JENOPTIK

MORE LIGHT

Interim Financial Report of the Jenoptik Group

(unaudited)

January to June 2019

At a glance – Jenoptik Group

in million euros	Jan. – June 2019	Jan. – June 2018	Change in %	April - June 2019	April - June 2018	Change in %
Revenue (external)	383.1	384.7	– 0.4	199.1	194.8	2.2
Light & Optics	162.7	163.3	– 0.4	79.5	82.3	– 3.4
Light & Production	111.3	76.6	45.3	60.9	37.5	62.4
Light & Safety	48.4	61.8	– 21.7	23.9	28.7	– 16.5
VINCORION	59.1	81.6	– 27.6	33.8	45.7	– 26.0
Other[1]	1.6	1.3		1.0	0.7	
EBITDA	54.0	56.3	– 4.1	30.2	28.5	5.8
Light & Optics	32.0	35.4	– 9.4	15.4	18.1	– 14.8
Light & Production	11.9	6.7	77.7	6.4	4.2	52.0
Light & Safety	6.6	9.4	– 30.4	2.8	3.6	– 21.5
VINCORION	4.5	8.7	– 48.3	4.9	5.2	– 5.3
Other[1]	– 1.0	– 3.9		0.7	– 2.5	
EBITDA margin	14.1%	14.6%		15.2%	14.7%	
Light & Optics	19.5%	21.5%		19.2%	21.8%	
Light & Production	10.7%	8.8%		10.5%	11.2%	
Light & Safety	13.5%	15.2%		11.8%	12.5%	
VINCORION	7.6%	10.6%		14.4%	11.3%	
EBIT	32.2	42.8	– 24.8	19.4	21.9	– 11.7
EBIT margin	8.4%	11.1%		9.7%	11.3%	
Earnings after tax	24.2	33.4	– 27.4	14.0	17.7	– 20.9
Earnings per share in euros	0.42	0.59	– 27.8	0.25	0.31	– 21.3
Free cash flow	– 14.6	28.8	– 150.9	– 9.5	15.5	– 161.6
Order intake (external)	392.5	397.2	– 1.2	182.2	197.9	– 8.0
Light & Optics	153.0	179.3	– 14.7	76.5	81.9	– 6.6
Light & Production	113.0	92.0	22.8	49.9	48.0	4.0
Light & Safety	50.6	48.1	5.1	23.6	23.5	0.4
VINCORION	73.8	76.4	– 3.4	30.8	43.9	– 30.0
Other[1]	2.1	1.3		1.4	0.7	

	June 30, 2019	Dec. 31, 2018	June 30, 2018
Order backlog (external, in million euros)	522.5	521.5	454.7
Light & Optics	162.6	180.6	142.1
Light & Production	114.8	112.5	88.9
Light & Safety	71.6	69.5	54.9
VINCORION	173.0	158.9	168.8
Other[1]	0.5	0	0
Frame contracts (in million euros)	56.8	62.5	79.8
Employees (incl. trainees)	4,074	4,043	3,684
Light & Optics	1,372	1,368	1,300
Light & Production	1,117	1,055	790
Light & Safety	472	472	463
VINCORION	807	790	786
Other[1]	306	358	345

[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 June 2019

- In the first half-year Jenoptik received new orders worth 392.5 million euros (prior year: 397.2 million euros). The book-to-bill ratio remained stable at 1.02 (prior year: 1.03). At 522.5 million euros, the order backlog was at the 2018 year-end level.
  See Earnings Position – Page 9

- As expected, the momentum in revenue development picked up in the second quarter, allowing the company to compensate for the shortfall in revenue from the prior quarter. At 383.1 million euros, revenue was at the high prior-year level (prior year: 384.7 million euros). Revenue saw growth abroad.
  See Earnings Position – Page 8

- Increased capital expenditure for future growth caused functional costs to rise. This was reflected in lower profitability. EBITDA fell slightly to 54.0 million euros (prior year: 56.3 million euros). EBIT, including earnings-reducing PPA impacts, declined strongly as expected, and came to 32.2 million euros (prior year: 42.8 million euros).
  See Earnings Position – Page 9

- Robust balance sheet and financing structure – the equity ratio of 58.4 percent was below the figure of 60.6 percent at year-end 2018 following first-time application of IFRS 16. Primarily due a rise in working capital, the free cash flow fell to minus 14.6 million euros (prior year: 28.8 million euros).
  See Financial and Asset Position – from Page 11 on

- Division highlights
  Light & Optics: Good business with the semiconductor equipment industry; slight declines in industry and life science business. Revenue at prior-year level, very good EBITDA margin of 19.5 percent (prior year: 21.5 percent). Fall in order intake as major order was placed in the fourth quarter of 2018.
  Light & Production: Significant rise in revenue, earnings, and order intake was mainly due to contributions from acquired companies.
  Light & Safety: Growth in order intake; revenue shortfall due to prior-year toll project could not be fully compensated.
  VINCORION: High order backlog. Outstanding export licenses in particular had a negative impact on both revenue and earnings. Active sales process started.
  See Segment Report – from Page 13 on

- Jenoptik still expects growth in 2019. Without any major portfolio changes revenue is now expected in a range between 850 and 860 million euros (before: growth in the mid-single-digit percentage range). The EBITDA margin is forecast to come to around 15.5 percent (before: 15.5 to 16.0 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 to 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 combined according to a common understanding of markets and customers based on similar buisness models. This helps us to increase the reach of our products and solutions and opens up improved growth opportunities.

The new Light & Optics division brings the former Optical Systems and Healthcare & Industry divisions together 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 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 the "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 positioned 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 "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 transformatory 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.

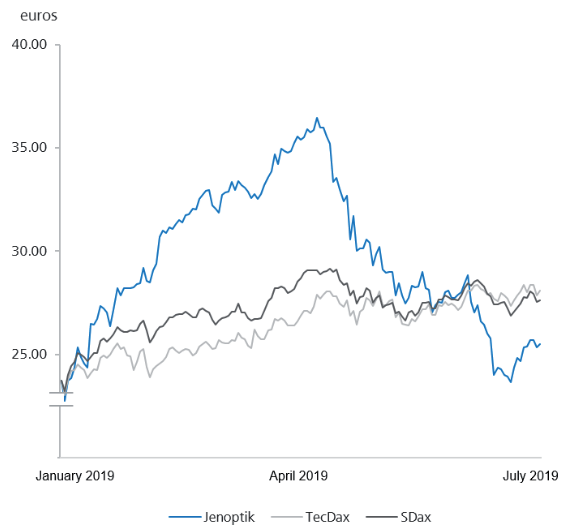
For more information on the strategic trajectory of the Jenoptik Group, we refer to the 2018 Annual Report and the details given in the "Targets and Strategies" chapter from page 75 on, as well as on the Jenoptik website.

The Jenoptik Share

Ongoing trade and political tensions meant that the global economic downturn continued in the second quarter of 2019. Economic risks such as the uncertainty surrounding Brexit and the trade conflict between the US and China, with their concomitant protectionist policies, dampened global economic growth. These issues were also reflected in the volatile development of the capital markets. Nevertheless, the German indices saw robust growth in the first six months of the year. The German technology index (TecDax) climbed to 2,876 points by the end of June 2019, a year-to-date increase of 16.7 percent. On the last day of trading in the second quarter, the SDax was up 18.9 percent, at 11,378 points.

Up to the end of April 2019, the Jenoptik share displayed highly encouraging performance. On the first day of trading in 2019, the share started the new year 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. Subsequently, the share saw a significant drop in value. At the end of the reporting period, the Jenoptik share was trading at 28.45 euros, an increase of 19.8 percent since the beginning of the year. As of this time, Jenoptik's market capitalization was 1,628.4 million euros.

Uncertainties in the economy and on the capital markets intensified in July and were clearly reflected in the price of our share, which fell to 25.50 euros by the end of July 2019. Over the six-month period, the total shareholder return was 21.3 percent (prior year: 57.8 percent).



In February 2019, SMALLCAP World Fund, USA, informed us that it had increased its stake in Jenoptik from 3.34 percent to 5.04 percent. In May 2019 Invesco Ltd., Bermuda, informed that it holds a stake of 4.11 percent due to the merger with Oppenheimer Funds Ltd., US.

Trading in Jenoptik shares was less intense in 2019 than in the comparable prior-year period. On average, 137,406 shares changed hands per day on the German stock exchanges (Xetra, floor exchanges, and Tradegate) in the first half-year (prior year: 185,909 shares), a drop of 26.1 percent. On the TecDax, Jenoptik was in 19th place (prior year: 15th) in terms of free float market capitalization (89.0 percent) as of June 2019, in terms of stock turnover, in 25th place (prior year: 22nd).

