantly in credit quality since initial recognition. In these cases, 12-month expected credit losses are recognized. If there is a significant increase in the risk of default by the debtor, the financial instrument is allocated to stage 2 and an allowance is recognized in the amount of the expected losses over the entire term or life of the asset. If there is further objective evidence of impairment, the financial assets are allocated to stage 3. Objective evidence includes delay of payment by more than 90 days, information about financial difficulties of the debtor or insolvency proceedings filed against the debtor. The general approach is used to determine the expected credit losses for all assets except trade and other receivables.

Offsetting of financial instruments
In the ZEISS Group, derivative financial transactions are concluded in accordance with the German master agreement for financial futures contracts. They do not meet the offsetting criteria pursuant to IAS 32 *Financial Instruments: Presentation* since offsetting is enforceable only in the event of insolvency.

In the ZEISS Group, credit notes received are offset against corresponding trade payables, and trade receivables offset against corresponding credit notes if these fulfill the offsetting criteria pursuant to IAS 32.

Inventories
Materials and supplies as well as merchandise are measured at costs of purchase, which are generally determined using the average cost method. Work in progress and finished goods are measured at costs of conversion. In addition to direct materials as well as direct labor, costs of conversion include an appropriate portion of materials and production overheads as well as production-related depreciation and production-related administrative expenses.

Write-downs are recorded on inventories when the costs of purchase or conversion exceed the estimated net realizable value. All inventory, selling and income risks are thus given adequate consideration. If the reasons for a write-down no longer apply, it is reversed to the lower of cost or estimated net realizable value.

Trade and other receivables
Trade and other receivables are accounted for at nominal value or amortized cost. Trade receivables are recognized when an unconditional right to consideration from the customer exists. The simplified approach is applied to determine allowances for trade receivables and receivables under financial leases. According to this, expected credit losses are always calculated over the entire lifetime of financial instruments. As a practical expedient, the ZEISS Group applies a provision matrix for non-credit-impaired receivables which determines the expected losses as a percentage based on the number of days overdue. The calculation is based on historical loss experience and is supplemented by relevant forward-looking parameters. This takes current macroeconomic forecasts and various scenarios with regard to the COVID-19 pandemic into account. The forecasts cover a full economic cycle at a minimum. If information about financial difficulties of the debtor is available, the receivables are assessed on a case-by-case basis and an allowance is recognized for credit-impaired receivables. An allowance account is used to post changes to allowances.

A financial instrument is derecognized if the rights to cash flows have expired, for example, due to the conclusion of insolvency proceedings, a court ruling or depending on other circumstances in the local law. A financial asset is also derecognized if the significant risks and rewards are transferred.

Cash and cash equivalents
Cash and cash equivalents comprise cash on hand and cash at banks as well as all investments with an original term of less than 3 months.

Provisions for pensions and other post-employment benefits
The entities of the ZEISS Group have various pension plans. In addition, some foreign subsidiaries have agreed to provide post-employment healthcare benefits on a certain scale.

Payments for defined contribution obligations including contributions to statutory pension funds are recognized as an expense for the period.

Defined benefit obligations are measured according to IAS 19 *Employee Benefits* using the projected unit credit method allowing for expected future adjustments to salaries and pensions.

The provisions for pensions and similar obligations at German Group entities are determined based on actuarial principles and using the 2018 G mortality tables published by Prof. Dr. Klaus Heubeck. The provisions for pensions and similar obligations at entities outside Germany are determined using the relevant local basis for calculation and local parameters.

External funds invested to cover defined benefit obligations are measured at fair value and offset against the corresponding obligations.

Changes in the portfolio and variances in actual trends compared to the assumptions used for calculation purposes, as well as changes in the assumptions for the measurement of defined benefit obligations, result in actuarial gains and losses, which are recognized directly in other reserves within equity and thus directly affect the consolidated statement of financial position and the consolidated statement of comprehensive income.

The balance of the defined benefit obligation and plan assets (net defined benefit obligation or net plan assets) is discounted using the interest rate on which the measurement of the defined benefit obligation is based. The resulting net interest expense or income is recognized in the interest expenses or income in the consolidated income statement. Service cost is disclosed in the earnings before interest and taxes (EBIT).

Deferred compensation

ZEISS offers employees with unlimited employment contracts the option of using untaxed compensation to make provision for old age. Depending on the terms of their contract, the employees may convert up to 3 monthly salaries a year. The amounts converted are paid into an employer's pension liability insurance policy and the associated benefits are pledged to the employees. The amount and timing of the receivables from the employer's pension liability insurance matches those of the benefits payable to employees. As the receivables are pledged, they generally satisfy the requirements for plan assets and are presented on a net basis. The pension plan is therefore classified as a defined contribution plan from a substance-over-form perspective. If the future benefits under the employer's pension liability insurance are higher than the benefit obligation to the employee, the employee receives the higher amount.

The amount is dependent on the age of the employees at the time of conversion of their compensation and the employees' decision on whether to have the deferred compensation paid out as a one-off payment or as a pension. In addition to the conversion of compensation, the deferred compensation system may include invalidity and surviving dependants' benefits, depending on the model chosen.

Other provisions

In accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, present obligations to third parties arising from past events are disclosed within other provisions if it is probable that an outflow of resources will be required and can be measured reliably. The provisions are recognized at full cost.

Where the effect of the time value of money is material and the remaining term of the obligation can be determined reliably, non-current provisions are recognized at the amount needed to settle the obligation, discounted to the reporting date. In such cases, the increase in the provision due to the passage of time is recognized as an interest expense.

The provisions for obligations under the German phased retirement scheme, long-service awards and death benefits are determined and measured on the basis of actuarial reports or similar parameters.

Restructuring provisions
Restructuring provisions are recognized when an entity has made the decision to restructure and has a detailed formal plan for the restructuring, stating the parts of a business or locations concerned, the approximate number of employees affected and when the plan will be implemented, and it has been announced to those affected or their representatives before the reporting date. The amount of the provision covers all direct expenditures arising from the restructuring which necessarily arise during the restructuring and are not associated with the ongoing or future activities of the entity.

Warranty provisions
Warranty obligations may be legal, contractual or non-contractual (assurance-type warranties). Provisions are recognized for expenses expected to be incurred under guarantee or warranty obligations unless there are separate performance obligations. Warranty claims are expected especially when the warranty period has not yet expired, when warranty expenses were incurred in the past or when there is specific indication of pending warranty cases. The warranty risk is derived either from individual estimates or past experience and is provided for accordingly.

Provisions for litigation risks
Provisions are recognized for risks arising from litigation in which entities of the ZEISS Group are the defendants and if it is more likely than not that the outcome will be negative. They are measured at the amount that the company expects to pay in the event of a negative outcome. This amount includes the amounts payable by the company, such as damages and compensation payments as well as anticipated legal costs.

Deferred taxes
Deferred taxes are recognized using the liability method according to IAS 12 *Income Taxes*.

Deferred tax assets and liabilities are recognized on all temporary differences between the IFRS carrying amounts and the tax accounts of consolidated entities and on consolidation measures.

Further, deferred tax assets for future economic benefits from unused tax losses and unused tax credits are taken into account if it is probable that they will be used.

The carrying amount of deferred tax assets is reviewed at every reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow the deferred tax asset to be utilized. A previously unrecognized deferred tax asset is reassessed and recognized to the extent that it has become probable that future economic benefits will be recovered.

Deferred tax liabilities are recognized for the expected income tax and withholding tax on expected dividend payments by subsidiaries. In contrast, deferred tax liabilities are not recognized for temporary differences from retained earnings of subsidiaries as the temporary differences will not reverse in the foreseeable future.

Deferred taxes relating to items recognized in other comprehensive income are likewise recognized in other comprehensive income and not through profit or loss.

Deferred tax assets and deferred tax liabilities are offset if a group entity has a legally enforceable right to offset current tax assets and current tax liabilities and these relate to income taxes levied by the same taxation authority on the same taxable entity. Consequently, deferred tax assets and liabilities are netted within consolidated tax groups.

Liabilities
Financial liabilities and the outstanding invoices reported in accruals are normally measured at amortized cost using the effective interest method. Financial liabilities comprise liabilities to banks, loans and other financial liabilities. Non-interest-bearing loans and loans bearing off-market interest rates are recognized at present value and increased due to the passage of time over their term to maturity.

The fair value option offered by IFRS 9 is not applied.

Contract liabilities are recorded when the customer pays consideration before the corresponding goods or services are transferred to the customer. Contract liabilities are recognized as revenue when the contractual obligations are fulfilled.

NOTES TO THE CONSOLIDATED INCOME STATEMENT

7 Revenue

Revenue by region breaks down as follows:

	2019/20		2018/19	
	€ k	%	€ k	%
Germany	598,256	9	662,591	10
EMEA (without Germany)	2,715,154	43	2,646,096	41
Americas	1,236,609	20	1,394,289	22
APAC	1,746,523	28	1,725,079	27
	6,296,542	**100**	**6,428,055**	**100**

Of revenue, €5,620m (prior year: €5,767m) is attributable to the sale of goods, €647m (prior year: €626m) to the rendering of services and €29m (prior year: €35m) to the granting of licenses.

Revenue of €721m was recognized under contractual liabilities at the beginning of the reporting period. Contracts with customers of €711m currently still recorded under contract liabilities is expected to result in revenue of €683m in fiscal year 2020/21 and revenue of €28m in subsequent fiscal years.

8 Other income

Other income contains income from technology sales of €3.9m, from the reversal of other provisions, rental income and income from the sale of scrap, as well as other income not attributable to functional costs.

9 Other expenses

Other expenses contain the loss of €13.6m from the disposal of Carl Zeiss Vision Venezuela Industria Optica C.A., San Diego (Venezuela) from the basis of consolidation, losses from the disposal of non-current assets, expenses from allocations to other provisions and other operating expenses not attributable to functional costs.

10 Financial result

Interest result

	2019/20	2018/19
	€ k	€ k
Interest income	**14,148**	**11,283**
» thereof from affiliates	234	298
Interest expenses	**57,204**	**55,889**
» thereof to affiliates	19	108
» thereof from leases	6,848	7,198
» thereof net interest cost for pensions	16,353	21,694
	-43,056	**-44,606**

Other financial result

	2019/20	2018/19
	€ k	€ k
Income from investments	1,558	1,842
Income from profit transfer	29	787
Expenses for loss absorption	1,555	223
Investment result	**32**	**2,406**
Expenses from exchange differences	-20,600	-23,706
Income/expenses from changes in market value	37,181	-26,742
Sundry other financial result	-14,301	839
Other financial result	**2,312**	**-47,203**

Income from investments includes income from affiliates of €828k (prior year: €707k).

The expenses from exchange differences should be seen in the context of the hedging of currency risks. The result from changes in market value mainly include effects from the measurement of financial assets and financial liabilities at fair value through profit or loss. The sundry other financial result mainly contains impairments of financial assets.

11 Income taxes

Income taxes include domestic and foreign income taxes, the reversal of tax provisions, tax refunds and deferred taxes.

Income taxes break down as follows:

	2019/20	2018/19
	€ k	€ k
Current tax expenses less tax refunds and reversal of tax provisions	277,342	287,604
Deferred tax income	-11,825	-63,614
» thereof from temporary differences	-35,393	-31,209
» thereof from changes in tax rates	2,014	2,629
» thereof from unused tax losses including any reductions	21,554	-35,034
	265,517	**223,990**

Deferred taxes are determined on the basis of the tax rates that apply or are expected to apply based on the tax laws that have been enacted or substantively enacted in the individual countries at the time of realization. In Germany, a corporate income tax rate of 15.0% currently applies. Taking into account the solidarity surcharge and the different trade tax levy rates, the rates for German entities are in the range of 25.0% to 30.7% (prior year: 27.7% to 31.3%). The tax rates form the basis for the calculation of current taxes.

The nominal tax rates applicable outside Germany in the reporting period ranged between 7.5% and 47.0% (prior year: 7.5% and 34.6%).

Significant estimates are required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits together with future tax planning strategies. The deferred tax assets are assumed to be recoverable on account of the planned business development in subsequent years.

