



MORE LIGHT

Interim Financial Report of the Jenoptik Group
(unaudited)

January to September 2019

At a glance – Jenoptik Group

in million euros	Jan. – Sept. 2019	Jan. – Sept. 2018	Change in %	July – Sept. 2019	July – Sept. 2018	Change in %
Revenue (external)	595.7	593.4	0.4	212.7	208.7	1.9
Light & Optics	250.8	246.6	1.7	88.1	83.3	5.8
Light & Production	170.9	140.1	22.0	59.5	63.4	- 6.2
Light & Safety	75.1	83.3	- 9.8	26.7	21.5	24.5
VINCORION	96.8	121.6	- 20.4	37.8	40.0	- 5.5
Other ¹	2.2	1.8		0.5	0.5	
EBITDA	91.4	89.0	2.7	37.4	32.8	14.2
Light & Optics	49.5	55.2	- 10.5	17.4	19.9	- 12.3
Light & Production	19.2	14.3	33.7	7.2	7.6	- 5.1
Light & Safety	11.9	11.0	7.9	5.4	1.6	228.9
VINCORION	10.6	14.4	- 26.4	6.1	5.7	6.9
Other ¹	0.3	- 5.9		1.3	- 2.1	
EBITDA margin	15.3%	15.0%		17.6%	15.7%	
Light & Optics	19.6%	22.2%		19.7%	23.7%	
Light & Production	11.2%	10.2%		12.1%	12.0%	
Light & Safety	15.9%	13.3%		20.1%	7.6%	
VINCORION	10.9%	11.8%		16.1%	14.3%	
EBIT	58.1	66.7	- 13.0	25.9	23.9	8.1
EBIT margin	9.7%	11.2%		12.2%	11.5%	
Earnings after tax	44.3	53.7	- 17.5	20.1	20.4	- 1.4
Earnings per share in euros	0.77	0.94	- 18.0	0.35	0.36	- 1.9
Free cash flow	7.3	57.2	- 87.2	21.9	28.4	- 22.7
Order intake (external)	574.9	588.4	- 2.3	182.4	191.2	- 4.6
Light & Optics	233.0	264.5	- 11.9	80.1	85.2	- 6.1
Light & Production	158.7	138.4	14.6	45.6	46.4	- 1.6
Light & Safety	72.2	73.8	- 2.1	21.6	25.6	- 15.6
VINCORION	108.0	109.8	- 1.7	34.2	33.4	2.4
Other ¹	2.9	1.8		0.8	0.5	

	Sept. 30, 2019	Dec. 31, 2018	Sept. 30, 2018
Order backlog (external, in million euros)	491.2	521.5	480.9
Light & Optics	154.0	180.6	142.7
Light & Production	100.6	112.5	119.8
Light & Safety	67.2	69.5	56.4
VINCORION	168.7	158.9	162.0
Other ¹	0.7	0	0
Frame contracts (in million euros)	52.2	62.5	78.0
Employees (incl. trainees)	4,126	4,043	3,984
Light & Optics	1,404	1,368	1,342
Light & Production	1,100	1,055	1,034
Light & Safety	488	472	466
VINCORION	812	790	791
Other ¹	322	358	351

¹ Other includes Corporate Center (holding, shared services, real estate) and consolidation.

Please note that there may be rounding differences as compared to the mathematically exact amounts (monetary units, percentages) in this report.

Summary of Business Performance, January to September 2019

- Revenue in the third quarter was up on the prior-year period, compensating for the shortfall in prior quarters. At 595.7 million euros, revenue for the nine-month period was slightly above the high prior-year figure (prior year: 593.4 million euros). Significant growth was seen in revenue generated abroad.

[See Earnings Position – Page 8](#)

- Despite higher expenditure for future growth, EBITDA increased slightly to 91.4 million euros (prior year: 89.0 million euros). The EBITDA margin improved to 15.3 percent (prior year: 15.0 percent). EBIT, including earnings-reducing PPA impacts of minus 4.2 million euros, came to 58.1 million euros (prior year: 66.7 million euros).

[See Earnings Position – Page 9](#)

- In the first nine months, Jenoptik received new orders worth 574.9 million euros (prior year: 588.4 million euros). The book-to-bill ratio was 0.96 (prior year: 0.99). The value of the order backlog fell to 491.2 million euros (31/12/2018: 521.5 million euros), but was still above the figure for the prior-year period.

[See Earnings Position – Page 9](#)

- Robust balance sheet and financing structure – the equity ratio of 59.8 percent was slightly down on the figure of 60.6 percent at year-end 2018 following first-time application of IFRS 16. Primarily due a rise in working capital and lower provisions, the free cash flow fell to 7.3 million euros (prior year: 57.2 million euros).

[See Financial and Asset Position – Page 11](#)

- Division highlights

Light & Optics: Continuation of good business with the semiconductor equipment industry. Revenue up on prior-year figure; very good EBITDA margin of 19.6 percent (prior year: 22.2 percent). Fall in order intake following major order placed at year-end 2018.

Light & Production: Significant rise in revenue, earnings, and order intake thanks to contributions by acquired companies. Main revenue growth in the Americas.

Light & Safety: Revenue in the third quarter up on prior quarter; cumulatively, the revenue shortfall due to the prior-year toll project was significantly reduced; improvement in EBITDA and EBITDA margin. Order intake only slightly down on prior year.

VINCORION: Order backlog remained strong. Outstanding export licenses negatively impacted on both revenue and earnings in the first nine months; a permission was granted for a major project in early October. Structured sales process started.

[See Segment Report – from Page 13 on](#)

- Jenoptik continues to expect growth in 2019. Without any major portfolio changes, revenue is expected to come in at between 850 million euros and 860 million euros (prior year: 834.6 million euros); the EBITDA margin is forecast at around 15.5 percent.

[See Forecast Report – Page 21](#)

Business and Framework Conditions

Group Structure and Business Activity

Jenoptik is a global photonics group and a supplier of high-quality and innovative capital goods. The Group is thus primarily a technology partner to industrial companies. In the Light & Safety and VINCORION divisions, we are also a supplier to the public sector, in part indirectly through system integrators.

Jenoptik provides the majority of its products and services for the photonics market. Our key markets primarily include the semiconductor equipment industry, the medical technology, automotive, mechanical engineering, traffic, aviation, and security and defense technology industries.

The Jenoptik Group has been operating in the following divisions since January 1, 2019: Light & Optics, Light & Production, Light & Safety and VINCORION.

With the new organizational structure that came into force in January 2019, we have further improved our market and customer orientation. Business operations within our former segments were reorganized and the relevant parts of the operating business were consolidated according to a common understanding of markets and customers based on the similar business models. This helps us to increase the reach of our products and solutions and opens up improved growth opportunities.

The new Light & Optics division combines the former Optical Systems and Healthcare & Industry divisions with the photonics activities in the former Defense & Civil System division. The Light & Production division corresponds to the former Automotive division, the Light & Safety division to the Traffic Solutions division. Prior-year information on the divisions was adjusted to meet the requirements of the new structure in this quarterly report. The legal merger of JENOPTIK AG and JENOPTIK SSC GmbH was also completed in the first half-year of 2019.

The three newly created photonics divisions, Light & Optics, Light & Production, and Light & Safety, build on our extensive expertise in optics, sensors, imaging, robotics, data analysis, and human-machine interfaces. The mechatronics business from the former Defense & Civil Systems segment is now managed under the VINCORION brand. This puts us in a position to address customers from the aviation and defense industries in a much more focused manner than before on the basis of our mechatronic products and solutions.

Targets and Strategies

At the heart of "Strategy 2022" and our future development is a concentration on photonic technologies for high-growth markets. The aim is to transform Jenoptik into a focused, globally operating photonics company over the next few years. The strategy under the motto "More Light", comprises three building blocks: "More Focus", "More Innovation", and "More International". The greater concentration on the core competencies will contribute to optimize the use of existing capacities and thus a more efficient allocation of resources. By 2022, we want to increase our R+D output, including developments on behalf of customers, to around 10 percent of revenue. International diversity will characterize the company more strongly than ever before. That means international teams bringing together diverse cultural backgrounds, and more local decision-making, with at least one division due to be based abroad by 2022.

To achieve the goals of our "Strategy 2022", we are

- focusing on our core competencies in the field of photonics,
- actively managing our portfolio with a view to additional purchases as well as transformational acquisitions and selective divestments,
- continuing to work on further internationalization in conjunction with greater vertical integration and customer proximity in our growth regions,
- investing more heavily in research and development, expanding our system and application expertise, and becoming a full solutions provider,
- promoting an active cultural shift within the company, and
- continuing to steadily strengthen our financial resources.

In the course of the new strategy, the Executive Board has set out the following priorities for the current 2019 fiscal year:

- Growth in Asia,
- Operational excellence in our production processes, and
- Speed-up of innovation.

In late July, Jenoptik's Executive Board and Supervisory Board initiated a new phase of the Group's transformation with the start of the sales process of the VINCORION division, which operates the Group's mechatronic business. The aim is to strengthen the business focus on the competencies in optics and photonics.

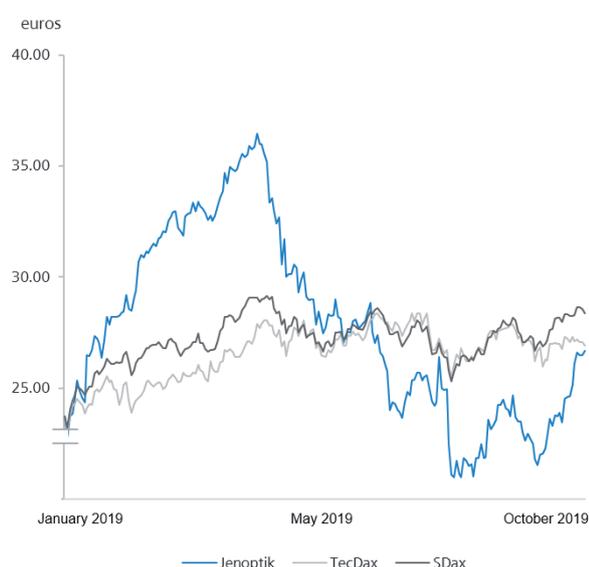
The proceeds from the potential sale of VINCORION will be used to expand the Jenoptik Group's international reach and vertical integration, particularly in the strategic growth regions of the Americas and Asia. In addition, bolt-on and transformative acquisitions will be used to optimize the product range and gain access to new customers and markets. At the same time, the mechatronics business, operated under the brand name of VINCORION, will have the chance to grow successfully with a new owner.

For more information on the strategic trajectory of the Jenoptik Group, we refer to the 2018 Annual Report and the details given in the "Targets and Strategies" chapter from page 75 on, as well as on the Jenoptik website.

The Jenoptik Share

Ongoing trade and political tensions were the cause for the continued global economic downturn in the third quarter of 2019. These issues were reflected in the volatile development of the capital markets. Nevertheless, the German indices saw growth in the first nine months of the year. The German technology index (TecDax) climbed to 2,814 points by the end of September 2019, a year-to-date increase of 14.2 percent. On the last day of trading in the third quarter, the SDax was up 15.2 percent, at 11,027 points.

Up to the end of April 2019, the Jenoptik share showed highly encouraging performance. On the first day of trading in 2019, the share started with a closing price of 23.74 euros. It made consistent gains in the next few months, reaching a high of 36.45 euros on April 24. The share then fell significantly in value,



primarily due to increasing economic uncertainties, trading at 22.74 euros at the end of the reporting period, a drop of 4.2 percent since the beginning of the year. At that time, Jenoptik's market capitalization amounted to 1,301.6 million euros. In the nine-month period, the total shareholder return was minus 2.7 percent (prior year: 15.3 percent).