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 from 17.2 million euros in the prior year to a new figure of 20.0 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.

Earnings per share

	1/1 to 30/6/2019	1/1 to 30/6/2018
Earnings attributable to shareholders in thousand euros	24,230	33,580
Weighted average number of outstanding shares	57,238,115	57,238,115
Earnings per share in euros	0.42	0.59

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 30/6/2019	1/1 to 30/6/2018
Closing share price (Xetra) on 30/6/ in euros	28.45	33.58
Highest share price (Xetra) in euros	36.45	39.48
Lowest share price (Xetra) in euros	22.76	26.44
Market capitalization (Xetra) on 30/6/ in million euros	1,628.4	1,922.1
Average daily trading volume in shares[1]	137,406	185,909

[1] Source: Deutsche Börse

A total of eleven research companies and banks currently report regularly on Jenoptik. At the time this report was prepared, two analysts recommended buying the stock, eight advised investors to hold, and one recommended selling. As of the end of July, the average price target across all recommendations was 30.50 euros.

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

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

The global economy saw a drop in momentum in the first half-year of 2019, a trend that began in the first quarter, according to the International Monetary Fund (IMF). Growing international tensions, e.g. the trade conflict between the US and China and the Brexit put the brakes on global economic growth, and also noticeably impacted on the investment climate. In June, the EU and the South American bloc Mercosur concluded an agreement to create one of the world's largest free trade zones.

In the last few months, the US economy saw growth. In the first quarter, annualized gross domestic product (GDP) increased by 3.1 percent. Due to unresolved trade conflicts the economy grew slower, at 2.1 percent, in the second quarter. Private consumption and public expenditure were again strong, but contribution from the export sector to growth were lacking.

Although the Chinese economy remained unexpectedly stable at the beginning of the year, GDP grew just 6.2 percent in the second quarter, slower than for 27 years, according to the Chinese National Bureau of Statistics in Beijing. Uncertainties have arisen in recent months as a result of external factors, chief among them the trade conflict with the US.

In Germany, signs of an economic downturn have intensified in recent months. As a result, the ifo Business Climate Index fell in June to its lowest level since November 2014. The first half-year was dominated by the trade dispute between China and the US, Brexit negotiations, and a potential euro crisis in Italy. In German industry, orders fell in June for the sixth consecutive month. The shortage of skilled workers in Germany also slowed economic momentum. The Bundesbank concludes that gross domestic product (GDP) is set to shrink marginally in the second quarter.

Photonics is considered a key technology for the future and, thanks to a good order situation, is displaying continued solid growth, according to a summary published by the Spectaris industry association. This upward trend is being driven by issues such as autonomous driving, digital production, and new developments in the medical sector. In the second quarter, Spectaris released a new photonics trend report. German manufacturers generated revenue of 37.1 billion euros in 2018 (prior year: 34.8 billion euros), with an export ratio of 72 percent. The Photonics World Market Index confirms the positive trend, showing international revenue growth of 50 percent in the years between 2011 and 2018.

The German medical technology sector exceeded the 30-billion-euro revenue mark for the first time in 2018 and remained a strong driver of the German economy, as reported by Spectaris in early June 2019. Of this figure, around 65 percent was generated abroad. According to Spectaris, the rather low figure of 3.3 percent growth in exports was due to trade barriers and the Brexit negotiations.

In the first quarter, sales data for the semiconductor industry already revealed the greatest decrease in the last 35 years. Global revenue in the first quarter was down 13 percent on the prior year, in April and May 14.6 percent each compared with the prior-year month. The economic situation and the trade dispute between the US and China have put a brake on global growth in the industry. These uncertainties, arising from geopolitical tensions, are slowing development in the semiconductor equipment industry. Semiconductor Equipment and Materials International (SEMI) reported a minor upswing in revenue of North American equipment manufacturers in the months of April and May, but the figures – indicating double digit losses – are still considerably down on the prior year. Market volatility caused by the macro-economic environment continued unabated.

Order intakes in the mechanical and plant engineering industry fell in each of the past months, primarily due to cyclical swings and aforementioned economic factors. Domestic demand practically stagnated at minus 1 percent in May. Order intakes from EU countries fell by 6 percent, with orders from the rest of the world dropping 10 percent, according to the German Mechanical Engineering Industry Association (VDMA).

Contrary to forecasts issued in the first quarter and despite poor economic conditions, the International Federation of Robotics (IFR) is reporting new sales records in the robotics industry. In the first half-year, revenue was mainly generated in major markets such as China, Japan, South Korea, the US, and Germany.

The automotive industry was increasingly burdened by geopolitical risks in the past half-year, including trade conflicts and punitive tariffs for car imports. Increasing numbers of car manufacturers are consequently forming alliances, which is likely to transform the overall development of the industry. Other drivers are topics such as digitization, electromobility and sustainability issues such as stricter emissions/environmental standards. Signs that the industry's growth of recent years is coming to an end include various profit warnings issued by car manufacturers and suppliers, and announcements of plant closures and job cuts. In all of the major sales regions except Brazil, fewer vehicles were sold in the first six months of 2019 than in the prior-year period, according to the German Association of the Automotive Industry (VDA).

In the field of traffic safety, the majority of discussions in Germany revolved around the planned toll system for passenger cars in the first half of the year. Following extensive deliberations, the European Court of Justice in June ruled that the project was in violation of EU law. In the US, signs of increasing opposition to traffic control measures were seen in the first half-year. The German Federal Statistical Office published its traffic statistics for 2018 in early July: in the past year, 3,275 people were killed in road traffic accidents in Germany, 3 percent more than in the prior year.

In early 2019, a Jenoptik section control system was put into operation in Lower Saxony. Following a court order to pause recording, the system can be reactivated in summer 2019.

In early July 2019, the Saarland Constitutional Court issued a ruling on a constitutional complaint in connection with a speeding offense recorded using the Jenoptik TraffiStar S350 instrument. The court held that the complainant was entitled to receive and review the raw measurement data generated, but not saved, by the device. The TraffiStar S350 system – like devices made by other manufacturers – does not store this data. As a result, the affected measuring systems, as well as those from other manufacturers, were shut down in the Saarland. Jenoptik disagrees with the ruling but will still apply to the Physikalisch-Technische Bundesanstalt (PTB) for approval of a software update that would enable the systems to be put back into operation.

The first quarter saw uncertainties emerging in the aviation industry due to current political decision-making and public debates, for example regarding better climate protection in the world of aviation. At the Le Bourget air show in June both Airbus and Boeing, the world's two major aircraft manufacturers, reported major order slowdowns: in the first five months of 2019, canceled orders exceeded order intakes at both companies. Following two plane crashes, Boeing is also facing commercial difficulties caused by the ongoing flight ban on the Boeing 737 Max and associated cancellations and extra payments.

In the security and defense technology industry, US defense companies in particular reported rising demand from Europe: according to Boeing or Lockheed Martin, this demand mainly concerned fighter planes and missile defense systems, not least due to the tensions between the US and Iran. In Germany, despite restrictions on the export of armaments to a number of Arab states, more exports were approved in the first half-year 2019 than in the entire prior year. According to the Armaments Export Report published in July 2019, exports in the first six months had a value of 5.3 billion euros. As stated by the Federal Ministry for Economic Affairs and Energy, this equates to an increase of 107 percent on the prior-year period. In 2018, individual export authorizations were worth a total of 4.8 billion euros.

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

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 "Other". 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 six months of the year, the Group generated revenue of 383.1 million euros, which was thus at the same level as in the prior-year period (prior year: 384.7 million euros). Quarter-on-quarter revenue increased 8.2 percent, from 184.0 million euros in the first quarter to 199.1 million euros. Growth was seen in the Light & Production division, not least due to the contribution to revenue of 29 million euros made by the companies acquired in 2018. Revenue in the Light & Optics division remained at the prior-year level thanks to good business with the semiconductor equipment industry. The revenue figure for the Light & Safety division in the first half-year 2018 included the significant sum of around 25 million euros arising from the settlement of the toll project, which could not be compensated in full. In the VINCORION division, primarily the extension of arms export restrictions issued by the German government adversely affected business performance.

Jenoptik exclusively generated revenue growth outside Europe in the first half-year 2019. The share of revenue generated abroad thus increased to 72.7 percent (prior year: 67.4 percent). At 153.6 million euros, revenue in the growth regions of the Americas and Asia/Pacific was appreciably up on the prior year (prior year: 126.5 million euros). It was also up in percentage terms, accounting for 40.1 percent of group revenue (prior year: 32.9 percent). Revenue grew by 27.0 percent in the Americas, primarily due to the contribution made by Prodomax Automation Ltd. (Prodomax), and was 10.9 percent up in Asia/Pacific. Revenue in Europe, however, fell by 6.1 percent. In Germany, revenue declined a significant 16.6 percent to 104.7 million euros (prior year: 125.5 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.