The total amount of deferred tax assets and liabilities as of 30 September 2020 is allocated to the following items of the statement of financial position:

	30 Sep 20		30 Sep 19	
	Assets	Liabilities	Assets	Liabilities
	€ k	€ k	€ k	€ k
Non-current assets	**35,384**	**100,945**	**21,462**	**113,956**
Intangible assets	15,525	68,180	10,426	77,430
Property, plant and equipment	14,600	31,028	7,140	34,337
Other non-current assets	5,259	1,737	3,896	2,189
Current assets	**86,579**	**24,316**	**90,014**	**28,579**
Inventories	72,361	7,075	73,393	5,744
Receivables and other current assets	14,218	17,241	16,621	22,835
Non-current liabilities	**646,917**	**5,767**	**632,117**	**3,769**
Provisions for pensions and similar obligations	588,095	3,810	575,888	3,019
Other non-current liabilities	58,822	1,957	56,229	750
Current liabilities	**96,812**	**10,906**	**118,979**	**9,808**
Outside basis differences	**0**	**2,600**	**0**	**2,604**
Unused tax losses	**94,398**	**0**	**112,624**	**0**
Total deferred taxes	**960,090**	**144,534**	**975,196**	**158,716**
Impairment losses	3,309	0	8,391	0
Offsetting	73,604	73,604	67,144	67,144
Deferred taxes, net	**883,177**	**70,930**	**899,661**	**91,572**

The outside basis differences contain deferred tax liabilities on retained earnings from subsidiaries where a distribution is planned.

Unused tax losses include deferred tax assets from unused tax losses as well as from tax credits.

Deferred tax assets are recognized for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. The loss carryforwards relate to group entities in Germany, Australia, Brazil, China, France, Israel, Spain and the USA (prior year: Germany, Australia, Brazil, China, France, Spain and the USA).

The unused tax losses for which no deferred taxes were recognized amount to €330,323k (prior year: €141,510k). Most of these are available for offsetting for more than 5 years or do not expire at all. As of the reporting date these unused tax losses were classified as not likely to be usable because based on the forecasts it is not likely that taxable profit will be available in the future. The loss carryforwards relate to group entities in Germany, Brazil, France, the UK, Ireland, Japan, Singapore, South Africa and Hungary (prior year: Germany, Brazil, France, the UK, Ireland, Japan, Netherlands, Singapore, South Africa, Hungary and the USA).

Consolidation measures gave rise to deferred tax assets of €43,278k (prior year: €60,150k) and deferred tax liabilities of €61,475k (prior year: €74,247k).

In the reporting period, the tax rate of the parent company Carl Zeiss AG of 28.78% (prior year: 28.78%) was used as the tax rate applicable for the reconciliation of the expected income tax expense of €253,618k (prior year: €279,605k), based on earnings before taxes, to the current income tax expense of €265,517k (prior year: €223,990k).

The tax reconciliation statement is presented in the table below:

	2019/20	2018/19
	€ k	€ k
Earnings before taxes (EBT)	881,229	971,525
Expected income tax expense (= 28.78% x EBT; prior year: = 28.78% x EBT)	**253,618**	**279,605**
Differences from diverging tax rates	-13,986	-15,815
Effects of changes in tax rates	2,014	2,629
Effects of non-deductible expenses	14,354	13,080
Effects of tax-free income	-5,549	-5,615
Effects relating to other periods	21,568	-38,776
Permanent effects	-5,110	-7,359
Other	-1,392	-3,759
Current income tax expense	**265,517**	**223,990**

NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

12 Intangible assets

The goodwill amounting to €1,284,410k (prior year: €1,293,541k) is tested for impairment annually at the level of the cash-generating units.

Against the background of the economic implications of the COVID-19 pandemic and the associated uncertainties surrounding the future economic development, 2 scenario projections were prepared in the context of corporate management for various COVID-19 crisis developments for fiscal years 2019/20 and 2020/21, both of which are likely to be heavily affected. The first scenario assumes a recovery back to normal, while the second assumes a continued recession. Using these scenario projections as a basis, management made an expectation-weighted estimation of a most-likely case for these 2 fiscal years and for the 2 subsequent fiscal years, namely that – starting from a lower level in fiscal year 2020/21 – there will be a recovery in line with the pace of growth planned for the medium term in last year's mid-term planning. Management's general assumption was that no long-term change is expected to the fundamental growth trends underlying the segment's mid-term planning from the COVID-19 pandemic. Based on this, the plans were determined over a detailed planning phase of 3 years. The detailed planning phase for one segment was extended to 5 years in order to take particular account of the influence of the COVID-19 pandemic.

The cash flows derived from the aforementioned planning on the basis of detailed plans were used for impairment testing. For the following fiscal years, the cash flows of the last detailed planning year are rolled forward with a growth rate of 1.0%. The discount rates are based on an after-tax weighted average cost of capital (WACC) depending on the cash-generating unit. The cost of capital is a material parameter in impairment testing. A change in WACC has a direct impact on value in use.

In a sensitivity analysis, an increase in the discount rate by 1 percentage point and a decrease in the long-term growth rate by half a percentage point were simulated. As a result of the plans affected by the COVID-19 pandemic, this simulation mathematically results in an impairment loss of €56.1m for Vision Care and an impairment loss of €23.2m for Industrial Quality Solutions when combining both adjustments. For the other strategic business units, no sensitivity of parameters (individually or in combination) classified as probable would result in a need to recognize an impairment loss.

Goodwill is allocated to the cash-generating units on the basis of the internal organizational structure of the ZEISS Group. This allows goodwill to be allocated to the strategic business units or the overarching segments as follows:

	30 Sep 20		30 Sep 19	
	Carrying amounts	WACC (after tax)	Carrying amounts	WACC (after tax)
	€ k	%	€ k	%
» Semiconductor Mask Solutions	42,479	9.5	44,952	12.1
Semiconductor Manufacturing Technology	**42,479**		**44,952**	
» Industrial Quality Solutions	553,935	8.7	553,934	9.0
» Research Microscopy Solutions	47,654	9.0	50,164	8.4
Industrial Quality & Research	**601,589**		**604,098**	
» Ophthalmic Devices	303,774	7.7	306,895	7.8
» Microsurgery	4,013	7.7	4,303	7.8
Medical Technology	**307,787**		**311,198**	
» Vision Care	332,555	6.6	333,293	6.6
Consumer Markets	**332,555**		**333,293**	
Total	**1,284,410**		**1,293,541**	

The changes in the cash-generating units stem from the first-time consolidation of Photono Oy, Helsinki (Finland), the deconsolidation of Carl Zeiss Vision Venezuela Industria Optica C.A., San Diego (Venezuela), as well as foreign currency translation in accordance with IAS 21.47.

Apart from goodwill, the ZEISS Group does not report any intangible assets with indefinite useful lives.

	Patents, industrial rights, licenses, software	Goodwill	Development costs	Other intangible assets and advances	Total
	€ k	€ k	€ k	€ k	€ k
Cost					
1 October 2018	**469,722**	**757,818**	**246,922**	**168,433**	**1,642,895**
Change in the basis of consolidation	46,776	620,566	58,526	89,099	814,967
Additions	12,272	0	23,411	5,817	41,500
Disposals	2,360	0	0	2,068	4,428
Reclassifications	5,116	0	0	-5,116	0
Currency translation	5,794	10,851	8,093	3,533	28,271
30 September 2019	**537,320**	**1,389,235**	**336,952**	**259,698**	**2,523,205**
Amortization/impairment					
1 October 2018	**375,473**	**93,281**	**168,453**	**124,442**	**761,649**
Change in the basis of consolidation	2,323	0	0	1,926	4,249
Additions	39,579	0	29,816	15,960	85,355
Disposals	2,338	0	0	1,332	3,670
Reclassifications	0	0	0	0	0
Currency translation	5,178	2,413	2,455	2,481	12,527
30 September 2019	**420,215**	**95,694**	**200,724**	**143,477**	**860,110**
Carrying amounts as of 30 September 2019	**117,105**	**1,293,541**	**136,228**	**116,221**	**1,663,095**

	Patents, industrial rights, licenses, software	Goodwill	Development costs	Other intangible assets and advances	Total
Cost					
1 October 2019	**537,320**	**1,389,235**	**336,952**	**259,698**	**2,523,205**
Change in the basis of consolidation	366	11,551	425	241	12,583
Additions	8,792	0	26,720	13,010	48,522
Disposals	5,827	0	0	112	5,939
Reclassifications	2,421	0	1,371	-4,295	-503
Currency translation	-7,416	-23,755	-11,316	-4,404	-46,891
30 September 2020	**535,656**	**1,377,031**	**354,152**	**264,138**	**2,530,977**
Amortization/impairment					
1 October 2019	**420,215**	**95,694**	**200,724**	**143,477**	**860,110**
Change in the basis of consolidation	3	0	0	0	3
Additions	36,862	0	25,852	19,038	81,752
Disposals	5,774	0	0	57	5,831
Reclassifications	461	0	0	-918	-457
Currency translation	-6,763	-3,073	-4,032	-3,377	-17,245
30 September 2020	**445,004**	**92,621**	**222,544**	**158,163**	**918,332**
Carrying amounts as of 30 September 2020	**90,652**	**1,284,410**	**131,608**	**105,975**	**1,612,645**

13 Property, plant and equipment

	Land and buildings including buildings on third-party land	Technical equipment and machinery	Other equipment, furniture and fixtures	Assets under construction and advances	Right-of-use assets	Total
	€ k	€ k	€ k	€ k	€ k	€ k
Cost						
1 October 2018	**770,778**	**925,395**	**994,649**	**127,316**	**0**	**2,818,138**
First-time application of IFRS 16	0	0	0	0	191,972	191,972
Change in the basis of consolidation	25,358	17,000	16,948	209	1,994	61,509
Additions	7,138	34,217	99,647	224,050	72,168	437,220
Disposals	11,162	25,312	38,375	488	0	75,337
Reclassifications	50,369	46,639	24,491	-121,499	0	0
Currency translation	7,681	11,986	9,887	2,632	3,538	35,724
30 September 2019	**850,162**	**1,009,925**	**1,107,247**	**232,220**	**269,672**	**3,469,226**
Depreciation/impairment						
1 October 2018	**361,457**	**640,627**	**787,971**	**0**	**0**	**1,790,055**
Change in the basis of consolidation	1,631	5,545	7,713	0	0	14,889
Additions	44,103	65,025	79,203	0	45,460	233,791
Disposals	7,101	22,463	27,173	0	0	56,737
Reclassifications	0	17	-17	0	0	0
Currency translation	4,843	7,358	6,267	0	2,331	20,799
30 September 2019	**404,933**	**696,109**	**853,964**	**0**	**47,791**	**2,002,797**
Carrying amounts as of 30 September 2019	**445,229**	**313,816**	**253,283**	**232,220**	**221,881**	**1,466,429**

Cost						
1 October 2019	**850,162**	**1,009,925**	**1,107,247**	**232,220**	**269,672**	**3,469,226**
Change in the basis of consolidation	11	17	178	0	578	784
Additions	59,985	51,859	88,459	209,878	73,928	484,109
Disposals	24,105	23,029	40,149	4,076	19,816	111,175
Reclassifications	60,077	47,327	32,164	-139,065	0	503
Currency translation	-13,701	-23,485	-17,994	-5,090	-14,994	-75,264
30 September 2020	**932,429**	**1,062,614**	**1,169,905**	**293,867**	**309,368**	**3,768,183**
Depreciation/impairment						
1 October 2019	**404,933**	**696,109**	**853,964**	**0**	**47,791**	**2,002,797**
Change in the basis of consolidation	2	9	138	0	0	149
Additions	41,225	76,582	83,146	0	55,176	256,129
Disposals	18,526	19,519	25,971	0	12,935	76,951
Reclassifications	-19	-257	733	0	0	457
Currency translation	-7,398	-14,018	-11,454	0	-4,351	-37,221
30 September 2020	**420,217**	**738,906**	**900,556**	**0**	**85,681**	**2,145,360**
Carrying amounts as of 30 September 2020	**512,212**	**323,708**	**269,349**	**293,867**	**223,687**	**1,622,823**

Property, plant and equipment with a net carrying amount of €53,436k (prior year: €57,305k) are subject to restrictions on disposal or serve as collateral for liabilities. Accumulated contractual purchase commitments for property, plant and equipment and intangible assets total €338,114k as of the reporting date (prior year: €317,301k).