The share gained some ground in October, closing at 26.70 euros at the end of trading on October 31, 2019.

Allianz Global Investors increased its shareholding in Jenoptik in the summer, reporting a 3.05 percent stake in August. Based on its most recent voting rights announcement in October 2019, Templeton holds a stake of 2.97 percent in the company.

Trading in Jenoptik shares has been less intense than in the comparable prior-year period. On average, 149,808 shares changed hands per day on the German stock exchanges (Xetra, floor exchanges, and Tradegate) in the first nine months (prior year: 171,529 shares), a minus of 12.7 percent. On the TecDax, Jenoptik was in 22nd place (prior year: 19th) in terms of free float market capitalization (89.0 percent) as of September 2019, and 26th in terms of exchange turnover (prior year: 25th).

Earnings per share

	1/1 to 30/9/2019	1/1 to 30/9/2018
Earnings attributable to shareholders in thousand euros	44,333	54,067
Weighted average number of outstanding shares	57,238,115	57,238,115
Earnings per share in euros	0.77	0.94

Earnings per share are the earnings attributable to shareholders divided by the weighted average number of shares outstanding.

Jenoptik key share figures

	1/1 to 30/9/2019	1/1 to 30/9/2018
Closing share price (Xetra) on 30/9/ in euros	22.74	32.04
Highest share price (Xetra) in euros	36.45	39.48
Lowest share price (Xetra) in euros	21.00	26.44
Market capitalization (Xetra) on 30/9/ in million euros	1,301.6	1,833.9
Average daily trading volume in shares ¹	149,808	171,529

¹ Source: Deutsche Börse

At the Annual General Meeting on June 12, 2019, the shareholders agreed to increase the dividend to 0.35 euros per share (prior year: 0.30 euros). This increased the total dividend to 20.0 million euros (prior year: 17.2 million euros). JENOPTIK AG has been consistently distributing a share of its profits to shareholders since 2011. The dividend has seen an annual increase in each of the last five years.

A total of eleven research companies and banks currently report regularly on Jenoptik. At the time this report was prepared, three analysts recommended buying the share, while eight advised investors to hold their shares. As of the end of October, the average price target across all analysts was 27.93 euros.

In the first nine months of 2019, the Jenoptik management presented the company to investors and analysts at conferences in Baden-Baden, Berlin, Frankfurt/Main, Hamburg, Lyon, New York, Warsaw, and Zurich, and at roadshows in Brussels, Chicago, Geneva, Helsinki, London, Luxembourg, Madrid, Milan, and Paris.

Development of the Economy as a Whole and of the Individual Sectors

In the current year, the [global economy](#) has been growing more slowly than anticipated by economists. Various geopolitical and trade conflicts, such as the trade dispute between the US and China or the uncertain situation surrounding Brexit, had a strong impact on the global economy, not least because they caused companies to hold back on investment or the purchase of new machinery and other capital goods. In October, China and the US reached a partial agreement to ease trade tensions, which is due to be expanded by a comprehensive trade agreement if the dispute between the two nations does not escalate. Punitive tariffs for other industries, however, have not been ruled out; since October, the US – with the approval of the World Trade Organization (WTO) – has levied tariffs worth 7.5 billion euros on EU imports, primarily for passenger airplanes, food, and consumer goods.

According to the Department of Commerce, trade conflicts have barely impacted economic growth in the [USA](#) with the economy there growing an annualized 1.9 percent in the second quarter (following 2.0 percent in the second quarter). However, investments by companies and exports fell compared to the prior quarter, not least due to the slump in deliveries of passenger airplanes following the global ban on the Boeing 737 Max aircraft. The US concluded a new trade agreement with Japan in October, but this agreement does not concern the automotive market.

The trade dispute with the US and the reciprocal punitive tariffs linked to it have also severely impacted the [Chinese economy](#) in recent months. In the third quarter, gross domestic product grew just 6.0 percent compared with the prior-year quarter, its slowest rate for 27 years. Exports, in particular, were weaker, down 3.2 percent on the prior-year figure in September, with exports to the US falling by as much as 21.9 percent, according to the Chinese customs authorities. Imports also suffered, falling 8.5 percent on the prior-year month in September. Industrial production has, however, picked up recently.

According to the Bundesbank, the current situation in the [German economy](#) is two-pronged, with a continuing upward trend in the domestic economy and a sustained downturn in industry. Indicators include declining order intakes and lower production in the manufacturing sector. Month-on-month exports also unexpectedly dropped sharply in August. In September, the Ifo Business Climate Index improved slightly for the current business situation, in October for the business outlook.

[Photonics](#) is regarded as a key technology for the future; the growth of the industry is driven by issues such as autonomous driving, digital production, and new developments in the medical sector. Nevertheless, the Photonics World Market Index compiled by the Spectaris industry association reveals a minor downturn, with revenues generated by the surveyed market participants in the second quarter of 2019 down almost 1 percent on the prior quarter and 5.5 percent on the prior-year level.

Global revenues in the [semiconductor industry](#) amounted to 106.7 billion US dollars in the third quarter, according to the Semiconductor Industry Association (SIA), a fall of 14.6 percent on the record value in same period in the prior year, but a plus of 8.2 percent compared with the second quarter. Over the last three consecutive months, revenue increased slightly which SIA assessed as slight market recovery. M&A activities have increased within the industry, according to the market analysts at IC Insights, and accounted for a value of 28 billion dollars (prior year: 25.9 billion US dollars) by the end of August.

In recent months, the German [mechanical and plant engineering industry](#) reported a drop in production and order intakes. In the first nine months and in the third quarter, orders fell by 8 percent compared with the prior year, up to August production declined by 1.6 percent. Global trade conflicts severely impacted German exports, which account for 70 percent of the business and saw only a minimal year-on-year increase. Structural changes taking place in key customer groups such as the automotive industry represented a further cause for concern.

In September, the International Federation of Robotics (IFR) published its finalized figures for the record year of 2018 in the [robotics](#) industry: around 422,000 robots, worth 16.5 billion US dollars, were sold worldwide last year, an increase of 6 percent on the prior year. Some 30 percent of them were used in the automotive industry, followed by 14 percent in the electrical and electronics industries. Despite this, the weak economic environment seen in customer industries in recent months had an impact on order intakes of major robot manufacturers.

The [automotive industry](#) is currently in sharp decline; an end to years of growth in the industry was reflected in both numerous revenue and profit warnings from car manufacturers and suppliers as well as announcements of plant closures and job cuts. According to the British SMMT industry association, production and foreign investment in the British automotive industry also fell sharply as a result of Brexit. Car sales on the Chinese market in September were 6.6 percent lower than in the same prior-year period, according to the China Passenger Car Association (PCA). In addition, there was continued uncertainty about future drive technologies and environmental regulations, for example due to a new exhaust gas measurement method.

In the field of [traffic safety](#), the majority of discussions in Germany in the last nine months revolved around the planned toll system for passenger cars. Following extensive deliberations, the European Court of Justice in June ruled that the project was in violation of EU law. For Germany, the Federal Statistical Office published its provisional traffic statistics for the first half of 2019 in August. According to these statistics, more accidents were reported than in the same period of 2018, but there were 2.7 percent fewer fatalities.

In the [aviation industry](#), uncertainties have arisen in the course of the year to date as a result of political decisions: in the US, for example, punitive tariffs on aircraft components from the EU entered into force in October. Following two plane crashes, US aircraft manufacturer Boeing is facing commercial difficulties caused by the flight ban on the Boeing 737 Max in force since March 2019 and associated cancellations and extra payments. The crisis has also had a trickle-down effect on suppliers.

In the [security and defense technology](#) industry, German export licenses saw an increase of 75 percent on the prior-year period by the end of September 2019, to a value of 6.35 billion euros, according to the Federal Ministry for Economic Affairs and Energy, and could thus achieve a new annual record. The main customers were Hungary and Egypt. In September, the German government again extended its arms embargo on Saudi Arabia and other countries involved in the Yemen war for six months, to March 2020. The US withdrew from the INF Treaty banning intermediate-range missiles in August and announced a new missile system. At the same time, an arms deal between Turkey and the US was discussed in September. After Turkey initially purchased Russian air defense systems, negotiations are now underway on the purchase of American Patriot missiles.

No important new reports were published for other sectors relevant to Jenoptik. We therefore refer to pages 88ff. of the 2018 Annual Report and to the interim reports for 2019 published to date.

Earnings, Financial and Asset Position

The tables in the Management Report, which show a breakdown of the key indicators by segment, include the Corporate Center (holding company, shared services, real estate) and consolidation effects under "Others". Jenoptik has been operating in the following reportable segments since January 1, 2019: the Light & Optics, Light & Production, Light & Safety, and VINCORION divisions.

Earnings Position

Over the first nine months of the year, the Group generated **revenue** of 595.7 million euros, thus slightly exceeding the high level seen in the prior-year period (prior year: 593.4 million euros). Revenue continued to grow in the course of 2019, and following 184.0 million euros in the first quarter and 199.1 million euros in the second quarter amounted to 212.7 million euros for the period of July to September. Growth was recorded in the Light & Production division, primarily due to the contribution to revenue made by the companies acquired in 2018 and good business performance in the area of automation. Revenue in the Light & Optics division slightly exceeded the prior-year level thanks to good business with the semiconductor equipment industry. The revenue figure for the Light & Safety division in 2018 included the sum of around 25 million euros arising from settlement of the toll project, which has now largely been made up for. In the VINCORION division, primarily the extension of arms export restrictions adversely affected business performance.

Over the reporting period, Jenoptik achieved revenue growth primarily in the Americas, where revenue rose 14.5 percent, chiefly due to the contribution made by Prodomax. At 240.2 million euros, revenue in the growth regions of the Americas and Asia/Pacific was an appreciable 40.3 percent up on the prior year (prior year: 217.9 million euros or 36.7 percent).

Revenue

in million euros	1/1 to 30/9/2019	1/1 to 30/9/2018	Change in %
Group	595.7	593.4	0.4
Light & Optics	250.8	246.6	1.7
Light & Production	170.9	140.1	22.0
Light & Safety	75.1	83.3	- 9.8
VINCORION	96.8	121.6	- 20.4
Other	2.2	1.8	

Revenue in Europe (without Germany) was also slightly up, at 172.8 million euros (prior year: 170.2 million euros). The share of revenue generated abroad increased overall to 72.9 percent (prior year 69.6 percent). In Germany, by contrast, revenue fell by 10.5 percent to 161.2 million euros (prior year: 180.1 million euros). The prior year had included contributions from the settlement of the toll project. A summary of revenue distribution by region can be found on page 27.

In a similar way to revenue, the **cost of sales** increased slightly to 386.2 million euros (prior year: 383.8 million euros). Gross profit came to 209.5 million euros and was thus at the prior-year level (prior year: 209.6 million euros). The gross margin was 35.2 percent (prior year: 35.3 percent).

Over the first nine months, **R+D expenses** came to 34.4 million euros (prior year: 34.7 million euros). At 15.4 million euros, the development expenses on behalf of customers posted in cost of sales were essentially at the prior-year level of 15.2 million euros). The **R+D total output** came to 51.6 million euros (prior year: 51.3 million euros), equating to an 8.7 percent share of group revenue (prior year: 8.6 percent).