The cost of sales fell by 1.8 percent to 245.0 million euros (prior year: 249.4 million euros), and thus at a higher rate than revenue. This resulted in a gross profit of 138.1 million euros (prior year: 135.3 million euros). The gross margin consequently improved to 36.0 percent (prior year: 35.2 percent).

One of the strategic priorities set by the Group for the present fiscal year is to speed-up innovation by stepping up its research and development (R+D) work. Over the first six months, the Group's R+D expenses increased to 24.6 million euros (prior year: 22.9 million euros). At 8.3 million euros, the development expenses on behalf of customers posted in cost of sales were down on the prior-year figure of 9.6 million euros, which in the first six months of 2018 had included costs in connection with the toll project. The R+D total output grew to 34.1 million euros (prior year: 33.4 million euros), equating to a share of 8.9 percent of group revenue (prior year: 8.7 percent).

Revenue

in million euros	1/1 to 30/6/2019	1/1 to 30/6/2018	Change in %
Group	383.1	384.7	− 0.4
Light & Optics	162.7	163.3	− 0.4
Light & Production	111.3	76.6	45.3
Light & Safety	48.4	61.8	− 21.7
VINCORION	59.1	81.6	− 27.6
Other	1.6	1.3	

R+D Output

in million euros	1/1 to 30/6/2019	1/1 to 30/6/2018	Change in %
R+D output	34.1	33.4	2.1
R+D expenses	24.6	22.9	7.3
Capitalized development costs	1.2	0.9	37.5
Developments on behalf of customers	8.3	9.6	− 13.4

Due to the further expansion of international activities, also in connection with the acquisition of Prodomax, selling expenses increased to 47.4 million euros (prior year: 42.4 million euros) in the first half-year 2019. At 12.4 percent, the selling expenses ratio was also up on the prior year level of 11.0 percent. Administrative expenses increased to 31.0 million euros (prior year: 27.3 million euros), primarily due to higher personnel costs and the administrative expenses for the companies acquired in 2018, which were not yet included in the first half-year 2018. By contrast, earnings were boosted by impacts arising from the measurement of share-based payments for the Executive Boards and some members of the top management. The administrative expenses ratio rose to 8.1 percent (prior year: 7.1 percent).

In total, other operating income and expenses came to minus 2.9 million euros (prior year: 0.2 million euros). Of particular note here are negative currency effects worth a total of minus 1.0 million euros (prior year: 0.4 million euros) and higher expenses for internal process optimization projects.

Functional costs higher than in the prior year due to additional investment in future growth, together with the negative other operating result, produced a slight fall in EBITDA (earnings before interest, taxes, depreciation, and amortization) – despite the positive impacts arising from the first-time use of IFRS 16 of 5.5 million euros. EBITDA fell 4.1 percent to 54.0 million euros (prior year: 56.3 million euros). The EBITDA margin consequently reduced to 14.1 percent (prior year: 14.6 percent). On a quarterly basis, EBITDA of 30.2 million euros was, however, an improvement on both the prior quarter (23.8 million euros) and the prior-year quarter (28.5 million euros).

At 32.2 million euros, EBIT, as expected, was also down on the prior-year figure of 42.8 million euros, by 24.8 percent in the first half-year 2019. EBIT for the companies acquired in 2018 came to a total of 1.5 million euros, including impacts arising from the purchase price allocation, which amounted to minus 3.0 million euros. The Group EBIT margin fell to 8.4 percent (prior year: 11.1 percent). Here, too, growth can be seen in the course of the year, from 12.8 million euros in the first quarter of 2019 to 19.4 million euros in the second quarter.

Over the period covered by the report, the financial result remained virtually unchanged on the prior year, at minus 1.5 million euros (prior year: minus 1.6 million euros). Income from the measurement of cash items compensated for the lower currency gains in the financial result compared to the prior year. The Group achieved earnings before tax of 30.7 million euros, markedly down on the prior year (prior year: 41.2 million euros). Income taxes came to 6.5 million euros (prior year: 7.9 million euros). Due to a higher profit share abroad, the cash effective tax rate rose to 15.2 percent (prior year: 14.2 percent). Group earnings after tax decreased by 27.4 percent to 24.2 million euros (prior year: 33.4 million euros). Group earnings per share (EPS) accordingly came to 0.42 euros (prior year: 0.59 euros).

At 392.5 million euros, the order intake was only a marginal 1.2 percent down on the prior-year period (prior year: 397.2 million euros). Both the Light & Production and the Light & Safety divisions posted an increase in new orders. The Light & Optics division, which had seen strong growth from order intakes received earlier than expected in the fourth quarter of 2018, remained as expected below the prior-year level in the first half-year 2019. The book-to-bill ratio of 1.02 was at almost the prior-year figure of 1.03.

EBITDA

in million euros	1/1 to 30/6/2019	1/1 to 30/6/2018	Change in %
Group	54.0	56.3	– 4.1
Light & Optics	32.0	35.4	– 9.4
Light & Production	11.9	6.7	77.7
Light & Safety	6.6	9.4	– 30.4
VINCORION	4.5	8.7	– 48.3
Other	– 1.0	– 3.9	

EBIT

in million euros	1/1 to 30/6/2019	1/1 to 30/6/2018	Change in %
Group	32.2	42.8	– 24.8
Light & Optics	27.0	31.3	– 13.9
Light & Production	5.9	4.9	20.3
Light & Safety	3.0	7.0	– 56.6
VINCORION	1.2	6.9	– 82.9
Other	– 4.9	– 7.2	

Worth 522.5 million euros, the order backlog remained at a high level (31/12/2018: 521.5 million euros). Of this order backlog, 338.0 million euros or 64.7 percent (prior year: 300.3 million euros or 57.6 percent) is due to be converted to revenue in the present fiscal year and support scheduled growth.

As of June 30, 2019, there were also frame contracts worth 56.8 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.

The number of Jenoptik employees increased only slightly, to 4,074, in the first six months of 2019 (31/12/2018: 4,043 employees). At the end of June 2019, 1,006 people were employed at the foreign locations (31/12/2018: 981 employees).

Jenoptik had a total of 100 trainees as of June 30, 2019 (31/12/2018: 117 trainees). In Germany, the Group had 111 agency employees (31/12/2018: 107 agency employees).

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 six months of 2019, the debt-to-equity ratio, that of borrowings to equity, rose from 0.65 at the end of 2018 to 0.71. The rise was due to borrowings increasing while equity shrank marginally, principally following the first-time application of IFRS 16.

The increase of 56.6 million euros in financial debt owing to the introduction of IFRS 16 and lower cash and cash equivalents resulted in net debt coming to 79.0 million euros as of June 30, 2019 (31/12/2018: minus 27.2 million euros).

By the end of June 2019, the Group had invested 16.8 million euros in property, plant, and equipment and intangible assets; as previously announced, this was more than in the prior-year period (prior year: 14.2 million euros). At 14.6 million euros, the largest share of capital expenditure was on property, plant, and equipment (prior year: 11.2 million euros), primarily new technical equipment and an expansion in production capacities. Capital expenditure for intangible assets fell to 2.1 million euros (prior year: 2.9 million euros). Scheduled depreciation increased to 21.8 million euros, chiefly due to the application of IFRS 16 and impacts arising from the purchase price allocation (prior year: 13.5 million euros).

As of June 30, 2019, cash flows from operating activities fell to minus 7.6 million euros, despite first-time application of IFRS 16 (prior year: 36.6 million euros). The operating cash flow was adversely affected in particular by the change in working capital. Higher payments in advance for future revenue were made in the first half-year. Inventories and contract assets

Order situation

in million euros	1/1 to 30/6/2019	1/1 to 30/6/2018	Change in %
Order intake	392.5	397.2	− 1.2

	30/6/2019	31/12/2018	Change in %
Order backlog	522.5	521.5	0.2
Frame contracts	56.8	62.5	− 9.0

Employees (incl. trainees)

	30/6/2019	31/12/2018	Change in %
Group	4,074	4,043	0.8
Light & Optics	1,372	1,368	0.3
Light & Production	1,117	1,055	5.9
Light & Safety	472	472	0
VINCORION	807	790	2.2
Other	306	358	− 14.5

increased, in part due to the extension of arms export restrictions and deliveries postponed at customer request. In addition, customer payments originally expected in early 2019 had already been made at the end of December 2018. In part due to the reduction in personnel and warranty provisions, a greater change in provisions was reported.