The column "Land and buildings including buildings on third-party land" includes a rented property that qualifies as investment property in accordance with IAS 40 for the first time in fiscal year 2019/20. This is not presented separately in the statement of financial position for reasons of clarity and materiality. As of the reporting date, the investment property has a carrying amount of €27,636k and a fair value of €26,499k.

14 Other financial assets

	30 Sep 20		30 Sep 19	
		thereof due in more than 1 year		thereof due in more than 1 year
	€ k	€ k	€ k	€ k
Shares in affiliates	77,580	77,580	35,396	35,396
Investments	18,576	18,576	27,345	27,345
Loans	49,012	45,427	44,343	43,407
Securities	629,064	318,910	555,258	295,478
Derivatives	15,366	7,213	5,195	54
Sundry other financial assets	392,951	74,279	663,416	75,900
	1,182,549	**541,985**	**1,330,953**	**477,580**

The shares in affiliates relate to non-consolidated subsidiaries. Carl Zeiss Digital Innovation GmbH, Dresden (formerly Saxonia Systems AG, Munich) is included for the first time in the reporting year for an amount of €38.2m. On 26 November 2019, Carl Zeiss AG signed an agreement on the complete takeover of Saxonia Systems AG, Munich, after a 25% stake in the specialty enterprise for individual software solutions was acquired in 2018. 75% was acquired on 1 March 2020 for a purchase price of €30.1m. The entity was then renamed Carl Zeiss Digital Innovation GmbH and its registered office relocated to Dresden. In the prior year, 25% of the shares for a purchase price of €8.1m was included under investments.

Loans cover default risks according to the expected credit loss model of €6.1m (prior year: €6.2m). The current macroeconomic uncertainties relating to the COVID-19 pandemic were taken into account in the calculation.

The sundry other financial assets mainly consist of time deposits and the assets of entities within and outside Germany in connection with financing or securing short-term obligations toward employees.

15 Other non-financial assets

Other non-financial assets mainly comprise prepaid expenses as well as tax reimbursement claims from taxes other than income taxes.

16 Inventories

	30 Sep 20	30 Sep 19
	€ k	€ k
Materials and supplies	507,816	483,718
Work in progress	658,968	542,415
Finished goods and merchandise	538,300	573,420
Advances	31,169	22,803
	1,736,253	**1,622,356**

The carrying amounts contain write-downs of €230,890k (prior year: €196,236k).

The write-downs recorded on inventories, which are recognized under cost of sales in the consolidated income statement, amounted to €106,152k in the reporting period (prior year: €61,063k). Write-downs of €17,730k (prior year: €10,865k) were reversed through profit or loss.

Cost of materials amounted to €2,088m in the fiscal year (prior year: €2,078m).

17 Cash and cash equivalents

	30 Sep 20	30 Sep 19
	€ k	€ k
Cash funds	695,410	599,230
Securities due in less than 90 days of their acquisition date	69,429	50,803
	764,839	**650,033**

Cash is composed of checks, cash on hand and cash at banks. The effective interest rate for cash at banks due in less than 90 days is mainly between -0.5% and 0.0% (prior year: -0.5% and 0.0%).

18 Equity

The *issued capital* of Carl Zeiss AG totaling €120,000k is unchanged compared to the prior year and is divided into 120,000,000 stocks at nominal value, all of which are held by the Carl Zeiss Foundation. A dividend of €75,000k was distributed in the reporting period (prior year: €54,328k).

The *capital reserves* are unchanged at €52,770k.

Retained earnings primarily contain:
» the legal reserve of Carl Zeiss AG of €5,950k
» the consolidated profit of the reporting year as well as the past results generated by the entities included in the consolidated financial statements less the associated non-controlling interests
» the acquisition or sale of shares in subsidiaries currently under control

Other reserves present the differences arising from the currency translation of foreign subsidiaries' separate financial statements without effect on income as well as remeasurement effects recognized in equity:
» defined benefit plans
» financial assets at fair value through other comprehensive income

Non-controlling interests contain the proportionate share of non-controlling interests in equity.

The development of consolidated equity is shown in the consolidated statement of changes in equity.

19 Provisions for pensions and similar obligations

The provisions for pensions include current and future pension obligations of Carl Zeiss AG and various subsidiaries. In addition, this item comprises the provisions of the US entities for medical care benefit obligations.

The ZEISS Group has both defined contribution plans and defined benefit plans.

In the case of defined contribution plans, the obligation of the entity concerned is limited to the payment of the agreed amounts. The expenses for defined contribution plans amounted to €97,599k in the reporting period (prior year: €93,315k).

With defined benefit plans, the entity's obligation consists of fulfilling the commitments made to current and former employees and their surviving dependants. Such obligations exist both at group entities in Germany and other countries. In the ZEISS Group, defined benefit plans are partly funded via provisions and partly via external funds.

The obligations from defined benefit plans primarily relate to pension obligations in Germany, the USA and the UK.

The characteristics and the associated risks of the defined benefit plans vary depending on the legal, tax and economic framework in the respective country.

German pension plans
The currently applicable pension arrangement for employees in Germany is an employer-financed defined benefit plan, comprising old age, disability and surviving dependants' pensions. These pensions are generally granted after a certain period of service.

The defined benefit plan is a modular system in which one pension module is calculated and fixed for each fiscal year. The contribution amount is based on the employee's income and the profit of the company during the fiscal year, with a basic contribution being guaranteed. The contribution is translated into a pension module on the basis of age- and interest-related factors. The pension modules acquired are aggregated and paid out as a life-long annuity.

For employees who were employed before 1 January 2000, vested rights from previous final-salary-based defined benefit plans must be taken into account for service periods up to 2010.

To reduce the risks associated with defined benefit plans (in particular longevity, salary increases and inflation), benefits are partly financed via external plan assets. To this end, a contractual trust arrangement (CTA) was introduced in Germany in fiscal year 2005/06, under which assets are transferred to a trust association such that they can be used only to settle the benefit obligations of the active employees. These assets satisfy the criteria set forth in IAS 19 for plan assets and can therefore be offset against the benefit obligations in these consolidated financial statements. Where the assets exceed the underlying secured claims, the excess is reported under non-current financial assets.

In addition to the employer-financed pensions, all employees in Germany have the option of participating in the company pension scheme in the form of deferred compensation. This is a defined contribution plan financed by converting salary components, for which the company takes out employer's pension liability insurance.

Pension plans outside Germany

Major pension plans exist primarily in the USA and the UK. These are employer-financed defined benefit plans, comprising old age and surviving dependants' benefits as well as medical benefits, depending on how they are structured. Some of these plans are based on final salary, while others are based on salary-related modules. The obligations from foreign defined benefit obligations are largely covered by assets in long-term external funds. The plans in the USA and in the UK are closed to new employees and existing obligations are now capped.

Actuarial assumptions are essential for all defined benefit plans. Besides life expectancy, which in Germany is determined based on the 2018 G mortality tables published by Prof. Dr. Klaus Heubeck, and in other countries on comparable local measurement bases, the following assumptions were made for the purposes of the actuarial calculations:

	Germany		Other countries	
	2019/20	2018/19	**2019/20**	2018/19
	%	%	%	%
Interest rate	1.05	1.00	0.43 to 7.25	0.27 to 7.75
Future salary increases	2.75	2.75	0.00 to 5.00	0.00 to 5.00
Future pension increases	1.75	1.75	0.00 to 3.29	0.00 to 3.10

The assumptions regarding interest rates, future salary and pension increases as well as mortality rates on which the calculation of the defined benefit obligation (DBO) was based vary depending on economic and other conditions in the country in which the plans exist. The interest rates were determined on an entity-specific basis as of the respective reporting date, depending on the weighted average duration of the pension obligations and in line with the respective maturities and currencies.

The amounts for defined benefit obligations recognized in the statement of financial position break down as follows:

				30 Sep 20
	Defined benefit obligations (DBO)	Fair value of plan assets	Effects of the asset ceiling	Net carrying amount from defined benefit obligations
	€ k	€ k	€ k	€ k
Germany	2,962,439	1,441,721	0	1,520,718
Other countries	338,835	257,621	0	81,214
Carrying amount	**3,301,274**	**1,699,342**	**0**	**1,601,932**
» thereof pension provisions				1,605,834
» thereof other financial assets				3,902

				30 Sep 19
	Defined benefit obligations (DBO)	Fair value of plan assets	Effects of the asset ceiling	Net carrying amount from defined benefit obligations
	€ k	€ k	€ k	€ k
Germany	2,947,643	1,463,517	0	1,484,126
Other countries	344,842	262,579	0	82,263
Carrying amount	**3,292,485**	**1,726,096**	**0**	**1,566,389**
» thereof pension provisions				1,569,813
» thereof other financial assets				3,424

The reconciliation from the funded status to the amounts recognized in the consolidated statement of financial position is as follows:

	30 Sep 20	30 Sep 19
	€ k	€ k
Present value of funded pension obligations	2,482,312	2,439,734
Plan assets	1,699,342	1,726,096
Funded status (net)	**782,970**	**713,638**
Present value of unfunded pension obligations	**818,962**	**852,751**
Adjustment on account of asset ceiling	0	0
Carrying amount	**1,601,932**	**1,566,389**
» thereof pension provisions	1,605,834	1,569,813
» thereof other financial assets	3,902	3,424

Pension provisions developed as follows:

	2019/20	2018/19
	€ k	€ k
1 October	**1,569,813**	**1,143,660**
Recognized through profit or loss		
Service cost	102,833	71,090
Net interest cost	16,353	21,694
Not recognized through profit or loss		
Benefits paid	-53,492	-75,565
Remeasurements	6,365	555,638
Employer contributions	-32,982	-147,606
Exchange differences on translation	-4,309	4,316
Other	1,253	-3,414
30 September	**1,605,834**	**1,569,813**

Service cost is recorded in functional costs; net interest cost is recorded in the financial result.

The present value of the defined benefit obligations developed as follows during the reporting period:

	2019/20	2018/19
	€ k	€ k
1 October	**3,292,485**	**2,674,009**
Change in the basis of consolidation	0	2,616
Service cost	102,833	71,090
Interest cost	36,768	54,023
Benefits paid	-91,573	-87,114
Remeasurements		
» Actuarial gains/losses as a result of changes in demographic assumptions	-1,398	-5,050
» Actuarial gains/losses as a result of changes in financial assumptions	-13,179	541,176
» Actuarial gains/losses as a result of experience adjustments	-6,907	32,589
Exchange differences on translation	-18,606	13,103
Other	851	-3,957
30 September	**3,301,274**	**3,292,485**

The present value of the defined benefit obligations is attributable to:

	30 Sep 20	30 Sep 19
	€ k	€ k
Active employees	1,697,208	1,717,045
Former employees with vested rights	303,140	298,128
Pensioners	1,300,926	1,277,312
	3,301,274	**3,292,485**

A detailed reconciliation of the change in the fair value of plan assets is presented in the table below:

	2019/20	2018/19
	€ k	€ k
1 October	**1,726,096**	**1,535,336**
Change in the basis of consolidation	0	997
Interest income	20,415	32,329
Remeasurements	-27,849	12,608
Employer contributions	32,982	147,606
Employee contributions	357	243
Withdrawals for benefit payments	-38,081	-11,549
Exchange differences on translation	-14,297	8,787
Other	-281	-261
30 September	**1,699,342**	**1,726,096**

The actuarial gains/losses from the DBO and the remeasurement of the plan assets are recognized in other comprehensive income.

Employer contributions to plan assets for the following fiscal year are expected to amount to €2,989k.

These plan assets are used exclusively to settle the defined benefit obligations. The funding of these benefit obligations serves to cover future cash outflows as required by law in some countries and made on a voluntary basis in others.