Due to the further expansion of international activities, also in connection with the acquisitions, **selling expenses** through the end of September 2019 increased to 68.2 million euros (prior year: 64.3 million euros). At 11.4 percent, the selling expenses ratio was therefore slightly up on the prior year level of 10.8 percent. **Administrative expenses** also increased to 44.5 million euros (prior year: 39.7 million euros), primarily due to higher personnel costs following adjustments to pay rates, the administrative expenses for the companies acquired in 2018, which were not yet included in the prior year, and expenses for projects to optimize corporate processes. By contrast, earnings were boosted by impacts arising from the measurement of share-based payments for the top management. The administrative expenses ratio rose to 7.5 percent (prior year: 6.7 percent).

R+D Output

in million euros	1/1 to 30/9/2019	1/1 to 30/9/2018	Change in %
R+D output	51.6	51.3	0.6
R+D expenses	34.4	34.7	- 1.0
Capitalized development costs	1.9	1.4	34.8
Developments on behalf of customers	15.4	15.2	1.0

Other operating income and expenses came to minus 4.4 million euros (prior year: minus 4.1 million euros).

Despite expenditures in future growth and higher functional costs than in the prior year, EBITDA (earnings before interest, taxes, depreciation, and amortization, incl. impairment losses and reversals) increased by 2.7 percent to 91.4 million euros (prior year: 89.0 million euros). This was mainly attributable to contributions made by the companies acquired in 2018 and positive impacts arising from the first-time application of IFRS 16 of 8.9 million euros. The EBITDA margin consequently increased to 15.3 percent (prior year: 15.0 percent). On a quarterly basis, EBITDA of 37.4 million euros was a noticeable improvement on both the prior quarter (30.2 million euros) and the prior-year quarter (32.8 million euros).

In the first nine months of 2019, income from operations (EBIT) of 58.1 million euros was, as expected, below the prior-year figure of 66.7 million euros, a drop of 13.0 percent. EBIT for the companies acquired in 2018 came to a total of 4.8 million euros, including impacts arising from the purchase price allocation, which amounted to minus 4.2 million euros (prior year: earnings minus 0.2 million euros/PPA minus 6.3 million euros). The Group EBIT margin fell to 9.7 percent (prior year: 11.2 percent). EBIT, too, saw growth in the course of the year, from 12.8 million euros in the first quarter of 2019 and 19.4 million euros in the second quarter to 25.9 million euros in the third quarter.

Over the period covered by the report, the financial result improved on the prior year, at minus 1.6 million euros (prior year: minus 2.0 million euros). Income from the measurement of cash items and lower interest expenses to third parties compensated for the higher interest expenses than in the prior

year due to first-time application of IFRS 16. At 56.5 million euros (prior year: 64.7 million euros), the Group achieved significantly lower earnings before tax. Income taxes came to 12.1 million euros (prior year: 11.0 million euros). The overall tax rate primarily rose to 21.5 percent due to the utilization of capitalized deferred taxes on losses carried forward (prior year: 16.9 percent). Due to a higher profit share abroad, the cash effective tax rate grew to 14.9 percent (prior year: 14.5 percent). Group earnings after tax fell by 17.5 percent to 44.3 million euros (prior year: 53.7 million euros). Group earnings per share accordingly came to 0.77 euros (prior year: 0.94 euros).

At 574.9 million euros, the order intake was slightly down on the prior-year level (prior year 588.4 million euros), a drop of 2.3 percent. The Light & Optics division, which had seen strong growth from order intakes received earlier in late 2018, remained as expected below the prior-year level. The Light & Production division posted a number of new orders. The Group's book-to-bill ratio thus fell marginally to 0.96 (prior year: 0.99)

A very strong order backlog at the end of 2018 fell to 491.2 million euros by September 30, 2019 (31/12/2018: 521.5 million euros), but was still above the high level of the prior-year period (30/09/2018: 480.9 million euros). Of this order backlog, 226.1 million euros or 46.0 percent (prior year: 231.3 million euros or 48.1 percent) are due to be converted to revenue in the present fiscal year and help to support scheduled growth.

As of September 30, 2019, there were also frame contracts worth 52.2 million euros (31/12/2018: 62.5 million euros). Frame contracts are contracts or framework agreements where the exact sum and time of occurrence cannot yet be specified precisely.

EBITDA

in million euros	1/1 to 30/9/2019	1/1 to 30/9/2018	Change in %
Group	91.4	89.0	2.7
Light & Optics	49.5	55.2	- 10.5
Light & Production	19.2	14.3	33.7
Light & Safety	11.9	11.0	7.9
VINCORION	10.6	14.4	- 26.4
Other	0.3	- 5.9	

EBIT

in million euros	1/1 to 30/9/2019	1/1 to 30/9/2018	Change in %
Group	58.1	66.7	- 13.0
Light & Optics	41.0	49.2	- 16.6
Light & Production	10.4	9.6	8.7
Light & Safety	6.6	7.3	- 9.9
VINCORION	5.6	11.7	- 52.1
Other	- 5.6	- 11.0	

The number of Jenoptik employees increased slightly, to 4,126, in the first nine months of 2019 (31/12/2018: 4,043 employees). At the end of September 2019, 992 people were employed at the foreign locations (31/12/2018: 981 employees). In Germany, the Group had 115 agency employees (31/12/2018: 107 agency employees).

Jenoptik is making substantial investment in the training of young people; the number of trainees consequently increased significantly in the first nine months. As of September 30, 2019, the company had a total of 151 trainees (31/12/2018: 117 trainees).

CEO Dr. Stefan Traeger was confirmed in his post by the Supervisory Board in July. On expiry of his current appointment, which runs until June 2020, he will remain President & CEO of the Jenoptik Group for a further five years.

Detailed information on the development of the divisions can be found in the Segment Report from page 13 on.

Financial and Asset Position

At the end of the first nine months of 2019, the debt-to-equity ratio, that of borrowings to equity, rose to 0.67 (31/12/2018: 0.65). The rise was due to borrowings increasing at a higher rate than equity, principally following the first-time application of IFRS 16.

The increase in financial debt – owing to the first-time application of IFRS 16 – by 55.9 million euros and lower cash and cash equivalents resulted in net debt coming to 57.4 million euros on September 30, 2019 (31/12/2018: minus 27.2 million euros).

By the end of September 2019, the Group had invested 31.6 million euros in property, plant and equipment, and intangible assets, impacting on liquidity; as previously announced, this was more than in the prior-year period (prior year: 26.8 million euros). Property, plant and equipment accounted for the largest share of capital expenditure at 24.9 million euros (prior year: 22.5 million euros), primarily for the new build at the Villingen-Schwenningen location and new technical equipment and an expansion in production capacities. Capital expenditure for intangible assets rose to 6.7 million euros (prior year: 4.4 million euros), also due to the introduction of an SAP S/4 HANA system. Chiefly due to the application of IFRS 16 and impacts arising from the purchase price allocation, scheduled depreciation increased to 32.5 million euros (prior year: 21.1 million euros).

Order situation

in million euros	1/1 to 30/9/2019	1/1 to 30/9/2018	Change in %
Order intake	574.9	588.4	- 2.3
	30/9/2019	31/12/2018	Change in %
Order backlog	491.2	521.5	- 5.8
Frame contracts	52.2	62.5	- 16.5

Employees (incl. trainees)

	30/9/2019	31/12/2018	Change in %
Group	4,126	4,043	2.0
Light & Optics	1,404	1,368	2.6
Light & Production	1,100	1,055	4.3
Light & Safety	488	472	3.4
VINCORION	812	790	2.8
Other	322	358	- 10.1

As of September 30, 2019, **cash flows from operating activities** fell, despite changes in reporting due to IFRS 16, to 27.4 million euros (prior year: 72.8 million euros). The operating cash flow was adversely affected in particular by the change in working capital. In the first nine months, higher payments in advance were made for future revenue. Inventories and contract assets rose, in part due to extended arms exports restrictions (approval was granted in early October) and a higher proportion of customer projects in progress, for which revenue is recognized over time in accordance with IFRS 15. In addition, customer payments originally expected in early 2019 had already been made at the end of 2018. In part due to the reduction in personnel and warranty provisions, a stronger change in provisions was reported.

At the end of September 2019, **cash flows from investing activities** came to 3.6 million euros (prior year: minus 82.4 million euros). Over the reporting period, they were mainly influenced by payments for property, plant and equipment, and intangible assets. In the prior year, payments for acquisitions produced strongly negative cash flows from investing activities. In addition to capital expenditure, other key items included cash inflows and outflows from short-term investments, where the net inflow was higher than in the prior year.

Due to the lower cash flows from operating activities and increased capital expenditure from operating investing activities, the **free cash flow** in the reporting period fell to 7.3 million euros (prior year: 57.2 million euros). The free cash flow is calculated on the basis of the cash flow from operating activities (before interest and taxes) less the inflows and outflows of funds for intangible assets and property, plant and equipment.

Cash flows from financing activities amounted to minus 46.4 million euros in the first nine months (prior year: minus 46.3 million euros), and were in part influenced by lease payments, which rose in the course of first-time application of IFRS 16. By contrast, payments to service bonds and loans were down on the prior year, when loans were repaid in the context of the company acquisitions. The reporting period also saw the distribution of dividends amounting to 20.0 million euros.

As of September 30, 2019, the Jenoptik Group's **total assets** of 1,043.9 million euros were above the figure at year-end 2018 (31/12/2018: 985.9 million euros), particularly due to the introduction of IFRS 16.

On the assets side, IFRS 16 had the effect of boosting **non-current assets** to a value of 552.6 million euros (31/12/2018: 491.8 million euros). Property, plant and equipment showed a particularly strong increase, thanks both to the impact of IFRS 16 and capital expenditure. Both capital expenditure and positive currency effects produced an increase in intangible assets.

At 491.3 million euros, **current assets** remained almost unchanged (31/12/2018: 494.1 million euros). In preparation for future revenue, as well as due to the extension of arms export restrictions imposed by the German government, inventories increased to 196.9 million euros as of the reporting date (31/12/2018: 175.6 million euros). Contract assets also increased to 41.6 million euros (31/12/2018: 23.4 million euros). Within the project business, this was in part due to revenue recognition over time based on project progress. By contrast, current financial investments and cash and cash equivalents fell due to negative cash flows from financing activities resulting from loan repayments and the dividend.

Increased inventories and operating receivables (trade receivables and contract assets) led to a sharp increase in the **working capital** as of September 30, 2019 to 257.3 million euros (31/12/2018: 216.8 million euros; 30/09/2018: 239.9 million euros). The working capital ratio, that of working capital to revenue based on the last twelve months, accordingly increased to 30.7 percent compared to year-end 2018 and the equivalent prior-year period (31/12/2018: 26.0 percent; 30/09/2018: 29.5 percent).

As of September 30, 2019, **equity** of 624.4 million euros was above the level as at year-end 2018 (31/12/2018: 598.0 million euros), in particular due to the positive net profit for the period and positive currency effects. By contrast, equity was reduced by the dividend payment, actuarial impacts in connection with pension provisions, and impacts arising from the first-time application of IFRS 16. In light of the balance sheet extension, the **equity ratio**, at 59.8 percent, was down on the figure at year-end 2018 (31/12/2018: 60.6 percent).