At the end of June 2019, cash flows from investing activities came to minus 6.9 million euros (prior year: 5.8 million euros). Over the reporting period, they were mainly influenced by payments for property, plant, and equipment and intangible assets. In addition to capital expenditure, other key items included proceeds from and expenditure for short-term investments, where the net inflow was lower 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 minus 14.6 million euros (prior year: 28.8 million euros). The free cash flow is calculated on the basis of the cash flows from operating activities (before interest and taxes) less the inflows and outflows of funds for intangible assets and property, plant, and equipment.

Posted lease payments rose in the course of first-time application of IFRS 16. Repayments of service bonds and loans also increased, in part due to the repayment of a tranche of the debenture loans. The second quarter also saw the distribution of dividends amounting to 20.0 million euros. This resulted in cash flows from financing activities reducing to minus 44.9 million euros (prior year: minus 20.2 million euros).

As of June 30, 2019, the Jenoptik Group's total assets of 28.8 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 main effect of boosting non-current assets to a value of 548.9 million euros (31/12/2018: 491.8 million euros). Property, plant, and equipment saw a particularly strong increase, thanks both to the impact of IFRS 16 and capital expenditure. Both the first-time application of IFRS 16 and actuarial impacts arising from the measurement of pension provisions caused deferred taxes to rise.

Current assets declined by 21.3 million euros to 472.8 million euros (31/12/2018: 494.1 million euros), primarily due to the reduction in cash and cash equivalents to 30.9 million euros (31/12/2018: 89.3 million euros) caused by the negative cash flows from operating activities and financing activities. In preparation for future revenue, as well as due to the extension of arms export restrictions imposed by the German government, inventories increased to 201.1 million euros as of the reporting date (31/12/2018: 175.6 million euros). Deliveries postponed at the request of customers were partially responsible for higher volumes of customer orders in progress as of the reporting date. This resulted in the value of contract assets increasing to 34.6 million euros (31/12/2018: 23.4 million euros).

As a consequence of higher inventories and operating receivables (trade receivables and contract assets), the working capital increased to 256.4 million euros as of June 30, 2019 (31/12/2018: 216.8 million euros / 30/6/2018: 227.1 million euros). The working capital ratio, that of working capital to revenue based on the last twelve months, accordingly rose to 30.8 percent compared to year-end 2018 and the equivalent prior-year period (31/12/2018: 26.0 percent / 30/6/2018: 29.0 percent).

As of June 30, 2019, equity of 596.3 million euros was practically at the same level as at year-end 2018 (31/12/2018: 598.0 million euros). In addition to the dividend payment, actuarial impacts in connection with pension provisions and impacts arising from the first-time application of IFRS 16 adversely affected equity. They were largely balanced out by the positive net profit for the period and positive currency effects. The equity ratio, at 58.4 percent, was down on the figure at year-end 2018 (31/12/2018: 60.6 percent) due to the balance sheet extension.

Particularly due to an increase in non-current financial debt (impacts from IFRS 16), non-current liabilities rose to 191.4 million euros (31/12/2018: 170.3 million euros). The increase in pension liabilities arising from the discounting rates to be applied also contributed to this. Non-current liabilities primarily include the debenture loans placed in 2015, currently totaling 69 million euros (31/12/2018: 103 million euros), with original terms of five and seven years. Following early repayment of a tranche of the debenture loans worth 12.5 million euros in April 2019, a further tranche worth around 22 million euros was reclassified to current liabilities, as it becomes due in April 2020.

Higher current financial debt was primarily responsible for the rise in current liabilities to 234.1 million euros (31/12/2018: 217.7 million euros). The increase was attributable both to the application of IFRS 16 and the reclassification of a tranche of the debenture loans mentioned above. Advances received from customers led to an increase in contract liabilities. Other current non-financial liabilities also rose, chiefly due to employee vacation entitlements throughout the year. By contrast, other current provisions fell due to the reduction in personnel and warranty provisions, and in tax provisions following tax payments on earnings for prior years.

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

There were no company acquisitions or disposals in the first six 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

In the first half-year 2019, the Light & Optics division posted revenue of 162.7 million euros, at the same level as in the prior year (prior year: 163.3 million euros). Good business with the semiconductor equipment industry largely continued in the second quarter, while the fields of biophotonics and industrial solutions saw a decline. The division's share of group revenue came to 42.5 percent (prior year: 42.5 percent). Revenue rose the sharpest in the Americas, to 35.3 million euros (prior year: 28.6 million euros), while revenue in Asia/Pacific saw a marginal increase to 24.8 million euros (prior year: 23.0 million euros).

Compared to the prior year, income from operations before depreciation and amortization (EBITDA) fell, primarily due to the revenue-related drop in margins in the abovementioned areas, by 9.4 percent to 32.0 million euros (prior year: 35.4 million euros). The EBITDA margin remained at a very good level of 19.5 percent (prior year: 21.5 percent).

Light & Optics at a glance

in million euros	30/6/2019	30/6/2018	Change in %
Revenue (external)	162.7	163.3	– 0.4
EBITDA	32.0	35.4	– 9.4
EBITDA margin in %	19.5	21.5	
EBIT	27.0	31.3	– 13.9
EBIT margin in %	16.5	19.0	
Capital expenditure	7.8	8.7	– 10.8
Free cash flow	– 2.6	9.5	– 127.6
Order intake (external)	153.0	179.3	– 14.7
Order backlog (external)[1]	162.6	180.6	– 10.0
Frame contracts[1]	13.9	12.5	10.9
Employees[1]	1,372	1,368	0.3

[1] Prior year's figures refer to December 31, 2018

By June 30, 2019, the division reported an order intake worth 153.0 million euros, equating to a decline of 14.7 percent on the prior year (prior year: 179.3 million euros). This was due to the fact that a high-volume order for semiconductor equipment was placed earlier than expected in late 2018. Set against revenue, this resulted in a book-to-bill ratio of 0.94 for the reporting period (prior year: 1.10).

In March, the Light & Optics division announced the start of a long-term cooperation arrangement with a leading international life sciences company. Following successful completion 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 platforms.

The order backlog was worth 162.6 million euros at the end of June 2019 (31/12/2018: 180.6 million euros).

Chiefly due to an increase in working capital as of the reporting date, the free cash flow (before interest and taxes) of minus 2.6 million euros was considerably below the prior-year figure, despite stable business performance (prior year: 9.5 million euros). The main focus of investment was on 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 was able to complete 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 a 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 & Production

In the first half-year 2019, revenue in the Light & Production division increased 45.3 percent on the prior-year period, to 111.3 million euros (prior year: 76.6 million euros). The Automation & Integration area made a significant contribution to this growth. On a regional level, revenue increases were primarily attributable to the Americas, growth in this region mainly the result of the acquisition in Canada. Revenues also grew in Germany and Asia/Pacific. The division's share of group revenue rose to 29.1 percent (prior year: 19.9 percent).

On the basis of good revenue performance, the Light & Production division posted EBITDA of 11.9 million euros in the first six months of 2019, as expected again reflecting a significantly improved quality of earnings compared to the prior year (prior year: 6.7 million euros). The EBITDA margin improved to 10.7 percent, compared with 8.8 percent in the prior year.

EBIT increased 20.3 percent to 5.9 million euros (prior year: 4.9 million euros). EBIT the companies acquired in the prior year came to a total of 1.5 million euros, including impacts arising from the purchase price allocation, which amounted to minus 3.0 million euros. The EBIT margin accordingly fell to 5.3 percent (prior year: 6.4 percent).

The value of the order intake in the Light & Production division grew to 113.0 million euros (prior year: 92.0 million euros). In the first half-year 2019, the book-to-bill ratio reached a figure of 1.01 (prior year: 1.20).

Light & Production at a glance

in million euros	30/6/2019	30/6/2018	Change in %
Revenue (external)	111.3	76.6	45.3
EBITDA	11.9	6.7	77.7
EBITDA margin in %	10.7	8.8	
EBIT	5.9	4.9	20.3
EBIT margin in %	5.3	6.4	
Capital expenditure	4.0	1.5	158.0
Free cash flow	1.6	– 0.6	352.7
Order intake (external)	113.0	92.0	22.8
Order backlog (external)[1]	114.8	112.5	2.0
Employees[1]	1,117	1,055	5.9

[1] Prior year's figures refer to December 31, 2018

Demand for automation solutions saw particularly strong growth, as shown by the orders worth over 30 million euros received from North American OEMs and automotive suppliers in the first few months of the year.

Deliveries will include several assembly lines and cutting-edge systems for material processing and handling.

The division's order backlog at the end of June was worth 114.8 million euros (31/12/2018: 112.5 million euros).