Giving special consideration to the type of the underlying obligations, the assets transferred in Germany to Carl Zeiss Pensions-Treuhand e.V. are to be invested in the interest of the beneficiaries so as to maximize security and profitability while ensuring liquidity at all times. The objective of the investment is the long-term ability to fulfill the obligation.

The plan assets in the CTA are managed using an absolute return approach with the objective of achieving an attractive return over the investment horizon in order to earn the interest cost of the pension liabilities while controlling and limiting short-term risks. The target return is derived as a deterministic figure from the obligations.

Dynamic risk management aims to decrease the risks of potential losses in relation to strategic asset allocation (SAA) while generating a return comparable with the SAA over the course of a market cycle. The exposures of the asset classes are managed by means of derivatives on an annual basis using defined allocation ranges and taking into account a risk budget.

The portfolio of plan assets consists of the following components:

	30 Sep 20	30 Sep 19
	€ k	€ k
Equities and equity funds	581,266	479,574
Bonds and bond funds	722,485	761,642
Real estate and real estate funds	202,987	6,683
Cash and cash equivalents	72,029	227,301
Other assets	120,575	250,896
	1,699,342	**1,726,096**

Price quotations for the equity and equity funds as well as bonds and bond funds are almost exclusively in an active market; for the other investments, there are no market quotations.

Plan assets (real estate and real estate funds) contain assets of €194,787k (prior year: €0k) that were used or have not yet been used to build owner-occupied property.

Changes in the relevant actuarial assumptions would have the following effects on the defined benefit obligation as of the reporting date:

		30 Sep 20
Change in the present value of the defined benefit obligations (DBO)	Increase by 0.5%	Decrease by 0.5%
	€ k	€ k
Interest rate	-318,070	373,059
Future salary increases	31,501	-28,283
Future pension increases	141,160	-128,684

A 1-year increase in life expectancy would lead to an increase of €175,087k in the present value of the defined benefit obligations.

The sensitivity analyses presented take into account ceteris paribus the change of a parameter, while retaining the calculation method.

To examine the sensitivity of the DBO with regard to a change in the assumed life expectancy, the mortality rates used were reduced in a comparative calculation so that the decrease results in an increase in life expectancy of roughly 1 year.

For the defined benefit obligations as of the reporting date, the following pension payments are forecast for the next 10 years, with the expected benefit payments being partly funded via plan assets:

Maturity profile of defined benefit obligations Estimated benefit payments for the coming fiscal years	€ k
Fiscal year 2020/21	88,908
Fiscal year 2021/22	90,069
Fiscal year 2022/23	91,983
Fiscal year 2023/24	94,180
Fiscal year 2024/25	96,088
Fiscal years 2025/26 up to and including 2029/30	505,946

The average weighted duration of the pension plans is about 21 years in Germany, about 13 years in the USA and about 19 years in the UK.

20 Other provisions

	30 Sep 20		30 Sep 19	
		thereof due within 1 year		thereof due within 1 year
	€ k	€ k	€ k	€ k
Provisions for personnel-related obligations	30,113	8,025	31,907	7,455
Provisions for sales-related obligations	152,247	109,561	179,364	127,981
Sundry other provisions	92,096	54,746	116,814	71,226
	274,456	**172,332**	**328,085**	**206,662**

Provisions for personnel-related obligations contain phased retirement obligations, long-service awards and early retirement arrangements, the timing and/or amount of which cannot yet be precisely determined. Provisions for sales-related obligations principally relate to warranty obligations. Sundry other provisions include provisions for environmental risks, risks of legal costs and restructuring.

	1 Oct 19	Utilization	Reversal	Additions	Unwinding of the discount and effects from changes in the discount factor	Exchange differences	30 Sep 20
	€ k	€ k	€ k	€ k	€ k	€ k	€ k
Provisions for personnel-related obligations	31,907	-15,070	-1,096	14,818	3	-449	30,113
Provisions for sales-related obligations	179,364	-47,435	-30,143	53,225	0	-2,764	152,247
Sundry other provisions	116,814	-47,569	-10,713	36,287	-104	-2,619	92,096
	328,085	**-110,074**	**-41,952**	**104,330**	**-101**	**-5,832**	**274,456**

21 Accruals

	30 Sep 20	30 Sep 19
	€ k	€ k
Accruals for personnel-related obligations	414,781	447,257
Accruals for sales-related obligations	193,721	189,866
Outstanding invoices	274,254	255,823
Other accruals	38,991	41,173
	921,747	**934,119**

Accruals for personnel-related obligations are primarily attributable to special payments, accrued vacation, accrued overtime as well as other personnel-related obligations. Accruals for sales-related obligations mainly relate to bonus and commission payments.

22 Financial liabilities

			30 Sep 20			30 Sep 19
		thereof due within 1 year	thereof due in more than 5 years		thereof due within 1 year	thereof due in more than 5 years
	€ k	€ k	€ k	€ k	€ k	€ k
Liabilities to banks	123,302	83,160	0	191,923	19,806	0
Loans	52	52	0	52	52	0
Derivatives	1,661	1,661	0	31,409	30,026	0
Lease liabilities	229,837	53,382	76,619	224,518	52,989	69,848
Other financial liabilities	293,341	171,478	57,796	319,471	144,750	60,092
	648,193	**309,732**	**134,415**	**767,373**	**247,623**	**129,940**

Liabilities to banks
Promissory notes of €200m were placed in prior years. In June 2016, some of the promissory notes were renewed and some were refinanced at new conditions. The part of €33m that was not renewed was repaid to the investors. Following a scheduled repayment of €18m in fiscal year 2018/19, a further tranche of €55m was repaid before maturity in the current fiscal year.

The contractually agreed terms of the promissory notes totaling €94m break down as follows:
» €14m with a term of 5 years
» €52.5m with a term of 7 years
» €27.5m with a term of 10 years
Of this amount, a total of €14m is subject to floating interest rates and €80m to fixed interest rates.

An annuity loan of €45m was borrowed from Kreditanstalt für Wiederaufbau under an agreement dated 20 January 2012. The loan is subject to fixed interest, is repaid in quarterly installments of €1,417k from 31 March 2014 to 30 December 2021 and has a residual carrying amount of €7,083k as of the reporting date.

As of 16 July 2014, Carl Zeiss AG concluded a revolving credit facility with a volume of €500m, a term of 5 years and an option of extending on 2 occasions with a syndicate of banks. Under an amendment agreement dated 2 August 2019, the revolving credit facility was refinanced before maturing with an unchanged credit facility of €500m and a new term of a further 5 years. The credit facility includes an option of extending on 2 occasions, by 1 year in each case. The first extension option was exercised in fiscal year 2019/20, so that the extended maturity date is 2 August 2025.

The revolving credit facility serves as a strategic liquidity reserve for the ZEISS Group and was not utilized in the reporting period (prior year: €9.4m).

Lease liabilities
Lease liabilities mainly stem from lease agreements for office space, various non-current asset items and office equipment, which ZEISS accounts for as the lessee in accordance with IFRS 16 *Leases*. They are measured at the present value of the outstanding lease payments.

Other financial liabilities
Dividends payable and purchase price liabilities
The dividends payable and purchase price liabilities amount to €251m (prior year: €270m) and mainly contain dividends payable to ASML Holding N.V., Veldhoven (Netherlands), and (contingent) purchase price liabilities from the acquisition of shares in Carl Zeiss Meditec Cataract Technology, Inc. (formerly IanTECH, Inc.), Reno (USA), Carl Zeiss OPTEC Vertriebs GmbH (formerly OPTEC GmbH), Düsseldorf, and Photono Oy, Helsinki (Finland).

Profit participation capital
The Annual General Meeting of Carl Zeiss AG adopted a resolution on 19 March 2012 authorizing the Executive Board to issue profit participation rights in the fiscal years 2011/12 through to 2015/16 for a total amount of up to €25,000k. As of the reporting date, these comprise participation certificates of the 2015-D and 2016-D series, each with a term of 5 years and a nominal volume totaling €5,532k.

In accordance with the terms and conditions of the participation certificates, they are subject to graded interest rates (0% to 20%) depending on the ZEISS Group's revenue performance.

The Annual General Meeting of Carl Zeiss AG adopted a resolution on 13 March 2017 authorizing the Executive Board to continue issuing profit participation certificates in the fiscal years from 2016/17 up to and including 2020/21 for a total amount of up to €25,000k. As of the reporting date, these comprise participation certificates of the 2017-D series with a term of 5 years and a nominal volume totaling €3,776k.

In accordance with the terms and conditions of the participation certificates, they are subject to graded interest rates (0% to 16%) depending on the ZEISS Group's revenue performance.

The recipients are the employees of Carl Zeiss AG and its affiliates in Germany, respectively. In addition, the boards of foreign group entities are authorized to issue similar rights to employees not eligible for the Carl Zeiss AG profit participation offer.

The terms and conditions of the participation certificates provide for termination rights for either party only in very limited exceptions.

For more information on the contractually agreed undiscounted cash outflows from the non-derivative financial liabilities and derivative financial instruments, please refer to note 24 Financial instruments and risk management.

23 Other non-financial liabilities

	30 Sep 20		30 Sep 19	
		thereof due within 1 year		thereof due within 1 year
	€ k	€ k	€ k	€ k
Contract liabilities				
» Advances received on account of orders	525,026	525,026	579,291	577,912
» Deferred income	157,140	128,843	141,413	117,524
» Other contract liabilities	29,334	29,334	25,118	25,118
Other liabilities	106,024	101,402	146,875	140,296
	817,524	**784,605**	**892,697**	**860,850**

Other liabilities essentially contain liabilities from taxes other than income taxes as well as withheld wage tax.

24 Financial instruments and risk management

As a global player, the ZEISS Group is exposed to credit risks, liquidity risks and market risks (currency, interest rate and other market risks) as part of its ordinary activities.

Credit risk

Credit risk stems from an adverse development in the economic conditions of the company's counterparties or borrowers and lies primarily in trade receivables. There is the threat of non-performance on the part of a contractual party. The maximum credit risk position of the ZEISS Group is equivalent to the carrying amounts of the financial instruments disclosed as financial assets. The risks are minimized by obtaining collateral, gathering credit ratings/references or analyzing track records of prior business relations, particularly payment behavior. The most frequent form is the retention of title. To reduce the credit risk with regard to trade receivables, invoices and corresponding credit notes are reported at the net amount in the statement of financial position provided netting is legally permissible and the receivable is intended to be settled on a net basis. Impairment losses are recognized for any credit risks associated with the financial assets.

The table below provides information on the remaining credit risk of trade and other receivables:

	30 Sep 20	30 Sep 19
	€ k	€ k
Trade and other receivables (gross)	**1,261,462**	**1,351,699**
Specific allowances and expected credit losses	52,054	42,459
Allowance for exchange differences	1,066	429
Trade and other receivables (net)	**1,210,474**	**1,309,669**
» thereof due in more than 1 year	57,693	46,271

Trade receivables include finance lease receivables of €18,365k (prior year: €17,975k).

Identifiable credit risks are accounted for by specific allowances on trade and other receivables. Bad debt allowances on trade receivables (credit-impaired and non-credit-impaired) developed as follows:

	2019/20	2018/19
	€ k	€ k
1 October	**42,459**	**24,995**
IFRS 9 adjustment	0	15,936
Change in the basis of consolidation	0	414
Utilization	-3,523	-7,763
Reversal	-5,678	-5
Additions	21,359	8,147
Exchange rate effects	-2,563	735
30 September	**52,054**	**42,459**

The table below presents the gross carrying amounts and average default rates for trade and other receivables according to the expected credit loss model:

	30 Sep 20	
	€ k	in %
not past due	910,098	0.7
up to 30 days past due	158,743	3.2
31 to 60 days past due	72,584	5.5
61 to 90 days past due	19,722	6.6
more than 90 days past due	100,315	10.2

	30 Sep 19	
	€ k	in %
not past due	1,020,853	0.4
up to 30 days past due	159,902	2.6
31 to 60 days past due	53,457	4.3
61 to 90 days past due	26,148	5.8
more than 90 days past due	91,339	>5.8

Various macroeconomic scenarios were taken into account when calculating expected losses in order to reflect the credit risk that is seen as high by the market compared to the past. Adjusting the forward-looking statements to the current environment caused the average default rates to rise by between 0.1 and 1.3 percentage points.