Non-current liabilities rose to 183.2 million euros (31/12/2018: 170.3 million euros), in part due to an increase in non-current financial debt (impacts arising from IFRS 16) and a rise in pension liabilities as a result of applicable discount rates. A key element of the non-current liabilities are the debenture loans placed in 2015, currently totaling 69.0 million euros (31/12/2018: 103.0 million euros) and with original terms of five and seven years. Following early repayment of a tranche of these debenture loans worth 12.5 million euros in April 2019, a further tranche worth 21.5 million euros was reclassified in current liabilities, as it becomes due in April 2020.

Higher current financial debt was primarily responsible for the rise in **current liabilities** to 236.2 million euros (31/12/2018: 217.7 million euros). This was attributable to the application of IFRS 16 and the reclassification of a tranche of the debenture loans mentioned above. Other current provisions also fell due to reduced personnel and warranty provisions. By contrast, current trade accounts payable rose as of the reporting date.

More information on the impacts of IFRS 16 can be found in the Notes, page 28.

There were no company acquisitions or disposals in the first nine months of 2019.

There were also no changes to **assets and liabilities not included in the balance sheet**; for more information on this, we refer to the details on page 101 of the 2018 Annual Report and the details on contingent liabilities on page 198.

Segment Report

Jenoptik has been operating in the following reportable segments since January 1, 2019: the Light & Optics, Light & Production, Light & Safety, and VINCORION divisions. Prior-year information in the Segment Report has been adjusted to reflect the new structure of the Jenoptik Group.

Light & Optics

At 250.8 million euros, the **revenue** generated in the Light & Optics division in the first nine months of 2019 was above the prior-year level (prior year: 246.6 million euros). Good business with the semiconductor equipment industry continued in the third quarter, while the Industrial Solutions unit saw a decline. The division's share of group revenue came to 42.1 percent (prior year: 41.6 percent). Revenue rose the sharpest in the Americas, in part due to good business in the lithography and inspection area, to 57.4 million euros (prior year: 45.1 million euros), while revenue in Asia/Pacific saw a slight increase to 37.2 million euros (prior year: 34.7 million euros).

Despite good business with the semiconductor equipment industry and positive impacts arising from first-time application of IFRS 16, **income from operations before depreciation and amortization (EBITDA)** was down by 10.5 percent on the prior year, at 49.5 million euros, primarily due to a lower margin in the Industrial Solutions unit (prior year: 55.2 million euros). The **EBITDA margin**, however, remained at a very good level of 19.6 percent (prior year: 22.2 percent).

By September 30, 2019, the division had reported an **order intake** worth 233.0 million euros, equating to a fall of 11.9 percent on the prior year (prior year: 264.5 million euros). This development is partly attributable to the fact that a high-volume order for semiconductor equipment was received earlier than expected in late 2018. Set against revenue, this resulted in a book-to-bill ratio of 0.93 for the reporting period (prior year: 1.07).

In March, the Light & Optics division announced the start of a long-term cooperation arrangement with a leading international life sciences company. Following successful conclusion of the development phase, the aim is to produce significant numbers of digital imaging systems for this customer based on Jenoptik's own "SYIONS" imaging platform.

The **order backlog** was worth 154.0 million euros at the end of September 2019 (31/12/2018: 180.6 million euros).

Despite stable business performance, the **free cash flow** (before interest and taxes) of 11.8 million euros was significantly down on the prior-year figure (prior year: 18.2 million euros). This was mainly due to an increase in working capital as of the reporting date arising from the increase in current trade receivables and contract assets.

Capital expenditure amounted to 12.2 million euros (prior year: 12.2 million euros), particularly for new production facilities, thereby expanding production capacity. Jenoptik is upgrading and expanding its production facilities for the manufacture of high-power laser diodes in Berlin, for example, helping to lastingly secure the company's competitive edge in its core photonics business.

As part of Jenoptik's "Strategy 2022", the Light & Optics division completed a key initiative to simplify group structures, in line with its stated aim of achieving "More Focus". The division bundled its entire photonic technology business for OEM customers, including all German legal units, in one single company. Its expertise and longstanding experience in optics and photonics are being combined in one global production, service, and sales network with the aim of being in a position to offer more solutions from a single source in the future.

Light & Optics at a glance

in million euros	30/9/2019	30/9/2018	Change in %
Revenue (external)	250.8	246.6	1.7
EBITDA	49.5	55.2	- 10.5
EBITDA margin in %	19.6	22.2	
EBIT	41.0	49.2	- 16.6
EBIT margin in %	16.2	19.8	
Capital expenditure	12.2	12.2	0.0
Free cash flow	11.8	18.2	- 35.3
Order intake (external)	233.0	264.5	- 11.9
Order backlog (external) ¹	154.0	180.6	- 14.7
Frame contracts ¹	11.2	12.5	- 10.7
Employees ¹	1,404	1,368	2.6

¹ Prior year figures refer to December 31, 2018

Light & Production

In the first three quarters of 2019, **revenue** in the Light & Production division rose 22.0 percent on the prior-year period to 170.9 million euros (prior year: 140.1 million euros). The Automation & Integration unit made a significant contribution to this growth. The companies acquired in 2018 contributed around 52 million euros to the revenue figure (prior year: 21.8 million euros). On a regional level, revenue increases were primarily attributable to the Americas, chiefly due to the company acquisition in Canada, but Germany also saw a sharp rise in revenue. The division's share of group revenue increased to 28.7 percent (prior year: 23.6 percent).

On the basis of good revenue performance, the Light & Production division posted **EBITDA** of 19.2 million euros in the first nine months of 2019, reflecting a significantly improved quality of earnings compared to the prior year (prior year: 14.3 million euros). The **EBITDA margin** improved to 11.2 percent, compared with 10.2 percent in the prior year.

EBIT increased 8.7 percent to 10.4 million euros (prior year: 9.6 million euros). EBIT for the companies acquired in the prior year came to a total of 4.8 million euros, including impacts arising from the purchase price allocation (PPA), which amounted to minus 4.2 million euros (prior year: earnings minus 0.2 million euros / PPA minus 6.3 million euros). The EBIT margin accordingly fell to 6.1 percent (prior year: 6.8 percent).

The value of the **order intake** in the Light & Production division grew to 158.7 million euros (prior year: 138.4 million euros). Growth was attributable exclusively to the Automation & Integration area. In the first nine months of 2019, the book-to-bill ratio reached a figure of 0.93 (prior year: 0.99).

Testifying to the expected good demand in this sector, the division received larger-volume orders for automation solutions from North American OEMs and automotive suppliers worth a total of over 30 million euros in the early months of the year. Deliveries will include several assembly lines and cutting-edge systems for material processing and handling.

The division's **order backlog** was worth 100.6 million euros at the end of September (31/12/2018: 112.5 million euros).

As scheduled, **capital expenditure** for 2019 was sharply up, in part to fund modernization of our sites and expand production capacities. As of September 30, 2019, capital expenditure amounted to 7.1 million euros (prior year: 3.4 million euros). Cutting-edge development, production, and office spaces for industrial metrology are being built at the Villingen-Schwenningen site at a cost of over 13 million euros. Construction work started in March 2019 and business operations at the new site are due to commence in the spring of 2020.

The new production building in Bayeux, France opened on schedule to some 60 Jenoptik employees in spring 2019. This capital expenditure has allowed Jenoptik to create a modern production and sales environment for industrial metrology. Well-known automotive and supplier companies are among Jenoptik's customers in France. For industrial business worldwide, Bayeux is the center of excellence for pneumatic metrology.

An improved EBITDA in the first nine months was key to the improvement in the **free cash flow** (before interest and taxes) to a value of 8.8 million euros (prior year: 6.7 million euros).

Light & Production at a glance

in million euros	30/9/2019	30/9/2018	Change in %
Revenue (external)	170.9	140.1	22.0
EBITDA	19.2	14.3	33.7
EBITDA margin in %	11.2	10.2	
EBIT	10.4	9.6	8.7
EBIT margin in %	6.1	6.8	
Capital expenditure	7.1	3.4	106.2
Free cash flow	8.8	6.7	31.3
Order intake (external)	158.7	138.4	14.6
Order backlog (external) ¹	100.6	112.5	- 10.6
Employees ¹	1,100	1,055	4.3

¹ Prior year figures refer to December 31, 2018

Light & Safety

In the first nine months of 2019, the Light & Safety division generated **revenue** of 75.1 million euros (prior year: 83.3 million euros). In the prior year, the delivery of toll payment monitoring systems had returned a strong 25 million euros of revenue. Nevertheless, revenue in the third quarter was 24.5 percent up on the prior year, at 26.7 million euros. Over the reporting period, significant growth was seen in the Americas (61.2 percent) and the Middle East/Africa (60.4 percent). In Germany, the strong revenue arising from the prior-year toll project could not, as expected, be fully compensated for, and at 21.1 million euros in the reporting period it was sharply down (prior year: 43.3 million euros). The division's share of group revenue fell to 12.6 percent (prior year: 14.0 percent).

Despite the fall in revenue, **EBITDA** in the reporting period increased to 11.9 million euros (prior year: 11.0 million euros) due to higher depreciation following first-time application of IFRS 16. The **EBITDA margin** consequently saw a significant improvement to 15.9 percent (prior year: 13.3 percent).

Over the first nine months of 2019, the value of the **order intake** fell marginally to 72.2 million euros (prior year: 73.8 million euros). The book-to-bill ratio nevertheless consequently improved to 0.96, compared with 0.89 in the prior year.

The division's **order backlog** fell 3.4 percent to 67.2 million euros (31/12/2018: 69.5 million euros).

With a value of 2.5 million euros, the **free cash flow** (before interest and taxes) was sharply down on the prior year (prior year: 21.3 million euros), which, in the reporting period, was mainly due to a rise in inventories and higher prior-year payments from the toll project.

Following extensive research and development work in Great Britain, Jenoptik received a HOTA (Home Office Type Approval) for a new unattended speed monitoring camera concept. The new approval applies to a combination of the average speed limit enforcement cameras already in widespread use throughout Great Britain and solutions for measurement of spot speeds. Responding to the need for more safety on the roads, the new monitoring technology can be used to reduce collision and accident hot spots around the country.

In early July 2019, the Saarland Constitutional Court issued a ruling on a constitutional complaint in connection with a speeding offense. The court held that the complainant was entitled to receive and review the raw measured data generated, but not saved, by the Jenoptik TraffiStar S350 instrument. The measuring technology works correctly and reliably. Our instruments fulfill all existing legal regulations for devices subject to official calibration under the German Measuring and Verification Act and Measuring and Verification Ordinance. The judgment does not revoke the instrument's approval by the Physikalisch-Technische Bundesanstalt (PTB). Jenoptik disagrees with the ruling. Several higher regional courts have also expressly ruled against the Saarland decision (e.g. Oldenburg, Cologne, Düsseldorf, and Stuttgart higher regional courts), thus confirming the unrestricted use of the TraffiStar S350 measuring instrument. Jenoptik will nevertheless still apply to the PTB for approval of a software update that would enable the systems in the Saarland to return to operation.

Light & Safety at a glance

in million euros	30/9/2019	30/9/2018	Change in %
Revenue (external)	75.1	83.3	- 9.8
EBITDA	11.9	11.0	7.9
EBITDA margin in %	15.9	13.3	
EBIT	6.6	7.3	- 9.9
EBIT margin in %	8.8	8.8	
Capital expenditure	2.6	2.6	0.8
Free cash flow	2.5	21.3	- 88.1
Order intake (external)	72.2	73.8	- 2.1
Order backlog (external) ¹	67.2	69.5	- 3.4
Frame contracts ¹	13.9	19.2	- 27.7
Employees ¹	488	472	3.4

¹ Prior year figures refer to December 31, 2018

VINCORION

In the first three quarters, VINCORION generated **revenue** of 96.8 million euros, 20.4 percent down on the prior year (prior year: 121.6 million euros). This, in particular, was the result of the German government's decision to extend arms export restrictions, in part due to the sanctions imposed on a number of Arab states. The division saw its greatest revenue falls in the Americas and Germany. Its share of group revenue accordingly fell from 20.5 percent to 16.3 percent.