The level of scheduled capital expenditure for 2019, e.g. to upgrade our sites and expand production capacities, was not yet fully reflected in the books in the first half-year. As of June 30, 2019, capital expenditure amounted to 4.0 million euros (prior year 1.5 million euros). Jenoptik also continues to invest in expanding and upgrading its own development and production facilities. Cutting-edge development, production, and office spaces for industrial metrology are being built at the Villingen-Schwenningen site at a cost of around 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 investment project to construct a new production building in Bayeux, France, which started in 2018, was successfully completed after around one year of construction. As scheduled, the new building opened 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.

Improved earnings in the first half-year were key to the improvement in the free cash flow (before interest and taxes) to 1.6 million euros (prior year: minus 0.6 million euros).

Light & Safety

In the first six months of 2019, the Light & Safety division generated revenue of 48.4 million euros (prior year: 61.8 million euros). In the prior year, the delivery of toll monitoring systems had contributed some 25 million euros to strong growth. In the first half-year 2019, the Americas and the Middle East/Africa all saw significant growth. In Germany, high revenue arising from the prior-year toll project could not, as expected, be fully compensated for. At 12.9 million euros revenue was sharply down in the reporting period (prior year: 36.2 million euros). The division's share of group revenue fell to 12.6 percent (prior year: 16.1 percent).

As expected, this decline in revenue and a change in the product mix were also reflected in EBITDA, which following 9.4 euros in the prior-year came to 6.6 million euros in the current reporting period. The EBITDA margin thus fell to 13.5 percent (prior year: 15.2 percent).

By contrast, the order intake in the first six months of 2019 saw good growth, rising 5.1 percent to 50.6 million euros (prior year: 48.1 million euros). The book-to-bill ratio improved to 1.04, compared with 0.78 in the prior year.

The division's order backlog consequently also increased by 3.0 percent to 71.6 million euros (31/12/2018: 69.5 million euros).

The free cash flow (before interest and taxes) amounted to 0 euros (prior year: 15.7 million euros), mainly due to current earnings development and the increase in working capital.

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 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 control collision and accident hot spots around the country.

Light & Safety at a glance

in million euros	30/6/2019	30/6/2018	Change in %
Revenue (external)	48.4	61.8	– 21.7
EBITDA	6.6	9.4	– 30.4
EBITDA margin in %	13.5	15.2	
EBIT	3.0	7.0	– 56.6
EBIT margin in %	6.2	11.3	
Capital expenditure	1.4	1.1	23.9
Free cash flow	0	15.7	– 100.1
Order intake (external)	50.6	48.1	5.1
Order backlog (external)[1]	71.6	69.5	3.0
Frame contracts[1]	16.0	19.2	– 16.9
Employees[1]	472	472	0

[1] Prior year's figures refer to December 31, 2018

VINCORION

In the first half-year 2019, VINCORION generated revenue of 59.1 million euros, 27.6 percent less than in the prior year (prior year: 81.6 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 declines in the Americas and Germany. Its share of group revenue accordingly fell from 21.2 percent to 15.4 percent.

As a result of the lower revenue, EBITDA at the end of the first six months of 2019 came to 4.5 million euros (prior year: 8.7 million euros). The EBITDA margin fell from a prior-year figure of 10.6 percent to a current 7.6 percent.

At 73.8 million euros, the order intake was 3.4 percent lower than in the prior year (prior year: 76.4 million euros), in part due to growing uncertainty regarding German involvement in international defense projects. Based on lower revenues, the book-to-bill ratio improved considerably to 1.25, compared with 0.94 in the prior year.

Due to delayed revenue recognition, the division's order backlog also increased in value despite a lower order intake, by 14.1 million euros to 173.0 million euros (31/12/2018:158.9 million euros).

The free cash flow (before interest and taxes) of minus 7.4 million euros was sharply down on the prior year (prior year: 16.9 million euros) which was attributable to higher inventories and export restrictions.

VINCORION at a glance

in million euros	30/6/2019	30/6/2018	Change in %
Revenue (external)	59.1	81.6	– 27.6
EBITDA	4.5	8.7	– 48.3
EBITDA margin in %	7.6	10.6	
EBIT	1.2	6.9	– 82.9
EBIT margin in %	2.0	8.4	
Capital expenditure	1.9	2.0	– 4.5
Free cash flow	– 7.4	16.9	– 143.7
Order intake (external)	73.8	76.4	– 3.4
Order backlog (external)[1]	173.0	158.9	8.8
Frame contracts[1]	26.9	30.7	– 12.3
Employees[1]	807	790	2.2

[1] Prior year's figures refer to December 31, 2018

Report on Post-Balance Sheet Events

At its extraordinary meeting of July 29, 2019, the Supervisory Board of JENOPTIK AG confirmed CEO Dr. Stefan Traeger in office. Following his current appointment, which runs until June 2020, Dr. Traeger will consequently remain Chairman of the Executive Board for a further five years.

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At the same time, the Supervisory Board approved the start of a structured sales process for the mechatronics division VINCORION in order to pursue an active portfolio policy and strengthen the business focus on the competencies in optics and photonics. The management is considering the potential sale of all shares in the VINCORION division.

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

Opportunity and Risk Report

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

Both the German government's extension of a ban on exports of armaments to a number of Arab states in late March 2019 for a further six months and the ruling of the Saarland Constitutional Court regarding our TraffiStar S350 traffic monitoring system (see page 7) could negatively impact on both revenue and earnings.

There were no major changes in the opportunities and risks described in the report during the course of the first six 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

The growth forecast for the global economy continues to slacken in the face of the current political situation. Should economic confrontation widen in the coming months, global trade and the European manufacturing industry could be further weakened, according to the EU Commission. In view of the trade conflict between the US and China, associated punitive tariffs, a potential Brexit, and geopolitical tensions in the Gulf region, the International Monetary Fund (IMF) downgraded its forecast, now for the third time this year, in July, expecting the global economy to grow 3.2 percent in 2019 (prior forecast: 3.3 percent). US sanctions are also threatening to interrupt global supply chains in the technology sector. If these tensions persist, the growth forecast of 3.5 percent for 2020 will be almost impossible to attain. As the IMF states, growth could also be hindered by possible new US tariffs in the automotive sector or a no-deal Brexit.

In the light of slowing economic growth in the US, the Federal Reserve (Fed) has also cut its growth forecast to 2.0 to 2.5 percent, reflecting concern about the ongoing trade conflict with China and Brexit negotiations.

China is again set to stimulate economic growth in the country, with the Chinese government adopting a range of measures to achieve this objective. Tax cuts and a relaxed monetary policy aim to counter declines in the coming months. Experts are therefore predicting growth to remain comparatively slow, at 6.0 or 6.1 percent, in the second half of the year.

Growth forecast of gross domestic product

in percent / in percentage points	2019	Change to forecast of April 2019	2020
World	3.2	− 0.1	3.5
USA	2.6	0.3	1.9
Euro zone	1.3	0	1.6
Germany	0.7	− 0.1	1.7
China	6.2	− 0.1	6.0
Emerging economies	4.1	− 0.3	4.7

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

The German economy grew by 1.5 percent in the prior year. Since the beginning of 2019, forecasts issued by a range of institutions have been downgraded. The EU Commission, for example, is expecting German GDP to grow 0.5 percent in the current year; the Bundesbank's forecast is 0.6 percent (prior forecast: 1.6 percent). Uncertainties in the outlook are attributed to international tensions. The German foreign trade association BGA is therefore expecting export growth at only half the level of the prior year. For 2020, the German government is expecting the economy to recover with growth of between 1.0 and 1.5 percent.

Further growth is expected in the photonics industry, as stated in the latest photonics trend report issued by the industry association. According to market research company MarketsandMarkets, growth in the industry is arising from increased demand for applications such as IT and communications technology, medical technology, diagnostics and life sciences, and automation technology. According to its forecasts, the global photonics market is expected to grow an annual average of 7.0 percent, from 556.4 billion US dollars in 2018 to 780.4 billion US dollars in 2023. Within this forecast period, IT and communications technology is considered the most significant consumer industry. Consumer electronics is expected to be the fastest growing segment of the photonics market in the coming years, with Asia/Pacific being the largest market.

The Photonics21 technology platform published a position paper on the promotion of optical technologies in June 2019. The paper details commitments by the European photonics industry to invest up to 100 billion euros in research and development throughout the next phase of the "Horizon Europe" research initiative (2021 to 2027) when the European Commission launches a new photonics PPP (public-private partnership).

This PPP will double the Commission's annual commitment to 200 million euros, equating to 1.4 billion euros in seven years. This investment is required to ensure competitiveness compared to China, South Korea, and the US. Europe is in a good position to accelerate initiatives such as artificial intelligence, high-performance computing, smart cities, quantum communication, and quantum computing, all of which depend on photonics as the key enabling technology.