The table below provides information on the offsetting of non-derivative financial instruments and the resulting limit to the credit risk:

	30 Sep 20	30 Sep 19
	€ k	€ k
Trade and other receivables (before offsetting)	1,289,727	1,386,052
Offsetting of credit notes issued	79,253	76,383
Remaining credit risk	**1,210,474**	**1,309,669**

The following offsetting of derivative financial instruments would be possible in the event of insolvency at a counterparty:

	30 Sep 20	30 Sep 19
	€ k	€ k
Derivatives with a positive market value	15,366	5,195
Amount available for offsetting in the event of insolvency	1,317	4,708
Remaining credit risk	**14,049**	**487**

Credit risk in connection with securities is mitigated by selecting counterparties with good credit ratings and by limiting the amounts invested. The Group invests exclusively in securities of investment grade issuers.

Another credit risk is connected to the investment of cash if the banks are not able to meet their obligations. This risk is diversified by investing at different banks, defining limits per asset class and issuer, and applying high rating standards to business partners.

Liquidity risk
The liquidity risk of the ZEISS Group is the risk that it may not be able to meet its financial obligations (to repay financial liabilities or make interest payments).

The cash that serves this risk is generated primarily by operations. Where necessary or where it makes sense for strategic reasons, external sources of finance are drawn on in addition. Carl Zeiss Meditec AG also has the possibility of raising equity funds on the capital market.

For further details on financial liabilities, please refer to note 22 Financial liabilities.

To reduce the liquidity risk with regard to trade payables, invoices and corresponding credit notes issued are reported at the net amount in the statement of financial position provided netting is legally permissible and the liability is intended to be settled on a net basis.

The table below provides information on the offsetting of trade payables and the resulting limit to the liquidity risk:

	30 Sep 20	30 Sep 19
	€ k	€ k
Trade payables (before offsetting)	434,706	455,960
Offsetting of credits notes issued	15,088	8,233
Remaining liquidity risk	**419,618**	**447,727**

The following offsetting of derivative financial instruments with a negative market value would be possible in the event of insolvency of a counterparty:

	30 Sep 20	30 Sep 19
	€ k	€ k
Derivatives with a negative market value	1,661	31,409
Amount available for offsetting in the event of insolvency	1,317	4,708
Remaining liquidity risk	**344**	**26,701**

Liquidity is ensured by means of ongoing, group-wide liquidity monitoring and budgeting and a diversified investment policy that takes into account the terms to maturity and is implemented by Carl Zeiss Financial Services GmbH on a group-wide scale. The available liquidity as well as the revolving credit facility give the ZEISS Group adequate flexibility to cover the Group's refinancing needs. The ZEISS Group is not subject to any concentration risk thanks to the diverse nature of its financing sources and its cash and cash equivalents.

The table below shows the contractually agreed undiscounted cash outflows for non-derivative financial liabilities:

	Undiscounted cash outflows			
	due within 1 year	due in 1 to 5 years	due in more than 5 years	**Total 30 Sep 20**
	€ k	€ k	€ k	€ k
Trade payables	419,618	0	0	**419,618**
Financial liabilities				
» Liabilities to banks	83,887	43,294	0	**127,181**
» Loans	52	0	0	**52**
» Lease liabilities	53,494	113,811	97,812	**265,117**
» Other financial liabilities	172,853	65,140	58,411	**296,404**
Guarantees	5,875	0	0	**5,875**

	Undiscounted cash outflows			
	due within 1 year	due in 1 to 5 years	due in more than 5 years	Total 30 Sep 19
	€ k	€ k	€ k	€ k
Trade payables	447,727	0	0	**447,727**
Financial liabilities				
» Liabilities to banks	19,833	180,104	0	**199,937**
» Loans	52	0	0	**52**
» Lease liabilities	54,160	114,839	87,874	**256,873**
» Other financial liabilities	145,954	114,859	60,092	**320,905**
Guarantees	7,744	0	0	**7,744**

The table below shows the contractually agreed undiscounted cash outflows for derivative financial instruments with a negative market value:

	Undiscounted cash outflows			
	due within 1 year	due in 1 to 5 years	due in more than 5 years	**Total 30 Sep 20**
	€ k	€ k	€ k	€ k
Derivative financial liabilities settled on a gross basis				
» Cash outflows	285,704	0	0	**285,704**
» Cash inflows	283,749	0	0	**283,749**

	Undiscounted cash outflows			
	due within 1 year	due in 1 to 5 years	due in more than 5 years	Total 30 Sep 19
	€ k	€ k	€ k	€ k
Derivative financial liabilities settled on a gross basis				
» Cash outflows	900,789	72,593	0	**973,382**
» Cash inflows	862,461	69,820	0	**932,281**

Market risk

The operations of the ZEISS Group are exposed to market price risks due to changes in exchange rates and interest rates. Business policy aims to minimize these risks by means of hedging. All hedging transactions are implemented at corporate level.

From an operating perspective, hedging rates are set for all relevant currencies. All business is transacted in compliance with the principle of strict separation of duties between front office (trading), middle office (financial risk management) and back office (settlement, documentation).

Exchange rate risk

On account of its global orientation, the ZEISS Group is primarily exposed to exchange rate risks in operations whenever revenue is generated or goods are purchased in a currency other than the currency in which the associated costs are incurred. This risk is mainly in relation to the Chinese renminbi, the pound sterling, the Japanese yen, the South Korean won and the US dollar.

The average rates of the forward exchange contracts for the main currencies break down as follows:

	30 Sep 20
EUR / CNY	7.8504
EUR / GBP	0.8874
EUR / JPY	123.3086
EUR / KRW	1,318.7932
EUR / USD	1.1393

In order to reduce the effect of exchange rate fluctuations on operations, foreign exchange risks are mostly hedged using standard currency options and forward exchange contracts concluded with banks with excellent credit ratings.

Derivatives are accounted for as stand-alone derivatives. The nominal amounts and market values of the derivative financial instruments can be found in the following table:

	30 Sep 20	
	Nominal amount	Market value
	€ k	€ k
Derivatives not used for hedge accounting		
» Derivatives with a positive market value	635,139	15,366
» Derivatives with a negative market value	279,478	1,661

	30 Sep 19	
	Nominal amount	Market value
	€ k	€ k
Derivatives not used for hedge accounting		
» Derivatives with a positive market value	168,979	5,195
» Derivatives with a negative market value	928,661	31,409

For risk management and monitoring purposes value-at-risk analyses, supplemented by scenario, sensitivity and stress test analyses, are used to quantify exchange rate risks. These risk analyses are reported monthly to the Group's Executive Board.

These value-at-risk analyses are used to regularly assess the risk position from changes in exchange rates by calculating the maximum loss for a certain confidence level and retention period. Value at risk is determined on the basis of historical data and taking into account correlations between the transactions analyzed. The value at risk determined then shows the maximum loss that will not be exceeded over a period of 10 days with a probability of 95% (historical simulation).

In the past fiscal year, value at risk increased to €5.4m (prior year: €0.7m).

Interest rate risk
Interest rate risk arises from fluctuations in market interest rates.

These changes can affect both earnings (cash flow risk) and any fluctuations in the value of financial instruments (fair value risk). The ZEISS Group has various interest-sensitive assets and liabilities and therefore has interest rate exposure from its asset and liability management.

The interest rate risk is analyzed and managed centrally by Carl Zeiss Financial Services GmbH. The ZEISS Group has the following cash flow and fair value risks based on its floating-rate and fixed-rate instruments in this context.

Cash flow risk: A change of +/- 50 base points would have an effect of +/- €6.7m on profit or loss (prior year: +/- €6.8m). A change of +/- 50 base points would have no effect on equity.

Fair value risk: Assuming a change of +/- 50 base points, the fixed-rate instruments allocated to the "fair value through other comprehensive income" (FVOCI) measurement category would have an effect of -/+ €1.1m on equity (prior year: -/+ €0.8m).

The ZEISS Group is not exposed to material other price risks.

Carrying amounts and fair values by category

The table below presents the carrying amounts of the financial instruments accounted for by measurement category:

		30 Sep 20	30 Sep 19
		Carrying amount	Carrying amount
	Categories of IFRS 9	€ k	€ k
Trade and other receivables	AC/n.a.*	1,210,474	1,309,669
Other financial assets			
» Shares in affiliates	n.a.*	77,580	35,396
» Investments	FVPL	4,164	3,344
	FVOCI	4,083	5,051
	n.a.*	10,329	18,950
» Loans	AC	49,012	44,343
» Securities	AC	260,351	357,453
	FVPL	223,494	100,967
	FVOCI	145,219	96,838
» Derivatives	FVPL	15,366	5,195
» Sundry other financial assets	AC	392,951	663,416
Cash and cash equivalents	AC	764,839	650,033
Financial assets		**3,157,862**	**3,290,655**

Trade payables	FLAC	419,618	447,727
Other financial liabilities			
» Liabilities to banks	FLAC	123,302	191,923
» Loans	FLAC	52	52
» Derivatives	FVPL	1,661	31,409
» Lease liabilities	n.a.*	229,837	224,518
» Other financial liabilities	FLAC	205,514	210,462
	FVPL	87,827	109,009
Financial liabilities		**1,067,811**	**1,215,100**

Aggregated by measurement category in accordance with IFRS 9			
Financial assets at amortized cost	AC	2,677,627	3,024,914
Financial assets at fair value through other comprehensive income	FVOCI	149,302	101,889
Financial assets at fair value through profit or loss	FVPL	243,024	109,506
Financial liabilities at amortized cost	FLAC	748,486	850,164
Financial liabilities at fair value through profit or loss	FVPL	89,488	140,418

*n.a.: Not allocable to any IFRS 9 category

The carrying amounts presented for the financial instruments measured at (amortized) cost approximate their fair values. The following table shows the fair values and carrying amounts of the financial instruments that were measured at (amortized) cost but the carrying amounts do not approximate their fair values:

			30 Sep 20
		Carrying amount	Fair value
	Categories of IFRS 9	€ k	€ k
Liabilities to banks	FLAC	123,302	127,722

			30 Sep 19
		Carrying amount	Fair value
	Categories of IFRS 9	€ k	€ k
Liabilities to banks	FLAC	191,923	202,945

Fair value measurement
Financial instruments are measured at fair value based on a 3-level fair value hierarchy:

Level 1: Fair value is calculated based on the quoted, unadjusted market prices on active markets.

Level 2: Fair value is calculated based on market data such as stock prices, exchange rates or interest curves pursuant to market-based valuation techniques (e.g. present value method or option pricing models).

Level 3: Fair value is calculated based on models with non-observable market data.

The decision on classification is made on the reporting date.