As a result of the fall in revenue, **EBITDA** at the end of the first nine months of 2019 came to 10.6 million euros (prior year: 14.4 million euros). The **EBITDA margin** fell from 11.8 percent in the prior year to a present 10.9 percent.

At 108.0 million euros, the **order intake** in the period covered by the report was almost at the prior-year level (prior year: 109.8 million euros). In the third quarter, the division managed to increase its order intake by as much as 2.4 percent. Due to the good revenue development, the book-to-bill ratio improved significantly to 1.12, compared with 0.90 in the prior year.

Due to delayed revenue recognition, in part due to arms export restrictions, the division's **order backlog** increased by 9.8 million euros to 168.7 million euros (31/12/2018: 158.9 million euros).

The **free cash flow** (before interest and taxes) of minus 5.1 million euros was sharply down on the prior year (prior year: 24.7 million euros) due to increased inventories and export restrictions.

In early October, the division received approval from the German Federal Ministry for Economic Affairs and Energy to export power supply units for the "Patriot" missile defense system to the United Arab Emirates (U.A.E.). The order is worth around 10 million euros. As expected and reflected in the current forecast, the units will be delivered before the end of this year.

Jenoptik started the sales process for the VINCORION division in late July. The Group intends to use the funds from the potential sale to focus its business on the specialist fields of optics and photonics.

VINCORION at a glance

in million euros	30/9/2019	30/9/2018	Change in %
Revenue (external)	96.8	121.6	- 20.4
EBITDA	10.6	14.4	- 26.4
EBITDA margin in %	10.9	11.8	
EBIT	5.6	11.7	- 52.1
EBIT margin in %	5.8	9.6	
Capital expenditure	3.6	3.2	12.7
Free cash flow	- 5.1	24.7	- 120.7
Order intake (external)	108.0	109.8	- 1.7
Order backlog (external) ¹	168.7	158.9	6.1
Frame contracts ¹	27.1	30.7	- 11.8
Employees ¹	812	790	2.8

¹ Prior year figures refer to December 31, 2018

Report on Post-Balance Sheet Date Events

At the time this report was prepared, there were no events after the balance sheet date of September 30, 2019 that were of significance to the Group or had any significant influence on Jenoptik's earnings, financial, or asset positions.

Opportunity and Risk Report

Within the framework of the reporting on opportunity and risk management, we refer to the details on pages 113ff. of the 2018 Annual Report published at the end of March 2019.

In early October, Jenoptik received approval from the German Federal Ministry for Economic Affairs and Energy to export power supply units for the "Patriot" missile defense system to the United Arab Emirates (U.A.E.). This renders obsolete the risk of a loss of business set out in the reports on the first quarter and the first half-year. The possibility remains that the ruling of the Saarland Constitutional Court regarding our TraffiStar S350 traffic monitoring system (see page 15) could impact negatively on both revenue and earnings.

In our Light & Production division, we are closely linked to the development of the automotive industry and its investments. Risks for the success of our business as an equipment provider for this industry may arise from current challenges in this industry, which result from technological transformation and development of sales.

There were no other major changes in the opportunities and risks described in the report during the course of the first nine months of 2019. All the same, we continue to analyze the potential effects of the trade policies enacted by the present US government and the impacts of a potential Brexit.

Forecast Report

Outlook for the Economy as a Whole and the Jenoptik Sectors

For the current year, the OECD expects the [global economy](#) to grow just 2.9 percent, its lowest rate since the 2009 global financial crisis. In light of the trade conflict between the US and China, economists are continuing to warn of a global downturn. According to the International Monetary Fund (IMF), global economic output could fall by up to 700 billion US dollars next year. The OECD see a risk of recession in Great Britain if no deal is reached on Brexit, which, in turn, would impact strongly on growth in Europe. US sanctions are also threatening to interrupt global supply chains in the technology sector. The IMF has now downgraded its 2019 global economic forecast for the fourth time and in the current year is anticipating growth of 3.0 percent, which is again the slowest rate of growth since the global financial crisis. The forecast for 2020 is brighter but still down on previous assumptions. Growing tensions in the Middle East and a possible escalation of the trade conflict between the US and China could result in the global economy growing by only 3.4 percent.

In recent months, exports in the [USA](#) have fallen sharply. The majority of US companies, however, remain optimistic, according to the Federal Reserve's (Fed's) "Beige Book" economic report. The Fed is forecasting economic growth of 1.9 percent for 2020.

The OECD sees the risk of a sharper downturn in [China](#), which could lead to weak demand for imports. If the trade dispute persists, Harvard economists expect economic growth to contract to 3 or 4 percent a year.

The German government has lowered its economic forecast for next year and is now expecting gross domestic product in [Germany](#) to grow by just 1 percent. As recently as April, it was still expecting a figure of 1.5 percent, at the same level as in 2018. Reasons for the downgrade include trade conflicts, Brexit, and uncertainty surrounding investment, primarily in automotive/mechanical engineering and the electrical industry. For 2019, the forecast remains unchanged at 0.5 percent year-on-year growth; the government does not expect any crises, citing continuing strong domestic demand. The Bundesbank also sees no sign of a recession in the sense of a broad, prolonged decline in economic output, but currently also no sign of a sustained recovery in exports or stabilization in industry. The ifo Institute anticipates a further fall in industrial production in the last quarter of 2019. For 2020, it forecasts growth of 1.1 percent; for 2021 1.4 percent.

Growth forecast of gross domestic product

in percent / in percentage points	2019	Change to forecast of July 2019	2020
World	3.0	- 0.2	3.4
USA	2.4	- 0.2	2.1
Euro zone	1.2	- 0.1	1.4
Germany	0.5	- 0.2	1.2
China	6.1	- 0.1	5.8
Emerging economies	3.9	- 0.2	4.6

Source: International Monetary Fund, World Economic Outlook, October 2019

Thanks to digitization, the [photonics](#) industry remains part of a growing environment. The use of light technologies makes an essential contribution to global market growth and has become an indispensable technology for many innovations, including as a basic technology for autonomous driving. The market research company MarketsandMarkets expects the global photonics market to grow in value from 556.4 billion US dollars in 2018 to 780.4 billion US dollars by 2023, with an average annual growth rate of 7.0 percent. Spectaris, the German industry association, expects that the growth forecast of 4 percent at the beginning of the year will probably not be achieved due to trade disputes and economic downturns, and hopes for a slight increase, or at least the break-even point, for manufacturers of optics, photonics, analytical, and medical technology; as the industry serves growth markets, it is still more resistant to crises than others.

In September, market observer World Semiconductor Trade Statistics (WSTS) downgraded its forecast for the [semiconductor industry](#), with revenue now due to come in 60 billion US dollars or 13.3 percent down on the prior year. Growth is expected to reach 4.8 percent in 2020. Market analyst IC Insights expects a recovery and further M&A activities in the industry over the coming year. Thanks to upcoming trends such as artificial intelligence (AI) and machine learning, market analyst ABI research sees the market for AI chips exceeding the 20 billion dollar mark before the end of this year. In the future, the automotive industry will be one of the industry's key sales markets.

The German Mechanical Engineering Industry Association (VDMA) is forecasting a drop of 2 percent in production in the [mechanical and plant engineering industry](#) for both 2019 and 2020. Reasons for this include continuing global economic weakness, trade conflicts and protectionism, and structural changes in key customer groups. According to consulting firm PwC's "mechanical engineering barometer", companies in the industry are more pessimistic and expect revenue to fall 2.6 percent; due to a poor climate for investment, they are also planning to reduce capital expenditure in the fourth quarter of 2019. The VDMA has repeatedly downgraded its industry growth forecast since the beginning of the year. The industry needs to be prepared to deal with ongoing pressure, as no upswing is presently in sight, according to the VDMA.

For the [robotics](#) industry, the International Federation of Robotics (IFR) is expecting growth in the current year to remain at the same level as in 2018. The outlook is positive for the years through 2022. Thanks to continuing growth in automation, the IFR forecasts average annual global growth of 12 percent from 2020 on.

The [automotive industry](#) is still facing problems. The German CAR research institution is expecting new drive technologies to result in the loss of over 100,000 jobs in Germany over the next ten years. In addition, the Excelliance Industry Taskforce believes that car production in Germany will shrink by 5 percent compared with 2018. A weak economy and a drop in demand at car manufacturers also affect the outlook for suppliers: major German automotive suppliers do not expect global production of passenger cars and light commercial vehicles to pick up significantly in the next five years. Over the long term, mobility in general, the optimization of combustion engines, the switch to electromobility, and driver assistance systems will remain global drivers of growth.

In the field of [traffic safety](#), a bill aiming to introduce a speed limit of 130 kilometers per hour on German autobahns (highways) was rejected by the Bundestag in October. Nevertheless, a number of parties and the Federation of German Consumer Associations expect that in future, as in other European countries, there will be a speed limit on autobahns in Germany, not only to protect the climate and reduce accidents and fatalities, but also to enable automated driving on the autobahn.

The future development of the [aviation](#) industry will in part be adversely affected by the general downturn in the global economy and the political environment. Following two plane crashes, it is still not clear whether or when the Boeing 737 Max aircraft will fly again. According to the International Air Transport Association (IATA), plane travel will grow by an annual 5 percent in the next few years. Aircraft manufacturer Airbus is forecasting demand for 39,120 new planes over the next 20 years, a doubling of the world's present fleet. Its long-term forecast for average annual growth, updated annually, fell just minimally, from 4.4 to 4.3 percent. Boeing is expecting global demand to rise to some 35,000 aircraft in the coming 20 years. The aircraft manufacturer does not see ongoing discussions about climate protection as a danger, but rather as an opportunity to develop innovations to reduce emissions.

The planning of longer-term projects in the [security and defense industry](#) in Germany will be affected by current export restrictions until at least the spring of 2020, as the government has extended its export ban on Saudi Arabia and other nations involved in the Yemen war until March 2020. Following the military offensive in Syria, the German government does not intend to issue any new export licenses for armaments that could be used by Turkey in Syria. Three other EU countries have implemented similar export bans on Turkey. Together with France, the German government agreed in October on common guidelines for arms exports based on the "de minimis" rule with a threshold of 20 percent. This means that Germany will not block the export of armaments arising from joint Franco-German projects if less than 20 percent of the components in these goods are made by German companies. In their joint armaments cooperation arrangement to build a new battle tank, Krauss-Maffei Wegmann and Nexter, already affiliated in a holding company, have agreed with Rheinmetall to work together – with no merger – in a consortium. The tank is scheduled for deployment in 2038 and will replace the Leopard 2. By contrast, cooperation on the project for the new FCAS fighter jet, especially in the field of engine development, has not yet been settled due to disputes over project control and usage rights.

No new major forecasts have been issued for the other sectors. We therefore refer to pages 124ff. of the 2018 Annual Report and to the interim reports for 2019 published to date.