The manufacturers in the medical technology industry are confident of their future prospects. For the current year, Spectaris is anticipating revenues to grow 2 to 3 percent on the prior year. The potential offered by digitization is set to boost the industry. According to Spectaris, the use of digital components alone is expected to generate revenue of 15 billion euros by 2028; the current figure is 3.3 billion euros. This would equate to an annual increase of 16 percent in this segment. Nevertheless, the new European Medical Devices Regulation and the general economic downturn will influence momentum in the industry, as there is more reluctance to invest.

Experts are still expecting a decline in the semiconductor industry. Global revenues this year are likely to fall 12.1 percent to 412.1 billion US dollars and then rise marginally in 2020, according to figures released by the Semiconductor Industry Association (SIA). Thanks to high-growth fields such as autonomous and electric driving, the outlook is good. IT analyst Gartner down-graded its annual forecast for the semiconductor industry in July, now expecting the industry to generate 429 billion US dollars in revenue in 2019, 9.6 percent less than in the prior year. According to Gartner, the trade conflict between the US and China and the associated restrictions for Chinese companies based on security concerns will have a longer-term impact on semiconductor supply and demand, and are causing China to accelerate its own semiconductor production.

While major semiconductor equipment companies are expecting a strong second half-year 2019, the SEMI industry association cut its revenue forecast in July 2019: Based on the historic record figure achieved in the prior year, global revenue in the current year is expected to contract 18.4 percent to a value of 52.7 billion US dollars. SEMI had previously assumed a decline of 4 percent in its forecast of December 2018. In 2020, it anticipates revenue to be up 11.6 percent in the industry, to 58.8 billion US dollars. This forecast is down on the figure published in December 2018, when SEMI was still expecting revenue growth of 20.7 percent to 71.9 billion US dollars in 2020.

Due to persistently difficult conditions in the global economy, the German Mechanical Engineering Industry Association (VDMA) continues to forecast negative growth in the mechanical engineering and plant engineering sector. While geopolitical upheavals are the key reason for this, investment in the industry is also being cut back as a result of structural changes taking place in the market. The VDMA is expecting production to be scaled back by 2 percent in real terms for 2019. This forecast was made despite high order backlogs, which in April of this year existed for the next 8.5 months.

The robotics industry is optimistic about the future and expecting a long upswing for automation and robotics. In the coming years, the International Federation of Robotics (IFR) is anticipating an annual growth rate of around 14 percent.

Going by earnings in the first half-year 2019, the forecasts for the automotive industry issued by a range of associations are on the pessimistic side. The German research institution CAR forecasts a global car crisis, with world sales falling a good 5 percent to 79.5 million vehicles in 2019. In the large Chinese car market, too, the automotive industry is expecting a decline for the full year as a result of the trade conflict. The European Automobile Manufacturers' Association (ACEA) further assumes that car sales in the EU will fall one percent this year. Despite a weak environment, industry experts believe that the market for vehicles employing alternative drive technologies, in particular, will continue to grow. In a similar way, trends such as autonomous driving, the use of artificial intelligence, and sustainability aspects will impact positively on the industry.

At the present time, the future development of the aviation industry is dependent on a multitude of factors; the market is burdened by the general downturn in the global economy and the political environment. The International Air Transport Association (IATA) reduced its profit forecast for the global aviation industry in 2019 from 35.5 billion US dollars to 28 billion US dollars. Reasons for this include rising fuel prices, the US/China trade conflict, and a fall in new orders, according to IATA.

The planning of long-term projects in the security and defense technology industry will in future continue to be hampered by current export restrictions. Joint European projects such as the development of a Franco-German fighter jet remain dependent on a pending agreement between Germany and France on joint export guidelines. Within the industry, the merger of US corporations United Technologies Corporation and Raytheon is imminent and would result in the creation of a major defense, aviation, and aerospace supplier. In Germany, the development and manufacture of a new Puma infantry fighting vehicle is turning out significantly more expensive than planned, as the Ministry of Defense announced in July.

No new major forecasts have been issued for the other sectors. We therefore refer to pages 124ff. of the 2018 Annual Report and the interim report on the first quarter 2019.

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 will contribute to the lasting successful development of the Group this year. Further acquisitions will be very closely scrutinized. At the end of July, the Jenoptik Executive and Supervisory Boards have started the sales process of the mechatronic division VINCORION. The aim is to strengthen the business focus of the Jenoptik Group 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 still expects growth in 2019. Without any major portfolio changes, revenue is now expected in a range between 850 and 860 million euros (before: growth in the mid-single-digit percentage range / prior year: 834.6 million euros) due to the continuing reluctance to invest, especially in the automotive industry. Contributions to growth are to come from the photonics areas. Jenoptik is expecting EBITDA to grow in the 2019 fiscal year (prior year: 127.5 million euros). The EBITDA margin is forecast to come to around 15.5 percent (before: 15.5 to 16.0 percent).

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, the report on the first quarter 2019, and from page 124 on in the 2018 Annual Report.

Consolidated Statement of Comprehensive Income

Consolidated Statement of Income

in thousand euros	1/1 to 30/6/2019	1/1 to 30/6/2018	1/4 to 30/6/2019	1/4 to 30/6/2018
Revenue	383,099	384,682	199,120	194,782
Cost of sales	245,000	249,400	126,639	125,407
Gross profit	**138,100**	**135,281**	**72,481**	**69,375**
Research and development expenses	24,593	22,914	12,042	11,796
Selling expenses	47,384	42,425	24,056	21,390
General administrative expenses	31,043	27,347	14,916	14,715
Other operating income	8,307	9,275	3,013	5,135
Other operating expenses	11,194	9,080	5,092	4,663
EBIT	**32,191**	**42,790**	**19,388**	**21,945**
Result from other investments	3	79	3	78
Financial income	2,267	1,884	– 742	1,225
Financial expenses	3,770	3,515	679	1,271
Financial result	**– 1,500**	**– 1,552**	**– 1,419**	**33**
Earnings before tax	**30,691**	**41,237**	**17,970**	**21,978**
Income taxes	– 6,466	– 7,883	– 3,934	– 4,231
Earnings after tax	**24,225**	**33,354**	**14,036**	**17,747**
Results from non-controlling interests	– 5	– 226	– 70	– 174
Earnings attributable to shareholders	24,230	33,580	14,105	17,921
Earnings per share in euros (undiluted = diluted)	**0.42**	**0.59**	**0.25**	**0.31**

Consolidated Comprehensive Income

in thousand euros	1/1 to 30/6/2019	1/1 to 30/6/2018	1/4 to 30/6/2019	1/4 to 30/6/2018
Earnings after tax	**24,225**	**33,354**	**14,036**	**17,747**
Items that will never be reclassified to profit or loss	– 6,346	– 66	– 3,569	195
Actuarial gains/losses arising from the valuation of pensions and similar obligations	– 9,295	– 66	– 5,150	195
Deferred taxes	2,949	0	1,581	0
Items that are or may be reclassified to profit or loss	3,513	– 1,474	– 237	– 676
Cash flow hedges	– 981	– 3,812	910	– 4,615
Foreign currency exchange differences	4,902	1,209	– 897	2,557
Deferred taxes	– 408	1,129	– 250	1,382
Total other comprehensive income	**– 2,833**	**– 1,540**	**– 3,806**	**– 481**
Total comprehensive income	**21,392**	**31,814**	**10,230**	**17,266**
Thereof attributable to:				
Non-controlling interests	– 16	– 239	– 83	– 149
Shareholders	21,408	32,053	10,312	17,415

Consolidated Statement of Financial Position

Assets in thousand euros	30/6/2019	31/12/2018	Change	30/6/2018
Non-current assets	548,921	491,812	57,109	386,136
Intangible assets	205,313	205,553	– 240	119,997
Property, plant and equipment	241,158	185,930	55,228	172,165
Investment property	4,309	4,354	– 45	4,304
Financial investments	6,992	6,770	222	6,929
Other non-current financial assets	2,180	2,191	– 11	2,157
Other non-current non-financial assets	344	723	– 379	743
Deferred tax assets	88,626	86,291	2,335	79,841
Current assets	472,791	494,096	– 21,305	528,576
Inventories	201,114	175,602	25,512	173,456
Current trade receivables	141,230	131,198	10,032	124,503
Contract assets	34,554	23,385	11,169	21,964
Other current financial assets	713	5,268	– 4,555	1,643
Other current non-financial assets	14,483	9,912	4,571	8,015
Current financial investments	49,768	59,476	– 9,708	44,729
Cash and cash equivalents	30,928	89,255	– 58,327	154,266
Total assets	1,021,712	985,908	35,804	914,712