The table below shows the fair values of financial instruments as well as their respective classification:

Fair value				**30 Sep 20**
	Level 1	Level 2	Level 3	Total
	€ k	€ k	€ k	€ k
Securities	359,417	9,296	0	368,713
Derivatives	0	15,366	0	15,366
Financial assets	**359,417**	**24,662**	**0**	**384,079**
Liabilities to banks	0	127,722	0	127,722
Derivatives	0	1,661	0	1,661
Other financial liabilities	0	0	87,827	87,827
Financial liabilities	**0**	**129,383**	**87,827**	**217,210**

Fair value				30 Sep 19
	Level 1	Level 2	Level 3	Total
	€ k	€ k	€ k	€ k
Securities	96,838	100,967	0	197,805
Derivatives	0	5,195	0	5,195
Financial assets	**96,838**	**106,162**	**0**	**203,000**
Liabilities to banks	0	202,945	0	202,945
Derivatives	0	31,409	0	31,409
Other financial liabilities	0	0	109,009	109,009
Financial liabilities	**0**	**234,354**	**109,009**	**343,363**

The development of financial instruments allocated to Level 3 of the fair value hierarchy is presented in the table below:

	2019/20	**2018/19**
	€ k	€ k
1 October	**109,009**	**0**
Additions	9,673	98,842
Recognized in the income statement	2,500	5,591
Payment of contingent purchase price obligations	25,227	0
Exchange rate effects	-8,128	4,576
30 September	**87,827**	**109,009**

The financial liabilities allocated to Level 3 relate to a contingent purchase price obligation from an acquisition. The change in fair value recognized through profit or loss includes the annual unwinding of the discount on liabilities and also the adjustment of cost of capital to measure the liability. Both effects were recognized in interest expenses. Furthermore, the other financial result contains the income from the remeasurement of a contingent purchase price obligation and is also part of the change in fair value recognized through profit or loss. The fair value of the contingent consideration is determined based on the criteria agreed in the purchase agreement and the expected probable target achievement and is discounted at market interest rate. An increase or decrease in the interest rate by 0.5 percentage points would result in a decrease or increase in the contingent consideration by a low single-digit million figure. A delay in the target achievement linked to milestones and simultaneous decrease in the forecast revenue targets by 15% would result in a decrease in the obligations by €18m.

Net gain or loss

The effects of financial instruments recognized in the income statement are presented on a net basis in the table below by category as defined in IFRS 9 *Financial Instruments*:

				2019/20
		thereof from interest	thereof from subsequent measurement	thereof from disposals
	€ k	€ k	€ k	€ k
Financial assets at amortized cost	-38,804	7,272	-46,062	-14
Financial assets at fair value through other comprehensive income	2,257	2,730	-460	-13
Financial assets and liabilities at fair value through profit or loss	12,093	-25,543	27,607	10,029
Financial liabilities at amortized cost	-11,717	-6,928	-4,789	0

				2018/19
		thereof from interest	thereof from subsequent measurement	thereof from disposals
	€ k	€ k	€ k	€ k
Financial assets at amortized cost	18,886	8,237	10,651	-2
Financial assets at fair value through other comprehensive income	2,258	1,991	0	267
Financial assets and liabilities at fair value through profit or loss	-60,882	0	-26,665	-34,217
Financial liabilities at amortized cost	-28,399	-24,290	-4,109	0

The “Financial assets at amortized cost” category contains the interest and currency result from the measurement of receivables and loans together with securities allocated to this category. The “Financial assets at fair value through other comprehensive income” category mainly results from the measurement of securities and from the reversal of provisions from financial instruments in equity. The “Financial assets and liabilities at fair value through profit or loss” category contains the gains or losses from the measurement of derivatives and the measurement of financial liabilities. The interest and currency result from the measurement of liabilities is recognized in the “Financial liabilities at amortized cost” category.

OTHER NOTES

25 Notes to the statement of cash flows

The consolidated statement of cash flows shows how the cash and cash equivalents reported in the statement of financial position of the ZEISS Group changed in the course of the fiscal year as a result of cash received and paid. In accordance with IAS 7 *Statement of Cash Flows*, a distinction is made between cash flows from operating activities, investing activities and financing activities.

The cash flows from investing activities and financing activities are determined on the basis of payments made or received. As for government grants for research and development, third-party subsidies are offset against investments in property, plant and equipment. The changes in financial assets are presented on a net basis as defined by IAS 7.22. The cash flows from operating activities, on the other hand, are derived indirectly from the consolidated profit or loss for the year. When performing the indirect calculation, changes in items of the statement of financial position considered in connection with operating activities are adjusted for effects from currency translation and changes in the basis of consolidation. Non-cash effects are likewise eliminated. Changes in the items of the statement of financial position concerned can therefore not be reconciled with the figures based on the published consolidated statement of financial position.

Changes to liabilities from financing activities during the fiscal year are shown in the table below:

			Non-cash changes			
	1 Oct 19	Cash changes	from currency translation	from changes in the basis of consolidation	from additions and unwinding the discount	**30 Sep 20**
	€ k	€ k	€ k	€ k	€ k	€ k
Liabilities to banks	191,923	-62,559	-6,094	32	0	123,302
Lease liabilities	224,518	-51,216	-11,089	578	67,046	229,837
	416,441	**-113,775**	**-17,183**	**610**	**67,046**	**353,139**

26 Contingent liabilities

	30 Sep 20	30 Sep 19
	€ k	€ k
Liabilities from guarantees	5,875	7,744
Other contingent liabilities	1,114	1,171

The liabilities from guarantees and other contingent liabilities were not recognized as provisions because the probability of an outflow of resources is considered to be remote.

27 Average headcount for the year and personnel expenses

	2019/20	2018/19
	Number	Number
Germany	13,135	12,397
EMEA (without Germany)	4,547	4,482
Americas	6,866	6,954
APAC	6,537	6,355
	31,085	**30,188**
Trainees	473	425
Total	**31,558**	**30,613**

The average number for the year is calculated on the basis of full-time equivalents.

Personnel expenses break down as follows:

	2019/20	2018/19
	€ k	€ k
Wages and salaries	1,881,019	1,874,843
Social security	289,271	291,132
Pension costs	110,585	75,141
Total	**2,280,875**	**2,241,116**

28 Leases

ZEISS as lessee

The Group has entered into lease agreements for office space, various non-current asset items and office equipment. The contracts have terms of between 1 and more than 5 years and some contain renewal and purchase options as well as price adjustment clauses.

The carrying amounts of the right-of-use assets are included in property, plant and equipment as follows:

	30 Sep 20	30 Sep 19
	€ k	€ k
Land and buildings	189,072	183,676
Technical equipment and machinery	2,426	2,268
Other equipment, furniture and fixtures	32,189	35,936

Depreciation of right-of-use assets breaks down as follows:

	2019/20	2018/19
	€ k	€ k
Land and buildings	35,211	26,597
Technical equipment and machinery	1,519	1,068
Other equipment, furniture and fixtures	18,446	20,126

Lease liabilities of €51,216k (prior year: €46,680k) were repaid in fiscal year 2019/20. Interest expenses from the unwinding of the discount on lease liabilities are presented in the financial result.

The lease expenses include expenses for short-term leases of €10,843k (prior year: €7,051k) and expenses for leases of low-value assets of €9,640k (prior year: €6,649k).

In fiscal year 2019/20, cash outflows for leases totaled €78,547k (prior year: €67,578k).

Future cash outflows of €17k (prior year: €40k) were not included in the lease liability because it is not reasonably certain that the leases will be renewed or not terminated.

The future cash outflows for leases that have not yet begun as of the reporting date amounts to €4,144k (prior year: €0k).

Income of €657k (prior year: €391k) from the sublease of right-of-use assets was also recognized.

Rental concessions due to the COVID-19 pandemic of €249k were recognized through profit or loss.

ZEISS as lessor

Operating leases

The Group has entered into lease agreements mainly for buildings and technical equipment. In connection with product sales, the ZEISS Group offers financing models in the form of leases that are classified as operating leases based on their features.

The carrying amounts of these fixed assets contain the following amounts from operating leases under which the ZEISS Group is the lessor:

	30 Sep 20	30 Sep 19
	€ k	€ k
Land and buildings	27,636	165
Technical equipment and machinery	713	984
Other equipment, furniture and fixtures	1,529	2,205

Risks from leases stem in particular from lessees failing to adhere to agreed conditions or purchase agreed quantities. In these cases, compensation for minimum purchase volumes in the event of failure to purchase or the return of the leased asset to the lessor including appropriate compensation payments for early contract termination are agreed in the contracts as protection against such risks. Further risk mitigation measures that are carried out prior to entering into a contract include customer credit checks, a feasibility appraisal of the lease and a comprehensive analysis of the customer's realistic requirements.

Lease income came to €5,765k (prior year: €5,979k) in the fiscal year. There was no lease income relating to variable lease payments not linked to an index or interest.

Accumulated future minimum lease payments under non-cancellable operating leases amount to:

	30 Sep 20	30 Sep 19
Term to maturity	€ k	€ k
Due within year 1	5,595	6,220
Due within year 2	3,589	3,593
Due within year 3	2,886	228
Due within year 4	564	147
Due within year 5	524	2
Due in more than 5 years	2,985	0
Total minimum lease payments	**16,143**	**10,190**

Finance leases

In connection with product sales, the ZEISS Group offers financing models in the form of leases that are classified as finance leases based on their features.

See the statements under operating leases for information on the risks from finance leases.

Outstanding minimum lease payments under finance leases are as follows:

	30 Sep 20	30 Sep 19
Term to maturity	€ k	€ k
Due within year 1	7,317	6,498
Due within year 2	4,745	4,844
Due within year 3	3,352	3,843
Due within year 4	2,434	1,807
Due within year 5	1,051	1,056
Due in more than 5 years	85	611
Future undiscounted cash inflows	**18,984**	**18,659**
Unearned finance income	619	684
Finance lease receivables	**18,365**	**17,975**

29 Government grants

The government grants received in the reporting period were as follows:

	2019/20	2018/19
	€ k	€ k
Research and development grants	13,781	7,502
Grants related to assets	4,497	5,595
Other grants related to expenses	13,062	133
	31,340	**13,230**

Other grants related to expenses mainly include various grants in Germany and other countries as a result of the COVID-19 pandemic, which were deducted as income from cost of sales and functional costs.

30 Related party disclosures

Related parties as defined by IAS 24 *Related Party Disclosures* include the Carl Zeiss Foundation, Heidenheim an der Brenz and Jena, the entity SCHOTT AG, Mainz, owned by the Carl Zeiss Foundation, the associates, joint ventures and non-consolidated subsidiaries as well as the members of the Executive Board and the Supervisory Board of Carl Zeiss AG.

All transactions with the related parties are settled at arm’s length conditions.

The table below shows receivables from and liabilities to subsidiaries, joint ventures and associates that are not included in the consolidated financial statements of Carl Zeiss AG as well as SCHOTT AG, Mainz:

	30 Sep 20	30 Sep 19
	€ k	€ k
Receivables	46,999	45,309
Liabilities	20,285	15,697

These receivables and liabilities mainly stem from trade and cash management.

The table below shows the goods and services supplied to and received from subsidiaries, joint ventures and associates that are not included in the consolidated financial statements of Carl Zeiss AG as well as SCHOTT AG, Mainz:

	2019/20	2018/19
	€ k	€ k
Goods and services supplied	26,067	30,339
Goods and services received	56,630	34,230

In the reporting period, there were no transactions between the ZEISS Group and members of the Executive Board and the Supervisory Board and their family members above and beyond the existing employment, service or appointment relationships and the related contractually agreed remuneration.

Information on the remuneration of board members is contained in note 34 Remuneration of the Executive Board and the Supervisory Board.

31 German Corporate Governance Code

The Management Board and the Supervisory Board of the listed company Carl Zeiss Meditec AG, Jena, included in the consolidated financial statements have issued a declaration in accordance with Sec. 161 German Stock Corporation Act (AktG) on the recommendations issued by the government commission on the German Corporate Governance Code and made it available to stockholders on the company's website (www.zeiss.de/meditec-ag/ir).

32 Audit fees

The Supervisory Board of Carl Zeiss AG engaged Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart, to audit the consolidated financial statements. The audit fees relate to the group auditor Ernst & Young GmbH, Germany.

	2019/20
	€ k
Audit services	2,089
Other services	3,103

33 Subsequent events

There were no significant events after the end of the fiscal year.

34 Remuneration of the Executive Board and the Supervisory Board

Total remuneration of the members of the Executive Board for performance of their duties at Carl Zeiss AG and its subsidiaries came to €19,286k for fiscal year 2019/20 (prior year: €13,657k). Of the total remuneration, €0k (prior year: €250k) is attributable to long-term benefits and €4,814k (prior year: €1,785k) to service cost for pension obligations. Current fixed and variable remuneration comes to €14,472k (prior year: €11,622k). The members of the Executive Board did not receive any additional remuneration because they either waived the remuneration for their activities on the supervisory board of subsidiaries or offset this against their Executive Board remuneration.