Future Development of Business

The Jenoptik Group will continue to pursue its objective of ensuring lasting profitable growth. This will be aided by an expansion of the international business, the resultant economies of scale, higher margins from an optimized product mix, increasing service business, and improved cost discipline. In the past year, Jenoptik completed its acquisition of Prodomax and the OTTO Group, both of which have contributed to the lasting successful development of the Group this year. Further acquisitions will be very closely scrutinized. Jenoptik started the sales process for the mechatronics division VINCORION in late July 2019. The Group intends to use the sale to strengthen its business focus on the competencies in optics and photonics. A good asset position and a viable financing structure give Jenoptik sufficient room for maneuver to finance both organic and inorganic growth.

The Jenoptik Group continues to anticipate growth in 2019. Without any major portfolio changes, revenue is expected to come in at between 850 million euros and 860 million euros (prior year: 834.6 million euros). Growth is due to be achieved by its photonic divisions. For the 2019 fiscal year, Jenoptik is also expecting EBITDA to rise (prior year: 127.5 million euros), with an EBITDA margin of around 15.5 percent. In the fourth quarter, the Jenoptik Executive Board is expecting a good order intake and a strong cash flow compared with the prior quarters. Due to a development of order intake that was up to now weaker than anticipated, particularly in the automotive industry, the Group will, however, not be able to achieve the very high prior-year value of order intake in 2019.

We refer to the 2018 Annual Report, from page 130 on, for details of the outlook for other key indicators for the development of business and the development of the divisions in the 2019 fiscal year.

All statements on the future development of the business situation have been made on the basis of current information available at the time the report was prepared. They are given on the assumption that the economic situation develops in line with the economic and sector forecasts stated in this report, in the Interim Reports 2019, and in the 2018 Annual Report from page 124 on.

Consolidated Statement of Comprehensive Income

Consolidated Statement of Income

in thousand euros	1/1 to 30/9/2019	1/1 to 30/9/2018	1/7 to 30/9/2019	1/7 to 30/9/2018
Revenue	595,750	593,359	212,651	208,678
Cost of sales	386,207	383,791	141,208	134,391
Gross profit	209,543	209,568	71,443	74,287
Research and development expenses	34,350	34,700	9,757	11,785
Selling expenses	68,195	64,257	20,811	21,832
General administrative expenses	44,514	39,727	13,471	12,380
Other operating income	13,048	12,567	4,742	3,292
Other operating expenses	17,457	16,712	6,263	7,632
EBIT	58,075	66,739	25,883	23,949
Result from other investments	79	77	76	- 2
Financial income	3,710	2,471	1,443	587
Financial expenses	5,387	4,589	1,617	1,074
Financial result	- 1,598	- 2,041	- 98	- 488
Earnings before tax	56,476	64,698	25,785	23,460
Income taxes	- 12,139	- 10,951	- 5,673	- 3,068
Earnings after tax	44,337	53,747	20,112	20,393
Results from non-controlling interests	5	- 320	10	- 94
Earnings attributable to shareholders	44,333	54,067	20,103	20,487
Earnings per share in euros (undiluted = diluted)	0.77	0.94	0.35	0.36

Consolidated Comprehensive Income

in thousand euros	1/1 to 30/9/2019	1/1 to 30/9/2018	1/7 to 30/9/2019	1/7 to 30/9/2018
Earnings after tax	44,337	53,747	20,112	20,393
Items that will never be reclassified to profit or loss	- 1,681	- 11	4,665	55
Actuarial gains/losses arising from the valuation of pensions and similar obligations	- 3,174	- 11	6,121	55
Equity instruments measured at fair value through other comprehensive income	337	0	337	0
Deferred taxes	1,156	0	- 1,793	0
Items that are or may be reclassified to profit or loss	6,871	- 78	3,358	1,396
Cash flow hedges	- 3,540	- 4,233	- 2,559	- 421
Foreign currency exchange differences	11,207	3,467	6,305	2,258
Deferred taxes	- 796	688	- 388	- 441
Total other comprehensive income	5,190	- 90	8,023	1,450
Total comprehensive income	49,527	53,658	28,135	21,843
Thereof attributable to:				
Non-controlling interests	- 5	- 325	11	- 86
Shareholders	49,532	53,982	28,124	21,929

Consolidated Statement of Financial Position

Assets in thousand euros	30/9/2019	31/12/2018	Change	30/9/2018
Non-current assets	552,575	491,812	60,763	485,804
Intangible assets	209,783	205,553	4,229	213,971
Property, plant and equipment	244,512	185,930	58,582	176,757
Investment property	4,286	4,354	- 68	4,280
Financial investments	7,326	6,770	556	7,127
Other non-current financial assets	1,898	2,191	- 293	2,334
Other non-current non-financial assets	494	723	- 228	695
Deferred tax assets	84,277	86,291	- 2,014	80,640
Current assets	491,294	494,096	- 2,802	473,882
Inventories	196,903	175,602	21,301	196,924
Current trade receivables	137,213	131,198	6,015	121,528
Contract assets	41,637	23,385	18,252	27,426
Other current financial assets	613	5,268	- 4,655	1,395
Other current non-financial assets	14,185	9,912	4,273	10,284
Current financial investments	24,928	59,476	- 34,548	39,840
Cash and cash equivalents	75,814	89,255	- 13,441	76,484
Total assets	1,043,869	985,908	57,961	959,687

Equity and liabilities in thousand euros	30/9/2019	31/12/2018	Change	30/9/2018
Equity	624,412	597,951	26,461	565,305
Share capital	148,819	148,819	0	148,819
Capital reserve	194,286	194,286	0	194,286
Other reserves	280,641	254,175	26,466	222,402
Non-controlling interests	666	671	- 5	- 202
Non-current liabilities	183,228	170,267	12,961	176,575
Pension provisions	39,844	37,339	2,505	36,365
Other non-current provisions	15,788	16,279	- 491	16,801
Non-current financial debt	121,908	111,405	10,504	112,320
Other non-current financial liabilities	3,273	2,664	610	2,244
Other non-current non-financial liabilities	0	108	- 108	0
Deferred tax liabilities	2,413	2,473	- 60	8,846
Current liabilities	236,230	217,690	18,540	217,806
Tax provisions	5,209	9,000	- 3,791	8,247
Other current provisions	45,987	58,706	- 12,720	54,804
Current financial debt	36,239	10,123	26,116	20,558
Current trade payables	65,635	60,102	5,533	61,782
Contract liabilities	52,822	53,273	- 451	45,896
Other current financial liabilities	10,094	7,582	2,512	7,665
Other current non-financial liabilities	20,243	18,903	1,340	18,853
Total equity and liabilities	1,043,869	985,908	57,961	959,687

Consolidated Statement of Changes in Equity

in thousand euros	Share capital	Capital reserve	Retained earnings	Equity instruments measured through other comprehensive income	Cash flow hedges
Balance at 1/1/2018	148,819	194,286	212,022	213	1,554
Changes in accounting policies ¹			- 4,158		
Balance at 1/1/2018¹	148,819	194,286	207,864	213	1,554
Net profit for the period			54,067		
Other comprehensive income after tax					- 3,002
Total comprehensive income			54,067		- 3,002
Dividends			- 17,171		
Other adjustments			3,047		
Balance at 30/9/2018	148,819	194,286	247,806	213	- 1,448
Balance at 1/1/2019	148,819	194,286	281,938	197	- 1,793
Changes in accounting policies ²			- 3,034		
Balance at 1/1/2019²	148,819	194,286	278,904	197	- 1,793
Net profit for the period			44,333		
Other comprehensive income after tax				237	- 2,491
Total comprehensive income			44,333	237	- 2,491
Dividends			- 20,033		
Balance at 30/9/2019	148,819	194,286	303,205	434	- 4,284

¹ Adjusted due to initial application of IFRS 9 and IFRS 15

² Adjusted due to initial application of IFRS 16

Consolidated Financial Statements
Consolidated Statement of Changes in Equity

	Cumulative exchange differences	Actuarial effects	Equity attributable to shareholders of JENOPTIK AG	Non-controlling interests	Total	in thousand euros
	297	- 27,382	529,809	123	529,932	Balance at 1/1/2018
			- 4,158	- 1	- 4,159	Changes in accounting policies ¹
	297	- 27,382	525,651	122	525,773	Balance at 1/1/2018¹
			54,067	- 320	53,747	Net profit for the period
	3,011	- 94	- 85	- 5	- 90	Other comprehensive income after tax
	3,011	- 94	53,982	- 325	53,658	Total comprehensive income
			- 17,171		- 17,171	Dividends
			3,047		3,047	Other adjustments
	3,308	- 27,476	565,508	- 203	565,305	Balance at 30/9/2018
	795	- 26,961	597,281	670	597,951	Balance at 1/1/2019
			- 3,034	0	- 3,034	Changes in accounting policies ²
	795	- 26,961	594,247	670	594,917	Balance at 1/1/2019²
			44,333	5	44,337	Net profit for the period
	9,421	- 1,968	5,199	- 10	5,190	Other comprehensive income after tax
	9,421	- 1,968	49,532	- 5	49,527	Total comprehensive income
			- 20,033		- 20,033	Dividends
	10,216	- 28,929	623,747	665	624,412	Balance at 30/9/2019

Consolidated Statement of Cash Flows

in thousand euros	1/1 to 30/9/2019	1/1 to 30/9/2018	1/7 to 30/9/2019	1/7 to 30/9/2018
Earnings before tax	56,476	64,698	25,785	23,460
Financial income and financial expenses	1,677	2,118	174	487
Non-operating income from investments	- 50	0	- 50	0
Depreciation and amortization	32,543	21,138	10,745	7,616
Impairment losses and reversals of impairment losses	754	1,160	754	1,195
Profit/loss from asset disposals	149	139	122	73
Other non-cash income/expenses	- 1,188	- 715	- 631	636
Operating profit before adjusting working capital and further items of the statement of financial position	90,361	88,538	36,900	33,467
Change in provisions	- 15,408	2,335	1,194	3,322
Change in working capital	- 36,516	- 6,719	2,398	8,283
Change in other assets and liabilities	150	- 736	- 3,848	- 4,401
Cash flows from operating activities before income tax payments	38,588	83,418	36,645	40,671
Income tax payments	- 11,184	- 10,576	- 1,648	- 4,382
Cash flows from operating activities	27,403	72,841	34,997	36,289
Capital expenditure for intangible assets	- 6,732	- 4,351	- 4,607	- 1,425
Proceeds from sale of property, plant and equipment	318	570	137	367
Capital expenditure for property, plant and equipment	- 24,884	- 22,476	- 10,239	- 11,244
Proceeds from sale of financial investments	41	205	41	0
Acquisition of consolidated entities	- 684	- 80,986	0	- 80,981
Proceeds from sale of investment companies	0	281	0	0
Proceeds from sale of financial assets within the framework of short-term disposition	60,159	34,108	25,000	5,000
Capital expenditure for financial assets within the framework of short-term disposition	- 25,000	- 10,000	0	0
Proceeds from non-operating income from investments	50	0	50	0
Interest received	286	260	61	75
Cash flows from investing activities	3,556	- 82,389	10,442	- 88,207
Dividends paid	- 20,033	- 17,171	0	0
Proceeds from issuing bonds and loans	2,638	2,651	2,624	167
Repayments of bonds and loans	- 20,164	- 27,386	- 1,894	- 24,924
Lease payments	- 7,495	- 496	- 2,606	- 244
Change in group financing	1,647	- 1,567	945	- 682
Interest paid	- 2,988	- 2,377	- 552	- 482
Cash flows from financing activities	- 46,396	- 46,346	- 1,483	- 26,164
Change in cash and cash equivalents	- 15,437	- 55,894	43,956	- 78,082
Effects of movements in exchange rates on cash held	1,576	174	997	76
Changes in cash and cash equivalents due to valuation adjustments	420	- 333	- 67	224
Changes in cash and cash equivalents due to changes in the scope of consolidation	0	227	0	0
Cash and cash equivalents at the beginning of the period	89,255	132,310	30,928	154,266
Cash and cash equivalents at the end of the period	75,814	76,484	75,814	76,484