Equity and liabilities in thousand euros	30/6/2019	31/12/2018	Change	30/6/2018
Equity	596,276	597,951	– 1,676	543,462
Share capital	148,819	148,819	0	148,819
Capital reserve	194,286	194,286	0	194,286
Other reserves	252,516	254,175	– 1,660	200,473
Non-controlling interests	655	671	– 16	– 116
Non-current liabilities	191,384	170,267	21,117	168,677
Pension provisions	46,210	37,339	8,870	36,620
Other non-current provisions	16,887	16,279	608	18,073
Non-current financial debt	123,669	111,405	12,264	112,528
Other non-current financial liabilities	1,804	2,664	– 860	1,290
Other non-current non-financial liabilities	0	108	– 108	0
Deferred tax liabilities	2,815	2,473	342	166
Current liabilities	234,053	217,690	16,362	202,573
Tax provisions	4,152	9,000	– 4,848	9,044
Other current provisions	43,058	58,706	– 15,648	48,550
Current financial debt	36,030	10,123	25,906	21,170
Current trade payables	59,362	60,102	– 739	57,856
Contract liabilities	61,121	53,273	7,847	36,884
Other current financial liabilities	7,020	7,582	– 562	8,824
Other current non-financial liabilities	23,310	18,903	4,407	20,245
Total equity and liabilities	1,021,712	985,908	35,804	914,712

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			– 4,158		
Balance at 1/1/2018[1]	148,819	194,286	207,864	213	1,554
Net profit for the period			33,580		
Other comprehensive income after tax					– 2,689
Total comprehensive income			33,580		– 2,689
Dividends			– 17,171		
Other adjustments			3,047		
Balance at 30/6/2018	148,819	194,286	227,319	213	– 1,135
Balance at 1/1/2019	148,819	194,286	281,938	197	– 1,793
Changes in accounting policies			– 3,034		
Balance at 1/1/2019[2]	148,819	194,286	278,904	197	– 1,793
Net profit for the period			24,230		
Other comprehensive income after tax					– 693
Total comprehensive income			24,230		– 693
Dividends			– 20,033		
Balance at 30/6/2019	148,819	194,286	283,101	197	– 2,486

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

[2] Adjusted due to initial application of IFRS 16

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
297	– 27,382	525,651	122	525,773	Balance at 1/1/2018[1]
		33,580	– 226	33,354	Net profit for the period
1,256	– 94	– 1,527	– 13	– 1,540	Other comprehensive income after tax
1,256	– 94	32,053	– 239	31,814	Total comprehensive income
		– 17,171		– 17,171	Dividends
		3,047		3,047	Other adjustments
1,553	– 27,476	543,579	– 117	543,462	Balance at 30/6/2018
795	– 26,961	597,281	671	597,952	Balance at 1/1/2019
		– 3,034		– 3,034	Changes in accounting policies
795	– 26,961	594,247	671	594,918	Balance at 1/1/2019[2]
		24,230	– 5	24,225	Net profit for the period
4,233	– 6,363	– 2,822	– 11	– 2,833	Other comprehensive income after tax
4,233	– 6,363	21,408	– 16	21,392	Total comprehensive income
		– 20,033		– 20,033	Dividends
5,028	– 33,324	595,622	655	596,276	Balance at 30/6/2019

Consolidated Statement of Cash Flows

in thousand euros	1/1 to 30/6/2019	1/1 to 30/6/2018	1/4 to 30/6/2019	1/4 to 30/6/2018
Earnings before tax	30,691	41,237	17,970	21,978
Financial income and financial expenses	1,503	1,631	1,421	45
Depreciation and amortization	21,797	13,523	10,808	6,628
Impairment losses and reversals of impairment losses	0	– 35	0	– 25
Profit/loss from asset disposals	26	66	51	51
Other non-cash income/expenses	– 557	– 1,351	– 93	– 1,425
Operating profit before adjusting working capital and further items of the statement of financial position	53,461	55,071	30,158	27,253
Change in provisions	– 16,602	– 987	– 17,794	– 4,717
Change in working capital	– 38,914	– 15,003	– 13,725	1,939
Change in other assets and liabilities	3,998	3,665	1,299	– 764
Cash flows from operating activities before income tax payments	1,943	42,747	– 62	23,711
Income tax payments	– 9,536	– 6,195	– 6,666	– 4,039
Cash flows from operating activities	– 7,594	36,552	– 6,728	19,672
Capital expenditure for intangible assets	– 2,124	– 2,926	– 768	– 1,668
Proceeds from sale of property, plant and equipment	181	202	29	80
Capital expenditure for property, plant and equipment	– 14,644	– 11,232	– 8,744	– 6,619
Proceeds from sale of financial investments	0	204	0	204
Acquisition of consolidated entitites	– 684	– 5	– 684	0
Proceeds from sale of investment companies	0	281	0	0
Proceeds from sale of financial assets within the framework of short-term disposition	35,159	29,108	25,000	10,000
Capital expenditure for financial assets within the framework of short-term disposition	– 25,000	– 10,000	– 15,000	0
Interest received	225	185	115	63
Cash flows from investing activities	– 6,887	5,818	– 51	2,060
Dividends paid	– 20,033	– 17,171	– 20,033	– 17,171
Proceeds from issuing bonds and loans	14	2,484	– 10	2,145
Repayments of bonds and loans	– 18,270	– 2,462	– 15,837	– 876
Lease payments	– 4,889	– 252	– 2,504	– 198
Change in group financing	702	– 885	– 871	– 706
Interest paid	– 2,436	– 1,895	– 1,655	– 1,459
Cash flows from financing activities	– 44,913	– 20,182	– 40,911	– 18,266
Change in cash and cash equivalents	– 59,393	22,188	– 47,690	3,466
Effects of movements in exchange rates on cash held	580	98	– 382	820
Changes in cash and cash equivalents due to valuation adjustments	487	– 557	288	– 103
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	78,712	150,083
Cash and cash equivalents at the end of the period	30,928	154,266	30,928	154,266

Disclosures on Segment Reporting

January 1 to June 30, 2019

January 1 to June 30, 2019

in thousand euros	Light & Optics	Light & Production	Light & Safety	VINCORION	Other	Consolidation	Group
Revenue	163,990	111,364	48,426	59,110	24,835	– 24,626	383,099
	(164,561)	(76,651)	(61,824)	(81,602)	(23,267)	(– 23,224)	(384,682)
thereof intragroup revenue	1,329	18	0	60	23,218	– 24,626	0
	(1,222)	(19)	(13)	0	(21,970)	(– 23,224)	0
thereof external revenue	162,660	111,346	48,426	59,050	1,617	0	383,099
	(163,340)	(76,632)	(61,811)	(81,602)	(1,297)	(0)	(384,682)
Germany	33,533	24,599	12,875	32,064	1,617	0	104,688
	(32,690)	(18,281)	(36,164)	(37,114)	(1,293)	(0)	(125,542)
Europe	63,273	17,534	13,499	14,340	0	0	108,647
	(66,843)	(19,734)	(12,474)	(16,597)	0	(0)	(115,648)
Americas	35,254	47,994	10,477	11,087	0	0	104,812
	(28,612)	(21,773)	(5,799)	(26,310)	(4)	(0)	(82,497)
Middle East / Africa	5,785	760	8,764	886	0	0	16,196
	(12,159)	(696)	(3,052)	(1,123)	0	(0)	(17,030)
Asia / Pacific	24,816	20,459	2,809	673	0	0	48,757
	(23,036)	(16,148)	(4,322)	(459)	0	(0)	(43,964)
EBITDA	32,039	11,938	6,553	4,477	– 1,137	120	53,989
	(35,360)	(6,718)	(9,414)	(8,659)	(– 3,875)	(2)	(56,278)
EBIT	26,978	5,891	3,021	1,175	– 4,998	124	32,191
	(31,318)	(4,897)	(6,956)	(6,860)	(– 7,247)	(6)	(42,790)
Research and development expenses	9,971	4,482	5,326	4,804	61	– 51	24,593
	(9,620)	(3,902)	(4,394)	(4,933)	(66)	(0)	(22,914)
Free cash flow (before income taxes)	– 2,634	1,626	– 17	– 7,362	– 7,687	1,428	– 14,645
	(9,538)	(– 644)	(15,716)	(16,860)	(– 11,196)	(– 1,483)	(28,791)
Working capital[1]	104,105	65,434	14,434	78,186	– 4,549	– 1,193	256,415
	(79,193)	(59,283)	(10,648)	(71,759)	(– 4,153)	(80)	(216,810)
Order intake (external)	152,980	113,014	50,593	73,788	2,130	0	392,505
	(179,302)	(92,048)	(48,119)	(76,405)	(1,297)	(0)	(397,171)
Frame contracts[1]	13,914	0	15,962	26,947	0	0	56,824
	(12,549)	0	(19,203)	(30,717)	0	(0)	(62,468)
Assets[1]	261,984	284,559	114,891	188,883	805,806	– 634,410	1,021,712
	(230,830)	(254,472)	(106,775)	(154,602)	(849,074)	(– 609,844)	(985,908)
Liabilities[1]	95,853	207,745	95,830	150,629	149,513	– 274,133	425,437
	(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	7,769	3,996	1,415	1,908	3,375	0	18,464
	(8,708)	(1,549)	(1,143)	(1,999)	(1,981)	0	(15,379)
Scheduled depreciation and amortization	5,060	5,246	2,355	1,628	1,285	6,224	21,797
	(4,076)	(1,566)	(1,629)	(902)	(1,109)	(4,241)	(13,523)
Number of employees on average (without trainees)	1,333	1,072	465	761	323	0	3,955
	(1,260)	(790)	(485)	(740)	(318)	(0)	(3,593)

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 Six 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 June 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 54,368 thousand euros as of January 1, 2019. Liabilities increased by 58,632 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 amounts 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 (1,230 thousand euros) into account.