The total benefits paid to former members of the Executive Board and their surviving dependants amounted to €2,835k for fiscal year 2019/20 (prior year: €2,658k). Provisions totaling of €70,681k (prior year: €55,825k) were recognized for the benefit obligations to former members of the Executive Board or their surviving dependants.

The total remuneration of the members of the Supervisory Board of Carl Zeiss AG for their work came to €1,248k in fiscal year 2019/20 (prior year: €1,270k).

Oberkochen, 9 December 2020

The Executive Board of Carl Zeiss AG

Dr. Karl Lamprecht

Dr. Matthias Metz

Dr. Ludwin Monz

Dr. Christian Müller

Dr. Jochen Peter

Dr. Markus Weber

List of Shareholdings of the Group

in accordance with Sec. 315a (1) in conjunction with Sec. 313 (2) German Commercial Code (HGB)

30 Sep 20

Country	City	Name of entity		Share in capital acc. to Sec. 285 No. 11 HGB	Beneficial share in capital
				%	%
1. Fully consolidated subsidiaries					
Germany	Aalen	Carl Zeiss 3D Automation GmbH	1	100.0	100.0
Germany	Öhringen	Carl Zeiss Automated Inspection GmbH	1	100.0	100.0
Germany	Oberkochen	Carl Zeiss Beteiligungs-GmbH	1	100.0	100.0
Germany	Göttingen	Carl Zeiss CMP GmbH	1	100.0	100.0
Germany	Oberkochen	Carl Zeiss Energie GmbH	1	100.0	100.0
Germany	Oberkochen	Carl Zeiss Financial Services GmbH	1	100.0	100.0
Germany	Tholey	Carl Zeiss Fixture Systems GmbH		100.0	100.0
Germany	Oberkochen	Carl Zeiss Grundstücks GmbH & Co. KG	1	100.0	100.0
Germany	Oberkochen	Carl Zeiss Industrielle Messtechnik GmbH	1	100.0	100.0
Germany	Oberkochen	Carl Zeiss IQR GmbH	1	100.0	100.0
Germany	Oberkochen	Carl Zeiss IQS Deutschland GmbH	1	100.0	100.0
Germany	Jena	Carl Zeiss Jena GmbH	1	100.0	100.0
Germany	Jena	Carl Zeiss Jena Grundstücks GmbH & Co. KG	1	100.0	100.0
Germany	Jena	Carl Zeiss Meditec AG		59.1	59.1
Germany	Jena	Carl Zeiss Meditec Asset Management Verwaltungsgesellschaft mbH	1	100.0	59.1
Germany	Oberkochen	Carl Zeiss Meditec Vertriebsgesellschaft mbH	1	100.0	59.1
Germany	Oberkochen	Carl Zeiss Microscopy Deutschland GmbH	1	100.0	100.0
Germany	Jena	Carl Zeiss Microscopy GmbH	1	100.0	100.0
Germany	Oberkochen	Carl Zeiss MultiSEM GmbH	1	100.0	100.0
Germany	Düsseldorf	Carl Zeiss OPTEC Vertriebs GmbH		51.0	100.0[3]
Germany	Neubeuern	Carl Zeiss Optotechnik GmbH	1	100.0	100.0
Germany	Peine	Carl Zeiss QEC GmbH	1	100.0	100.0
Germany	Schönkirchen	Carl Zeiss Schönkirchen GmbH	1	100.0	100.0
Germany	Oberkochen	Carl Zeiss SMT GmbH	1	100.0	75.1
Germany	Oberkochen	Carl Zeiss SMT Holding GmbH & Co. KG	1	75.1	75.1
Germany	Oberkochen	Carl Zeiss SMT Holding Management GmbH	1	100.0	100.0
Germany	Jena	Carl Zeiss Spectroscopy GmbH	1	100.0	100.0
Germany	Wetzlar	Carl Zeiss Sports Optics GmbH	1	100.0	100.0
Germany	Aalen	Carl Zeiss Vision GmbH		100.0	100.0
Germany	Aalen	Carl Zeiss Vision Grundstücks GmbH & Co. KG	1	100.0	100.0
Germany	Aalen	Carl Zeiss Vision Holding GmbH		100.0	100.0
Germany	Aalen	Carl Zeiss Vision International GmbH		100.0	100.0
Germany	Aalen	Carl Zeiss Vision Investment GmbH		100.0	100.0
Germany	Wetzlar	Carl Zeiss Wetzlar Grundstücks GmbH & Co. KG	1	100.0	100.0
Germany	Braunschweig	GOM GmbH	1	100.0	100.0
Germany	Frankfurt	Helaba Invest - CZFS Spezialfonds		100.0	100.0
Germany	Aalen	Marwitz & Hauser GmbH	1	100.0	100.0
Germany	Kiel	Opton Feintechnik Kiel GmbH	1	100.0	100.0
Argentina	Buenos Aires	Carl Zeiss Vision Argentina S.A.		100.0	100.0
Australia	North Ryde	Carl Zeiss No. 2 Pty Limited		100.0	100.0

Country	City	Name of entity	Share in capital acc. to Sec. 285 No. 11 HGB	Beneficial share in capital
			%	%
1. Fully consolidated subsidiaries				
Australia	North Ryde	Carl Zeiss Pty. Limited	100.0	100.0
Australia	Tonsley	Carl Zeiss Vision Australia Group Pty. Ltd.	100.0	100.0
Australia	Tonsley	Carl Zeiss Vision Australia Holdings Ltd.	100.0	100.0
Australia	Tonsley	Carl Zeiss Vision Australia Pty. Ltd.	100.0	100.0
Australia	Tonsley	Sola Optical Partners (Limited Partnership)	100.0	100.0
Belarus	Minsk	Carl Zeiss LLC	100.0	100.0[3]
Belgium	Zaventem	Carl Zeiss N.V.-S.A.	100.0	100.0
Belgium	Zaventem	Carl Zeiss Vision Belgium NV	100.0	100.0
Brazil	São Paulo	Carl Zeiss do Brasil Ltda.	100.0	100.0
Brazil	Petrópolis	Carl Zeiss Vision Brasil Industria Optica Ltda.	100.0	100.0
British Virgin Islands	Road Town, Tortola	Carl Zeiss Vision China (BVI) Ltd.	100.0	100.0
China	Hong Kong	Carl Zeiss Far East Co., Ltd.	100.0	100.0
China	Changchun City	Carl Zeiss Fixture Systems (Changchun) Co., Ltd.	100.0	100.0
China	Shanghai	Carl Zeiss IMT (Shanghai) Co., Ltd.	100.0	100.0
China	Guangzhou	Carl Zeiss Meditec (Guangzhou) Ltd.	100.0	59.1
China	Shanghai	Carl Zeiss (Shanghai) Co., Ltd.	100.0	100.0
China	Suzhou-City	Carl Zeiss Suzhou Co., Ltd.	100.0	100.0
China	Guangzhou	Carl Zeiss Vision (China) Ltd.	100.0	100.0
China	Guangzhou	Carl Zeiss Vision (Guangzhou) Ltd.	100.0	100.0
China	Hong Kong	Carl Zeiss Vision Sunlens Asia Pacific Ltd.	100.0	100.0
China	Guangzhou	Carl Zeiss Vision Sunlens China Ltd.	100.0	100.0
China	Guangzhou	Carl Zeiss Vision Technical Services (Guangzhou) Ltd.	100.0	100.0
China	Guangzhou	Carl Zeiss Vision Technologies (Guangzhou) Ltd.	100.0	100.0
Denmark	Birkerød	Carl Zeiss A/S	100.0	100.0
Denmark	Birkerød	Carl Zeiss Vision Danmark A/S	100.0	100.0
Finland	Vantaa	Carl Zeiss Oy	100.0	100.0
Finland	Helsinki	Photono Oy	20.0	59.1[4]
France	La Rochelle, Perigny	Atlantic SAS	100.0	59.1
France	Marly-le-Roi	Carl Zeiss Meditec France S.A.S.	100.0	59.1
France	La Rochelle, Perigny	Carl Zeiss Meditec SAS	100.0	59.1
France	Marly-le-Roi	Carl Zeiss SAS	100.0	100.0
France	Sablé-sur-Sarthe	Carl Zeiss Services S.a.r.l.	100.0	100.0
France	Fougères	Carl Zeiss Vision France Holding S.A.S.	100.0	100.0
France	Fougères	Carl Zeiss Vision France S.A.S.	100.0	100.0
France	Paris	France Chirurgie Instrumentation SAS	100.0	59.1
UK	Cambourne	Carl Zeiss Ltd	100.0	100.0
UK	Cambourne	Carl Zeiss Microscopy Limited	100.0	100.0
UK	Birmingham	Carl Zeiss Vision UK Limited	100.0	100.0
UK	Livingston	HYALTECH Ltd.	100.0	59.1
UK	Birmingham	SILS Limited	100.0	100.0

Country	City	Name of entity	Share in capital acc. to Sec. 285 No. 11 HGB	Beneficial share in capital
			%	%
India	Bangalore	Carl Zeiss India (Bangalore) Private Limited	100.0	100.0
Ireland	Wexford	Carl Zeiss Vision Ireland Ltd.	100.0	100.0
Israel	Misgav	Carl Zeiss SMS Ltd.	100.0	75.1
Italy	Cassano Magnago, Varese	Bosello High Technology S.r.l.	100.0	100.0
Italy	Milan	Carl Zeiss S.p.A.	100.0	100.0
Italy	Varese	Carl Zeiss Vision Italia S.p.A.	100.0	100.0
Japan	Tokyo	Carl Zeiss Co., Ltd.	100.0	100.0
Japan	Tokyo	Carl Zeiss IMT Co., Ltd.	100.0	100.0
Japan	Tokyo	Carl Zeiss Meditec Co., Ltd.	100.0	79.2
Japan	Tokyo	Carl Zeiss Vision Japan Co., Ltd.	100.0	100.0
Canada	Toronto	Carl Zeiss Canada Ltd.	100.0	100.0
Canada	Toronto	Carl Zeiss Vision Canada Inc.	100.0	100.0
Kazakhstan	Almaty District	Carl Zeiss LLC	100.0	100.0[3]
Colombia	Bogotá D.C.	Carl Zeiss Vision Colombia S.A.S.	100.0	100.0
Korea, South	Seoul	Carl Zeiss Co., Ltd.	100.0	100.0
Korea, South	Seoul	Carl Zeiss Vision Korea Co., Ltd.	100.0	100.0
Croatia	Zagreb	Carl Zeiss d.o.o.	100.0	100.0
Malaysia	Petaling Jaya	Carl Zeiss Sdn. Bhd.	100.0	100.0
Malaysia	Kuala Lumpur	Carl Zeiss Vision (Malaysia) Sdn. Bhd.	100.0	100.0
Mauritius	Quatre Bornes	FCI SUD Ltd.	100.0	59.1
Mexico	México D.F.	Carl Zeiss de México S.A. de C.V.	100.0	100.0
Mexico	Tijuana	Carl Zeiss Vision Manufactura de Mexico S. de R.L. de C.V.	100.0	100.0
Mexico	Naucalpan	Carl Zeiss Vision Mexico S. de R.L. de C.V.	100.0	100.0
New Zealand	Auckland	Carl Zeiss (N.Z.) Ltd.	100.0	100.0
Netherlands	Breda	Carl Zeiss B.V.	100.0	100.0
Netherlands	Breda	Carl Zeiss Vision Nederland B.V.	100.0	100.0
Norway	Oslo	Carl Zeiss AS	100.0	100.0
Austria	Vienna	Carl Zeiss GmbH	100.0	100.0
Austria	Graz	Carl Zeiss Industrielle Messtechnik Austria GmbH	100.0	100.0
Philippines	Taguig	Carl Zeiss Philippines Pte. Ltd.	100.0	100.0
Poland	Poznan	Carl Zeiss Shared Services Sp. z o.o.	100.0	100.0
Poland	Poznan	Carl Zeiss Sp. z o.o.	100.0	100.0
Portugal	Lisbon	Carl Zeiss Meditec Portugal Unipessoal Lda.	100.0	59.1
Portugal	Setúbal	Carl Zeiss Vision Portugal S.A.	100.0	100.0
Romania	Bucharest	Carl Zeiss Instruments S.R.L.	100.0	100.0
Russia	Moscow	Carl Zeiss LLC	100.0	100.0[3]
Sweden	Stockholm	Carl Zeiss AB	100.0	100.0
Sweden	Malmö	Carl Zeiss Vision AB	100.0	100.0
Switzerland	Feldbach	Carl Zeiss AG	100.0	100.0
Switzerland	Feldbach	Carl Zeiss Vision Swiss AG	100.0	100.0
Singapore	Singapore	Carl Zeiss Pte. Ltd.	100.0	100.0