Disclosures on Segment Reporting

January 1 to September 30, 2019

in thousand euros	Light & Optics	Light & Production	Light & Safety	VINCORION	Other	Consolidation	Group
Revenue	252,577	170,916	75,141	96,879	37,650	- 37,414	595,750
	(248,560)	(140,096)	(83,276)	(121,558)	(34,461)	(- 34,592)	(593,359)
thereof intragroup revenue	1,796	59	15	60	35,483	- 37,414	0
	(1,917)	(31)	(13)	(0)	(32,631)	(- 34,592)	(0)
thereof external revenue	250,781	170,857	75,126	96,819	2,167	0	595,750
	(246,643)	(140,065)	(83,263)	(121,558)	(1,830)	(0)	(593,359)
Germany	50,562	36,755	21,092	50,622	2,167	0	161,198
	(52,042)	(29,159)	(43,253)	(55,060)	(634)	(0)	(180,148)
Europe (without Germany)	96,751	27,185	20,537	28,348	0	0	172,820
	(99,153)	(27,921)	(19,550)	(23,575)	(0)	(0)	(170,199)
Americas	57,425	80,424	17,868	15,683	0	0	171,400
	(45,065)	(53,317)	(11,086)	(40,237)	(7)	(0)	(149,711)
Middle East / Africa	8,826	797	10,521	1,371	0	0	21,514
	(15,697)	(968)	(6,558)	(1,848)	(0)	(0)	(25,071)
Asia / Pacific	37,218	25,696	5,109	795	0	0	68,818
	(34,686)	(28,701)	(2,814)	(839)	(1,190)	(0)	(68,230)
EBITDA	49,459	19,167	11,924	10,574	209	65	91,398
	(55,231)	(14,336)	(11,048)	(14,361)	(- 5,938)	(- 2)	(89,037)
EBIT	41,018	10,428	6,604	5,576	- 5,622	70	58,075
	(49,187)	(9,591)	(7,326)	(11,652)	(- 11,021)	(4)	(66,739)
Research and development expenses	14,608	6,530	8,176	5,001	122	- 88	34,350
	(14,306)	(5,896)	(6,438)	(7,960)	(108)	(- 10)	(34,700)
Free cash flow (before income taxes)	11,755	8,833	2,536	- 5,115	- 12,781	2,061	7,290
	(18,165)	(6,727)	(21,298)	(24,651)	(- 13,086)	(- 593)	(57,160)
Working capital ¹	104,094	61,430	16,061	81,168	- 3,542	- 1,915	257,297
	(79,193)	(59,283)	(10,648)	(71,759)	(- 4,153)	(80)	(216,810)
Order intake (external)	233,047	158,656	72,239	108,008	2,911	0	574,861
	(264,531)	(138,449)	(73,759)	(109,836)	(1,830)	(0)	(588,405)
Frame contracts ¹	11,201	0	13,874	27,092	0	0	52,167
	(12,549)	(0)	(19,203)	(30,717)	(0)	(0)	(62,468)
Assets ¹	277,107	290,532	115,958	196,755	816,266	- 652,749	1,043,869
	(230,830)	(254,472)	(106,775)	(154,602)	(849,074)	(- 609,844)	(985,908)
Liabilities ¹	96,999	209,119	93,390	153,098	152,838	- 285,987	419,457
	(92,450)	(183,399)	(89,292)	(106,767)	(170,261)	(- 254,211)	(387,957)
Additions to intangible assets, property, plant and equipment and investment properties	12,156	7,096	2,597	3,634	7,111	- 210	32,383
	(12,185)	(3,441)	(2,578)	(3,225)	(3,912)	(0)	(25,341)
Scheduled depreciation and amortization	7,660	8,739	5,319	4,998	5,832	- 6	32,543
	(6,079)	(3,550)	(3,722)	(2,709)	(5,084)	(- 6)	(21,138)
Number of employees on average (without trainees)	1,336	1,074	468	761	322	0	3,960
	(1,271)	(846)	(478)	(740)	(327)	(0)	(3,661)

EBITDA = Earnings before interest, taxes, depreciation and amortization

EBIT = Earnings before interest and taxes

Prior year figures are in parentheses.

¹ Prior year figures refer to December 31, 2018

Notes to the Interim Consolidated Financial Statements for the First Nine Months of 2019

Parent Company

The parent company is JENOPTIK AG headquartered in Jena and registered in the Commercial Register at the local court of Jena in Department B under the number HRB 200146. JENOPTIK AG is listed on the German Stock Exchange in Frankfurt and traded on the TecDax and SDax, amongst others.

Accounting in accordance with International Financial Reporting Standards (IFRS)

The accounting policies applied in preparing the 2018 consolidated financial statements were also applied in preparing the interim consolidated financial statements as at September 30, 2019, which were prepared on the basis of the International Accounting Standard (IAS) 34 "Interim Financial Reporting", with the exemption of the standards applied for the first time in fiscal year 2019. The 2018 consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union. These policies were published and individually described in detail in the Notes to the 2018 Annual Report. The Annual Report is available on the website under www.jenoptik.com using the path Investors/Reports and Presentations.

The interim consolidated financial statements were prepared in euros, the currency used in the Group, and figures are presented in thousand euros, if not otherwise stated. Please note that there may be rounding differences as compared to the mathematically exact values (monetary units, percentages, etc.).

Management considers the interim consolidated financial statements to include all standard adjustments to be made on an ongoing basis to present a true and fair view of the Group's business performance in the period under review.

The following IFRS were applied for the first time in the fiscal year 2019:

IFRS 16 "Leases". IFRS 16 includes a comprehensive set of new rules for accounting of leases and supersedes the previous rules of IAS 17 Leases and some interpretations.

The objective is to disclose the lessee's rights and obligations associated with the leases in the balance sheet. Relief is planned for short-term leases and the leasing of objects of low-value. Lessors will continue having to account for leases by classifying them as either finance or operating leases, applying the criteria defined in IAS 17. Moreover, IFRS 16 contains further regulations on classification and disclosures in the Notes.

First-time application of IFRS 16 on January 1, 2019 had a material impact on the Group's earnings, financial, and asset position, as the Group as a lessee has so far largely concluded contracts on movable assets as well as real estate that were accounted as operating leases.

For the first-time application of IFRS 16 as of January 1, 2019, the Group applied the modified retrospective approach and measured the right-of-use assets in the amount of the continuing carrying amounts from the commencement of the leases, applying interest rates from the date of first application.

The Group makes use of the practical relief offered by IFRS 16 and recognizes the lease payments for short-term leases and low-value leased assets as expenses on a straight-line basis over the term of the lease. In addition, the Group does not apply IFRS 16 to leases of intangible assets. The right-of-use assets are not shown separately on the balance sheet; instead, they are shown in the same balance sheet item in which the underlying asset would be posted if it were the property of the Group.

The first-time application of IFRS 16 resulted in an increase of fixed assets in the sum of 54,372 thousand euros as of January 1, 2019. Liabilities increased by 58,636 thousand euros due to initial recognition of lease liabilities as the present value of the outstanding lease payments.

The weighted average incremental borrowing rate as at January 1, 2019 amounted to 2.7 percent. The difference between right-of-use assets and lease liabilities led to a reduction in equity of 3,034 thousand euros, taking deferred taxes (1,229 thousand euros) into account.

The resulting increase in total assets of 55,601 thousand euros reduced the equity ratio.

Impact IFRS 16 on opening statement of financial position

in thousand euros	1/1/2019
Non-current assets - Intangible assets	- 512
Acquired patents, trademarks, software, customer relationships	- 512
Non-current assets - Property, plant and equipment	54,884
Right of use assets - Land, buildings	50,682
Right of use assets - Technical equipment and machinery	303
Right of use assets - Other equipment, operating and office equipment	3,899
Deferred tax assets	1,229
Total assets	55,601
Equity	- 3,034
Other reserves	- 3,034
Non-current liabilities	50,085
Non-current financial debt	50,203
Other non-current provisions	- 117
Current liabilities	8,551
Current financial debt	8,620
Other current financial liabilities	- 70
Total equity and liabilities	55,601

Based on the other financial obligations arising from rental and lease agreements as of December 31, 2018, the reconciliation statement in the table below led to the opening balance sheet value of the lease liabilities as of January 1, 2019.

As of September 30, 2019, application of IFRS 16 led to an increase in the value of fixed assets of 50,998 thousand euros. Liabilities increased by 55,491 thousand euros, in particular due to recognition of lease liabilities as the discounted value of outstanding lease payments.

In addition, changed recognition of lease expenses in the first nine months of 2019 produced an improvement in EBITDA of 8,905 thousand euros and in EBIT of 1,534 thousand euros in the income statement. Depreciation of right-of-use assets came to 7,372 thousand euros. Interest expenses amounted to 1,145 thousand euros.

Reconciliation to lease liabilities according to IFRS 16

in thousand euros	
Other financial obligations from rental and lease agreements as of December 31, 2018	65,999
Exemptions for short-term leases	- 701
Exemptions for leases of low-value assets	- 1,296
Payments for renewal and termination options	4,497
Payments for non-lease components	- 2,451
Others	- 300
Obligations from operating leases (undiscounted)	65,747
Effect of discounting	- 6,924
Obligations from operating leases (discounted)	58,823
Carrying amount of finance lease liabilities in accordance with IAS 17 as of December 31, 2018	4,007
Carrying amount of lease liabilities in accordance with IFRS 16 as of January 1, 2019	62,830

Impact IFRS 16 on current statement of financial position

in thousand euros	30/9/2019
Non-current assets - Intangible assets	- 474
Acquired patents, trademarks, software, customer relationships	- 474
Non-current assets - Property, plant and equipment	51,471
Right of use assets - Land, buildings	46,847
Right of use assets - Technical equipment and machinery	247
Right of use assets - Other equipment, operating and office equipment	4,377
Deferred tax assets	1,296
Total assets	52,294
Equity	- 3,197
Other reserves	- 3,197
Non-current liabilities	46,684
Non-current financial debt	46,505
Other non-current provisions	179
Current liabilities	8,807
Current financial debt	9,352
Other current financial liabilities	- 544
Total equity and liabilities	52,294

In the cash flow statement, payments for operating leases will now be reported in the cash flows from financing activities, leading to an improvement of 8,905 thousand euros in the cash flows from operating activities compared to the regulations in IAS 17.

Impact IFRS 16 on current statement of income

in thousand euros	1/1 to 30/9/2019
Total depreciation of right of use assets	7,372
Depreciation cost of sales	4,758
Depreciation research and development expenses	437
Depreciation selling expenses	937
Depreciation general administrative expenses	1,240
Fictitious rental expense according to IAS 17¹	8,905
Rental expenses cost of sales	5,847
Rental expenses research and development expenses	522
Rental expenses selling expenses	1,064
Rental expenses general administrative expenses	1,472
Interest expenses for leasing in accordance with IFRS 16	1,145
Deferred tax expense	66
Impact on EBITDA	8,905
Impact on EBIT	1,534

¹ If IFRS 16 would not have been applied

The comparative figures for the prior-year period do not require any adjustments.

There were no material impacts on the Group as lessor.