The resulting increase in total assets of 55,598 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	**54,880**
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	3,895
Deferred tax assets	**1,230**
Total assets	**55,598**
Equity	**– 3,034**
Other reserves	– 3,034
Non-current liabilities	**50,083**
Non-current financial debt	50,200
Other non-current provisions	– 117
Current liabilties	**8,549**
Current financial debt	8,619
Other current financial liabilities	– 70
Total equity and liabilities	**55,598**

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 June 30, 2019, application of IFRS 16 led to an increase in the value of fixed assets of 51,802 thousand euros. Liabilities increased by 56,137 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 six months of 2019 produced an improvement in EBITDA of 5,543 thousand euros and in EBIT of 799 thousand euros in the income statement. Depreciation of right of use assets came to 4,743 thousand euros. Interest expenses amounted to 762 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	– 304
Obligations from operating leases (undiscounted)	**65,743**
Effect of discounting	– 6,924
Obligations from operating leases (discounted)	**58,819**
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	**62,826**

Impact IFRS 16 on current statement of financial position

in thousand euros	30/6/2019
Non-current assets - Intangible assets	**– 479**
Acquired patents, trademarks, software, customer relationships	– 479
Non-current assets - Property, plant and equipment	**52,281**
Right of use assets - Land, buildings	47,873
Right of use assets - Technical equipment and machinery	259
Right of use assets - Other equipment, operating and office equipment	4,149
Deferred tax assets	**1,250**
Total assets	**53,053**
Equity	**– 3,084**
Other reserves	– 3,084
Non-current liabilities	**47,261**
Non-current financial debt	47,419
Other non-current provisions	– 158
Current liabilities	**8,876**
Current financial debt	9,133
Other current financial liabilities	– 257
Total equity and liabilities	**53,053**

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 5,543 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 30/6/2019
Total depreciation of right of use assets	**4,743**
Depreciation cost of sales	3,084
Depreciation research and development expenses	284
Depreciation selling expenses	595
Depreciation general administrative expenses	780
Fictitious rental expense according to IAS 17[1)]	**5,543**
Rental expenses cost of sales	3,605
Rental expenses research and development expenses	335
Rental expenses selling expenses	669
Rental expenses general administrative expenses	933
Interest expenses for leasing in accordance with IFRS 16	**762**
Deferred tax expense	**20**
Impact on EBITDA	**5,543**
Impact on EBIT	**799**

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 36 fully consolidated subsidiaries (31/12/2018: 40) of which, 12 (31/12/2018: 16) have their legal seat in Germany and 24 (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 six 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 six months 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.

There were no other transactions with a significant influence on the interim consolidated financial statements of Jenoptik as at June 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	**383,099**	**97,338**	**285,762**
Light & Optics	162,660	46,907	115,754
Light & Production	111,346	21,366	89,981
Light & Safety	48,426	15,760	32,666
VINCORION	59,050	11,689	47,362
Other	1,617	1,617	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	30/6/2019	31/12/2018
Land, buildings	146,291	99,239
Technical equipment and machinery	45,529	46,567
Other equipment, operating and office equipment	27,814	24,686
Payments on-account and assets under construction	21,525	15,438
Total	**241,158**	**185,930**

Inventories

in thousand euros	30/6/2019	31/12/2018
Raw materials, consumables and supplies	78,581	70,414
Unfinished goods and work in progress	97,332	85,691
Finished goods and merchandise	22,265	18,214
Payments on-account	2,936	1,283
Total	**201,114**	**175,602**

Current trade receivables

in thousand euros	30/6/2019	31/12/2018
Trade receivables from third parties	135,459	126,219
Receivables from due requested advance payments	4,733	4,527
Trade receivables from unconsolidated associates and joint operations	727	263
Trade receivables from investment companies	312	190
Total	**141,230**	**131,198**

Non-current financial debt

in thousand euros	30/6/2019	31/12/2018
Liabilities to banks	73,297	108,227
Lease liabilities	50,372	3,178
Total	**123,669**	**111,405**

Current financial debt

in thousand euros	30/6/2019	31/12/2018
Liabilities to banks	26,273	9,294
Lease liabilities	9,757	829
Total	36,030	10,123

Current trade payables

in thousand euros	30/6/2019	31/12/2018
Trade payables towards third parties	59,234	60,074
Trade payables towards unconsolidated associates and joint operations	72	16
Trade payables towards investment companies	56	11
Total	59,362	60,102

Other current non-financial liabilities

in thousand euros	30/6/2019	31/12/2018
Liabilities to employees	14,232	9,779
Liabilities from other taxes	5,043	4,353
Accruals	824	1,768
Miscellaneous current non-financial liabilities	3,211	3,003
Total	23,310	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 30/6/2019	Carrying amounts 31/12/2018
Financial investments			
Current cash deposits	AC	49,768	59,476
Shares in unconsolidated associates and investments	FVTOCI	1,569	1,569
Shares in entities which are subject to the at-equity valuation	-	5,412	5,191
Loans granted	AC	10	10
Trade receivables	AC	141,230	131,198
Other financial assets			
Derivatives with hedging relations	-	136	128
Derivatives without hedging relations	FVTPL	1,825	1,871
Other financial assets	AC	932	5,460
Cash and cash equivalents	AC	30,928	89,255

1) AC = Amortized costs
FVTPL = Fair value through Profit & Loss
FVTOCI = Fair value through other comprehensive income

As part of capital management, new cash investments are regularly made and payments are collected on scheduled due dates. In the course of these transactions, cash deposits decreased in value by a total of 9,708 thousand euros over the reporting period.

Financial liabilities

in thousand euros	Valuation category according to IFRS 9 [1]	Carrying amounts 30/6/2019	Carrying amounts 31/12/2018
Financial debt			
Liabilities to banks	AC	99,570	117,521
Lease liabilities	-	60,129	4,007
Trade payables	**AC**	**59,362**	**60,171**
Other financial liabilities			
Contingent liabilities	FVTPL	1,673	1,671
Derivatives with hedging relations	-	4,082	3,169
Derivatives without hedging relations	FVTPL	39	48
Miscellaneous financial liabilities	AC	3,030	5,288

1) AC = Amortized costs
FVTPL = Fair value through Profit & Loss

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 30/6/2019	Level 1	Level 2	Level 3
Shares in unconsolidated associates and investments	1,569	0	0	1,569
	(1,569)	0	0	(1,569)
Derivatives with hedging relations (assets)	136	0	136	0
	(128)	0	(128)	0
Derivatives without hedging relations (assets)	1,825	0	1,825	0
	(1,871)	0	(1,871)	0
Contingent liabilities	1,673	0	0	1,673
	(1,671)	0	0	(1,671)
Derivatives with hedging relations (liabilities)	4,082	0	4,082	0
	(3,169)	0	(3,169)	0
Derivatives without hedging relations (liabilities)	39	0	39	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 stright-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 June 30, 2019 result 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. Furthermore, variable purchase price components in the sum of 439 thousand euros, which had been agreed in connection with the acquisition of Five Lakes Automation LLC, were carried as liabilities.

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**
Currency effect	1	2
Balance at 30/6/2019	**1,569**	**1,673**

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] 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 June 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

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 events after the balance sheet date of June 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, August 7, 2019

Dr. Stefan Traeger
President & CEO

Hans-Dieter Schumacher
Chief Financial Officer

Dates

November 12, 2019
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January to September 2019

Contact

Investor Relations

Phone +49 3641 65-2156
E-mail ir@jenoptik.com

Communication and Marketing

Phone +49 3641 65-2255
E-mail pr@jenoptik.com

www.jenoptik.com
www.twitter.com/Jenoptik_Group

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