Country	City	Name of entity	Share in capital acc. to Sec. 285 No. 11 HGB	Beneficial share in capital
			%	%
1. Fully consolidated subsidiaries				
Singapore	Singapore	Carl Zeiss Vision Singapore Pte. Ltd.	100.0	100.0
Slovakia	Bratislava	Carl Zeiss Slovakia, s.r.o.	100.0	100.0
Slovenia	Ljubljana	Carl Zeiss d.o.o.	100.0	100.0
Spain	Tres Cantos - Madrid	Carl Zeiss Iberia, S.L.	100.0	100.0
Spain	Tres Cantos - Madrid	Carl Zeiss Meditec Iberia SA	100.0	59.1
Spain	Tres Cantos - Madrid	Carl Zeiss Vision España, S.L.	100.0	100.0
South Africa	Randburg	Carl Zeiss (Pty.) Ltd.	100.0	100.0
South Africa	Randburg	Carl Zeiss Vision South Africa (Pty) Ltd.	100.0	100.0
Taiwan	Hsinchu City	Carl Zeiss Co., Ltd.	100.0	100.0
Thailand	Bangkok	Carl Zeiss Co. Ltd.	49.0[2]	49.0[2]
Czech Republic	Prague	Carl Zeiss spol. s r.o.	100.0	100.0
Turkey	Ankara	Carl Zeiss Meditec Medikal Cözümler Tic. ve San. A.S	100.0	59.1
Ukraine	Kiev	Carl Zeiss LLC	100.0	100.0[3]
Hungary	Mátészalka	Carl Zeiss Sport Optikai Hungaria Kft.	100.0	100.0
Hungary	Budapest	Carl Zeiss Technika Kft.	100.0	100.0
Hungary	Mátészalka	Carl Zeiss Vision Hungary Optikai Kft.	100.0	100.0
USA	White Plains	Carl Zeiss Inc.	100.0	100.0
USA	Minneapolis	Carl Zeiss Industrial Metrology, LLC	100.0	100.0
USA	Reno	Carl Zeiss Meditec Cataract Technology, Inc.	100.0	59.1
USA	Temple	Carl Zeiss Meditec Digital Innovations, LLC	100.0	59.1
USA	Dublin	Carl Zeiss Meditec, Inc.	100.0	59.1
USA	Ontario	Carl Zeiss Meditec Production, LLC	100.0	59.1
USA	Dublin	Carl Zeiss Meditec USA, Inc.	100.0	59.1
USA	White Plains	Carl Zeiss Microscopy, LLC	100.0	100.0
USA	White Plains	Carl Zeiss SBE, LLC	100.0	100.0
USA	Peabody	Carl Zeiss SMT, Inc.	100.0	75.1
USA	San Diego	Carl Zeiss Vision Holdings Ltd.	100.0	100.0
USA	San Diego	Carl Zeiss Vision Inc.	100.0	100.0
USA	Pleasanton	Carl Zeiss X-ray Microscopy, Inc.	100.0	100.0
USA	Pembroke	FCI Ophthalmics Inc.	100.0	59.1
USA	Lafayette	Ophthalmic Laser Engines, LLC	52.0	30.8
United Arab Emirates	Dubai	Carl Zeiss Vision MENA FZE	100.0	100.0
Vietnam	Ho Chi Minh City	Carl Zeiss Vietnam Company Limited	100.0	100.0

Country	City	Name of entity		Share in capital acc. to Sec. 285 No. 11 HGB	Beneficial share in capital
				%	%
2. Non-consolidated subsidiaries					
Germany	Dresden	Carl Zeiss Digital Innovation GmbH		100.0	100.0
Germany	Oberkochen	Carl Zeiss EyeTec GmbH		100.0	59.1
Germany	Oberkochen	Carl Zeiss Grundstücks-Verwaltungs GmbH		100.0	100.0
Germany	Dresden	Carl Zeiss Innovationszentrum für Messtechnik GmbH		100.0	100.0
Germany	Ulm	Carl Zeiss MES Solutions GmbH		100.0	100.0
Germany	Wangen	Carl Zeiss Optical Components GmbH		100.0	100.0
Germany	Cologne	Carl Zeiss Retrofit und Service GmbH		100.0	100.0
Germany	Oberkochen	Carl Zeiss Sechste Vorratsgesellschaft mbH		100.0	100.0
Germany	Oberkochen	Carl Zeiss Siebte Vorratsgesellschaft mbH		100.0	100.0
Germany	Oberkochen	Carl Zeiss Venture Beteiligungsgesellschaft mbH		100.0	100.0
Germany	Aalen	Carl Zeiss Vision International China Holding GmbH		100.0	100.0
Germany	Oberkochen	Carl Zeiss Zehnte Vorratsgesellschaft mbH		100.0	100.0
Germany	Oberkochen	Gusto Gourmet GmbH		100.0	100.0
Germany	Essingen	Holometric Technologies Forschungs- und Entwicklungs-GmbH		100.0	100.0
Germany	Oberkochen	MuLight Technology GmbH		100.0	100.0
Germany	Ulm	Scantinel Photonics GmbH		91.5	91.5
Germany	Hohenbrunn	XETOS AG		51.0	51.0
Belarus	Minsk	JV ZEISS-BelOMO OOO		60.0	60.0
Brazil	Rio de Janeiro	Lentrix Industria e Comercio de Produtos Opticos Ltda.		51.0	51.0
China	Shanghai	GOM Optical Measuring Techniques (Shanghai) Co., Ltd.		100.0	100.0
China	Shanghai	Shanghai Light Care Technology Co., Ltd.		100.0	100.0
Denmark	Birkerød	Brock & Michelsen Invest A/S		100.0	100.0
France	Guibeville	GOM FRANCE SAS		65.9	65.9
France	Strasbourg	InfiniteVision Optics SAS		100.0	59.1
UK	Coventry	GOM UK LIMITED		100.0	100.0
Italy	Buccinasco	GOM ITALIA S.R.L.		100.0	100.0
Poland	Slupsk	OptiMedi Sp. z o.o.		91.1	58.3
Poland	Slupsk	OptiNav Sp. z o.o.		64.0	64.0
Romania	Timisoara	Carl Zeiss MES Solutions S.R.L.		99.9	99.9
Switzerland	Widen	GOM International AG		60.0	60.0
Zimbabwe	Harare	Carl Zeiss (Pvt.) Ltd. (Zimbabwe)		100.0	100.0
Turkey	Istanbul	Carl Zeiss Teknoloji Cözümleri Ticaret Limited Sirketi		100.0	100.0
USA	San Diego	American Optical IP Corporation		100.0	100.0
USA	Warsaw	Bosello High Technology USA LLC		100.0	100.0
USA	Wixom	Carl Zeiss Metrology Services Inc.		80.0	80.0
USA	Princeton	EMMETROPIA, INC		100.0	59.1
USA	Charlotte	GOM Americas Inc.		100.0	100.0
Venezuela	San Diego	Carl Zeiss Vision Venezuela Industria Optica C.A.		100.0	100.0

Country	City	Name of entity	Share in capital acc. to Sec. 285 No. 11 HGB	Beneficial share in capital
			%	%
3. Associates and joint ventures accounted for at cost				
Germany	Braunschweig	A3DS GmbH	30.0	30.0
Germany	Jena	JENAER BILDUNGSZENTRUM gGmbH SCHOTT CARL ZEISS JENOPTIK	33.3	33.3
Germany	Eggenstein-Leopoldshafen	Nanoscribe GmbH	39.9	39.9
Germany	Mainz	SCHOTT-ZEISS ASSEKURANZKONTOR GmbH	50.0	50.0
Germany	Holm-Seppensen	X-Ray Solutions GmbH	49.0	49.0
Denmark	Nørresundby	3D-CT A/S	49.0	49.0
Italy	Samarate, Varese	S.E.A.I. S.r.l.	25.0	25.0
Canada	Ottawa	Fibics Incorporated	25.1	25.1
Norway	Lier	Visitech AS	25.0	25.0
Switzerland	Zug	KXO AG	38.3	19.6
Hungary	Miskolc	ETEO Software Factory Kft.	50.0	50.0
USA	Bozeman	Bridger Photonics, Inc.	34.2	34.2
USA	White Plains	tooz technologies Inc.	50.0	50.0

[1] In accordance with Sec. 264 (3) HGB or Sec. 264b HGB, these entities are exempted from the duty to publish their financial statements
[2] Majority of the voting rights
[3] Due to reciprocal put and call options
[4] Due to purchase options that can be exercised at any time

Independent Auditor's Report

"Independent auditor's report

To Carl Zeiss AG

Opinions

We have audited the consolidated financial statements of Carl Zeiss AG, Oberkochen (Germany), and its subsidiaries (the Group), which comprise the consolidated income statement, and the consolidated statement of comprehensive income for the fiscal year from 1 October 2019 to 30 September 2020, the consolidated statement of financial position as of 30 September 2020, the consolidated statement of changes in equity and the consolidated statement of cash flows for the fiscal year from 1 October 2019 to 30 September 2020, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Carl Zeiss AG for the fiscal year from 1 October 2019 to 30 September 2020.

In our opinion, on the basis of the knowledge obtained in the audit,

» the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (1) German Commercial Code (HGB) and, in compliance with these requirements, give a true and fair view of the net assets and financial position of the Group as of 30 September 2020, and of its results of operations for the fiscal year from 1 October 2019 to 30 September 2020, and

» the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to Sec. 322 (3) Sentence 1 German Commercial Code (HGB), we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 317 German Commercial Code (HGB) and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report" section of our auditor's report. We are independent of the Group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Other information

The Supervisory Board is responsible for the Report by the Supervisory Board. In all other respects, the executive directors are responsible for the other information. The other information comprises the following components designated for the annual report, of which we obtained a version before issuing our auditor's report: Key Figures, Executive Board of Carl Zeiss AG, Foreword by the Executive Board, Solutions to Shape the Future, At Home across the Globe, A Global Strategy to Beat a Global Pandemic, Highlights from Fiscal Year 2019/20, Sustainable Development, Carl Zeiss Foundation, Corporate Governance, Report by the Supervisory Board and Supervisory Board of Carl Zeiss AG.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

» is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or

» otherwise appears to be materially misstated.

Responsibilities of the executive directors and the Supervisory Board for the consolidated financial statements and the group management report

The executive directors are responsible for the preparation of consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German law pursuant to Sec. 315e (1) German Commercial Code (HGB), for the preparation of consolidated financial statements that give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's responsibilities for the audit of the consolidated financial statements and of the group management report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 German Commercial Code (HGB) and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

» Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

» Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

» Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

» Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

» Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (1) German Commercial Code (HGB).

» Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.

» Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

» Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit."

Stuttgart, 9 December 2020

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Marbler	Dr. Jungblut
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Legal Information/Disclaimer

Legal information

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Disclaimer

This report contains certain forward-looking statements concerning the development of the ZEISS Group. At the present time, ZEISS assumes that these forward-looking statements are realistic. However, such forward-looking statements are based both on assumptions and estimates that are subject to risks and uncertainties, which may lead to the actual results differing significantly from the expected results. ZEISS therefore assumes no liability for such a deviation. There are no plans to update the forward-looking statements for events that occur after the end of the reporting period.

Apparent addition discrepancies may arise throughout this annual report due to mathematical rounding.

This is a translation of the original German-language Annual Report of the ZEISS Group. The ZEISS Group shall not assume any liability for the correctness of this translation. If the texts differ, the German report shall take precedence.

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