The Group of Entities Consolidated

The consolidated financial statements of JENOPTIK AG include 37 fully consolidated subsidiaries (31/12/2018: 40) of which, 12 (31/12/2018: 16) have their legal seat in Germany and 25 (31/12/2018: 24) abroad. One joint operation is part of the group of entities consolidated (31/12/2018: 1) as well as one associated company using the at-equity method (31/12/2018: 1).

The reduction in the number of fully consolidated entities is the result of mergers in the first six months of 2019. Upon entry in the commercial register on March 15, 2019, all assets, including all existing contractual relationships of JENOPTIK Laser GmbH, Jena, JENOPTIK Polymer Systems GmbH, Triptis, and JENOPTIK Diode Lab GmbH, Berlin, were merged into JENOPTIK Optical Systems GmbH. Furthermore, with the entry in the commercial register on May 2, 2019, the assets of Jenoptik SSC GmbH Jena were transferred to JENOPTIK AG.

There were no acquisitions or disposals of companies in the first nine months of 2019.

With the signing the agreement on July 10, 2018 and on the closing date of July 23, 2018, Jenoptik acquired a 100 percent stake in Prodomax Automation Ltd. (Prodomax), Barrie (Ontario), Canada through its US company JENOPTIK Automotive North America Inc. Its inclusion in the 2018 consolidated financial statements in accordance with IFRS 3 was based on provisional figures. The provisional nature related to the measurement of the intangible assets identified during the process of the purchase price allocation. Finalization took place in the first quarter of 2019 and led to an adjustment of the intangible assets, identified during the purchase price allocation, of minus 463 thousand euros, and subsequently (taking into account the accrual of deferred tax liabilities in the amount of 116 thousand euros) to an increase in goodwill of 347 thousand euros.

Material Transactions

The JENOPTIK AG Annual General Meeting resolved on June 12, 2019, a dividend payment of 0.35 euros per share. The payment of the dividend led to a reduction of 20,033 thousand euros in cash flows from financing activities.

At its extraordinary meeting held on July 29, 2019, the Supervisory Board of JENOPTIK AG confirmed Dr. Stefan Traeger for another five-year term as Chairman of the Executive Board, who will thus continue leading Jenoptik following his appointment, which runs until June 2020.

At the same time, the Supervisory Board approved the start of a structured sales process for the mechatronic division VINCORION in order to pursue an active portfolio policy and strengthen the business focus on the competencies in optics and photonics.

There were no further other transactions with a significant influence on the interim consolidated financial statements of Jenoptik as at September 30, 2019.

Classifications of Material Financial Statement Items

Revenue. A breakdown of revenues from contracts with customers by divisions and geographical regions is set out in the segment reporting on page 27. The breakdown of revenues into revenues recognized over time and revenues recognized at a point in time is shown in the table below. The revenues recognized over time included services such as customer-specific development projects and, in particular in the Light & Optics and VINCORION divisions, revenues recognized over time from customer-specific volume production.

External revenues

in TEUR	Total	thereof recognized over time	thereof recognized at a point in time
Group	595,750	153,526	442,224
Light & Optics	250,781	66,319	184,463
Light & Production	170,857	45,471	125,386
Light & Safety	75,126	23,317	51,809
VINCORION	96,819	16,253	80,566
Other	2,167	2,167	0

Property, plant and equipment. The increase in property, plant and equipment resulted in particular from the first-time application of IFRS 16 and the related accounting of right-of-use assets (see notes to IFRS 16).

Property, plant and equipment

in thousand euros	30/9/2019	31/12/2018
Land, buildings	145,478	99,239
Technical equipment and machinery	45,042	46,567
Other equipment, operating and office equipment	27,587	24,686
Payments on-account and assets under construction	26,404	15,438
Total	244,512	185,930

Inventories

in thousand euros	30/9/2019	31/12/2018
Raw materials, consumables and supplies	79,406	70,414
Unfinished goods and work in progress	91,055	85,691
Finished goods and merchandise	24,533	18,214
Payments on-account	1,910	1,283
Total	196,903	175,602

Current trade receivables

in thousand euros	30/9/2019	31/12/2018
Trade receivables from third parties	130,058	126,219
Receivables from due requested advance payments	6,564	4,527
Trade receivables from unconsolidated associates and joint operations	252	263
Trade receivables from investment companies	339	190
Total	137,213	131,198

Non-current financial debt

in thousand euros	30/9/2019	31/12/2018
Liabilities to banks	72,836	108,227
Lease liabilities	49,072	3,178
Total	121,908	111,405

Current financial debt

in thousand euros	30/9/2019	31/12/2018
Liabilities to banks	26,017	9,294
Lease liabilities	10,222	829
Total	36,239	10,123

Current trade payables

in thousand euros	30/9/2019	31/12/2018
Trade payables towards third parties	65,576	60,074
Trade payables towards unconsolidated associates and joint operations	53	16
Trade payables towards investment companies	5	11
Total	65,635	60,102

Other current non-financial liabilities

in thousand euros	30/9/2019	31/12/2018
Liabilities to employees	12,632	9,779
Liabilities from other taxes	4,105	4,353
Accruals	1,037	1,768
Miscellaneous current non-financial liabilities	2,469	3,003
Total	20,243	18,903

Financial Instruments

The carrying amounts listed below for shares in unconsolidated associates and investment companies, cash and cash equivalents, contingent liabilities and derivatives with and without hedging relations correspond to their fair value. The carrying amounts of the remaining items represent an appropriate approximation of their fair value. In the following presentation, the non-current and current portion of each item of the statement of financial position was aggregated.

Financial assets

in thousand euros	Valuation category according to IFRS 9 ¹⁾	Carrying amounts 30/9/2019	Carrying amounts 31/12/2018
Financial investments			
Current cash deposits	AC	24,928	59,476
Shares in unconsolidated associates and investments	FVTOCI	1,854	1,569
Shares in entities which are subject to the at-equity valuation ²⁾	-	5,462	5,191
Loans granted	AC	10	10
Trade receivables	AC	137,213	131,198
Other financial assets			
Derivatives with hedging relations	-	82	128
Derivatives without hedging relations	FVTPL	1,579	1,871
Other financial assets	AC	849	5,460
Cash and cash equivalents	AC	75,814	89,255

1) AC = Amortized costs

FVTPL = Fair value through Profit & Loss

FVTOCI = Fair value through other comprehensive income

2) Valuation according to IAS 28

As part of capital management, new cash investments are regularly made and payments are collected on scheduled due dates. Cash deposits decreased in value by a total of 35,548 thousand euros over the reporting period.

Financial liabilities

in thousand euros	Valuation category according to IFRS 9 ¹⁾	Carrying amounts 30/9/2019	Carrying amounts 31/12/2018
Financial debt			
Liabilities to banks	AC	98,854	117,521
Lease liabilities ²⁾	-	59,294	4,007
Trade payables	AC	65,635	60,171
Other financial liabilities			
Contingent liabilities	FVTPL	1,693	1,671
Derivatives with hedging relations	-	6,969	3,169
Derivatives without hedging relations	FVTPL	220	48
Miscellaneous financial liabilities	AC	4,485	5,288

1) AC = Amortized costs
FVTPL = Fair value through Profit & Loss
2) Valuation according to IFRS 16

The classification of fair values is shown in the following overview of financial assets and liabilities measured at fair value:

in thousand euros	Carrying amounts 30/9/2019	Level 1	Level 2	Level 3
Shares in unconsolidated associates and investments	1,854	0	0	1,854
	(1,569)	0	0	(1,569)
Derivatives with hedging relations (assets)	82	0	82	0
	(128)	0	(128)	0
Derivatives without hedging relations (assets)	1,579	0	1,579	0
	(1,871)	0	(1,871)	0
Contingent liabilities	1,693	0	0	1,693
	(1,671)	0	0	(1,671)
Derivatives with hedging relations (liabilities)	6,969	0	6,969	0
	(3,169)	0	(3,169)	0
Derivatives without hedging relations (liabilities)	220	0	220	0
	(48)	0	(48)	0

Prior year figures are in parentheses

Fair values which are available as quoted market prices at all times, are allocated to level 1. Fair values determined on the basis of direct or indirect observable parameters, are allocated to level 2. Level 3 is based on measurement parameters that are not based upon observable market data.

The fair values of all derivatives are determined using the generally recognized measurement method. In this context, the future cash flows determined via the agreed forward rate or interest rate are discounted using current market data. The market data used in this context is taken from leading financial information systems, such as, for example, Reuters. If an interpolation of market data is applied, this is done on a straight-line basis.

The fair value of contingent liabilities was measured by taking the expected and discounted payment outflows at the reporting date into consideration.

The contingent liabilities recognized at September 30, 2019 resulted mainly from variable purchase price components agreed within the framework of the acquisition of the OTTO Group that were recognized as liability at the fair value of 1,234 thousand euros. Payment of these variable purchase price components is expected to be due in 2020. No discounting was applied for reasons of materiality.

The development of financial assets and liabilities measured at fair value through profit and loss and assigned to level 3 can be found in the table below:

in thousand euros	Shares in unconsolidated associates and investments	Contingent liabilities
Balance at 1/1/2019	1,569	1,671
Disposals	- 56	0
Remeasurement through other comprehensive income	337	0
Currency effect	5	22
Balance at 30/9/2019	1,854	1,693

Related Party Disclosures

For the period under review no material business transactions were performed with related parties.

German Corporate Governance Code

The current statement given by the Executive Board and Supervisory Board pursuant to § 161 of the German Stock Corporation Act [Aktiengesetz (AktG)] regarding the German Corporate Governance Code has been made permanently available to shareholders on the Jenoptik website www.jenoptik.com using the path Investors/Corporate Governance. Furthermore, the statement can also be viewed on site at JENOPTIK AG.

Litigations

JENOPTIK AG and its group entities are involved in several court or arbitration proceedings. Provisions for litigation risks, respectively litigation expenses, were set up in the appropriate amounts in order to meet any possible financial burdens resulting from any court decisions or arbitration proceedings. In case of a material impact on the economic situation of the Group, these litigations are described in the Annual Report 2018. As at September 30, 2019 no further litigations arose that based on current assessment could have a material effect on the financial position of the Group.

Events after the Reporting Period

There were no events after the balance sheet date of September 30, 2019 that were of significance to the Group or had a significant influence on Jenoptik's earnings, financial or asset positions at the time this report was prepared.

Assurance from the the Legal Representatives

To the best of our knowledge, we assure that the interim consolidated financial statements prepared in accordance with the applicable principles for the interim financial reporting give a true and fair view of the net assets, financial position and result of operations of the Group and that the interim group management report presents a fair view of the performance of the business including the operating result and the position of the Group, together with a description of the significant opportunities and risks associated with the anticipated development of the Group.

Jena, November 11, 2019

The image shows two handwritten signatures in black ink. The signature on the left is 'Stefan Traeger' and the signature on the right is 'Hans-Dieter Schumacher'.

Dr. Stefan Traeger
President & CEO

Hans-Dieter Schumacher
Chief Financial Officer

Dates

February 12, 2020

Publication of the preliminary results
for the fiscal year 2019

March 25, 2020

Publication of the consolidated financial statements
for the fiscal year 2019

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You may find a digital version of this Interim Report on our internet <http://www.jenoptik.com>.

Our app „Publications“ provides an optimized view of the report on mobile devices with iOS and Android operating systems.

This is a translation of the original German-language Interim Report. JENOPTIK AG shall not assume any liability for the correctness of this translation. In case of differences of opinion the German text shall prevail.