

ASML HOLDING NV
Form 20-F
February 07, 2018

United States
Securities and Exchange Commission
Washington, D.C. 20549
Form 20-F
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D)
OF THE SECURITIES EXCHANGE ACT OF 1934
for the fiscal year ended December 31, 2017
Commission file number 001-33463

ASML HOLDING N.V.
(Exact Name of Registrant as Specified in Its Charter)

THE NETHERLANDS
(Jurisdiction of Incorporation or Organization)

DE RUN 6501
5504 DR VELDHOVEN
THE NETHERLANDS
(Address of Principal Executive Offices)

Skip Miller
Telephone: +1 480 235 0934
E-mail: skip.miller@asml.com
2650 W Geronimo Place
Chandler, AZ 85224, USA

(Name, Telephone, E-mail, and / or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

	Title of each class	Name of each exchange on which registered
Ordinary Shares (nominal value EUR 0.09 per share)	The NASDAQ Stock Market LLC	

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

427,393,592 Ordinary Shares
(nominal value EUR 0.09 per share)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes (x) No ()

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.
Yes () No (x)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes (x) No ()

Edgar Filing: ASML HOLDING NV - Form 20-F

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer.

See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP International Financial Reporting Standards as issued by the International Accounting Standards Board Other

If "Other" has been checked in response to the previous question, indicate by checkmark which financial statement item the registrant has elected to follow.

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act)

Yes No

Name and address of person authorized to receive notices and communications from the Securities and Exchange Commission:

James A. McDonald

Skadden, Arps, Slate, Meagher & Flom (UK) LLP

40 Bank Street, Canary Wharf London E14 5DS England

ASML INTEGRATED REPORT 2017

ASML INTEGRATED REPORT 2017



Contents

<u>1</u>	Message from our CEO
<u>2</u>	Highlights
<u>4</u>	Management Board Report
<u>5</u>	Board of Management
<u>7</u>	The Role of Lithography
<u>8</u>	Our Company
<u>10</u>	Industry Trends and Opportunities
<u>11</u>	Business Strategy
<u>14</u>	Markets and Products
<u>16</u>	Products and Technology
<u>23</u>	People
<u>31</u>	Partners
<u>37</u>	Operations
<u>41</u>	Financial Performance
<u>45</u>	Trend Information
<u>45</u>	Business Risk and Continuity
<u>48</u>	Risk Factors
<u>55</u>	Materiality Assessment
<u>58</u>	Business Ethics and Compliance
<u>60</u>	Supervisory Board Report
<u>61</u>	Supervisory Board
63	Introduction
63	Activities in 2017
64	Meetings and Attendance
64	Composition, Diversity and Independence
65	Evaluation
65	Supervisory Board Committees
67	Remuneration of the Supervisory Board
67	A Word of Thanks to ASML Employees
68	Remuneration Report
<u>74</u>	Corporate Governance
<u>75</u>	General
<u>75</u>	Board of Management
<u>77</u>	Supervisory Board
81	Shareholders and General Meeting of Shareholders
83	The Audit of Financial Reporting and the Position of the Internal and External Auditor Function
<u>83</u>	Other Information on Governance
88	Compliance with the Corporate Governance Code
<u>90</u>	Consolidated Financial Statements
<u>91</u>	Consolidated Statements of Operations
<u>92</u>	Consolidated Statements of Comprehensive Income
<u>93</u>	Consolidated Balance Sheets
<u>94</u>	Consolidated Statements of Shareholders' Equity
<u>96</u>	Consolidated Statements of Cash Flows
<u>98</u>	Notes to the Consolidated Financial Statements
<u>143</u>	Report of Independent Registered Public Accounting Firm
<u>146</u>	Non-Financial Statements
<u>147</u>	About the Non-financial Information
<u>150</u>	Non-financial Indicators

155 Stakeholder Engagement

156 Assurance Report of the Independent Auditor

ASML INTEGRATED REPORT 2017

158 Other Appendices

159 Appendix - Board of Management and Supervisory Board Remuneration

163 Appendix - Selected Financial Data

167 Appendix - Results of Operations 2016 Compared to 2015

169 Appendix - Principal Accountant Fees and Services

170 Appendix - Property, Plant and Equipment

171 Appendix - Taxation

176 Appendix - Financing and Capital Return Policy

177 Appendix - Competition

178 Appendix - Government Regulation

179 Appendix - Offer and Listing Details

180 Appendix - Material Contracts

181 Appendix - Exchange Controls

182 Appendix - Documents on Display

183 Appendix - Controls and Procedures

184 Appendix - Organizational Structure

185 Appendix - Information and Investor Relations

186 Appendix - ASML Worldwide Contact Information

187 Appendix - Reference Table 20-F

192 Definitions

200 Exhibit Index

A definition or explanation of abbreviations, technical terms and other terms used throughout this Integrated Report that require explanation can be found in the chapter Definitions.

This report comprises regulated information within the meaning of articles 1:1 and 5:25c of the Dutch Financial Markets Supervision Act (Wet op het Financieel Toezicht).

On May 30, 2013, we acquired 100 percent of the issued share capital of Cymer. Financial information presented in our Integrated Report includes Cymer from May 30, 2013 onwards.

On November 22, 2016, we acquired 100 percent of the issued share capital of HMI. Financial information presented in our Integrated Report includes HMI from November 22, 2016 onwards.

On June 29, 2017, we completed the acquisition of a 24.9 percent interest in Carl Zeiss SMT Holding GmbH & Co. KG, which owns 100 percent of the shares in Carl Zeiss SMT GmbH. We record the results from the interest in Carl Zeiss SMT Holding GmbH & Co. KG using a one-quarter time lag as the results are not available in time to record them in our concurrent period.

In this report the name 'ASML' is sometimes used for convenience in contexts where reference is made to ASML Holding N.V. and / or any of its subsidiaries and / or any equity method investments, as the context may require. The name is also used where no useful purpose is served by identifying the particular company or companies.

© 2017, ASML Holding N.V. All Rights Reserved.

ASML INTEGRATED REPORT 2017

Special Note Regarding Forward-Looking Statements

In addition to historical information, this Integrated Report contains statements relating to our future business and / or results. These statements include certain projections, business trends and other matters that are "forward-looking" within the meaning of the Private Securities Litigation Reform Act of 1995. You can generally identify these statements by the use of words like "may", "will", "could", "should", "project", "believe", "anticipate", "expect", "plan", "estimate", "forecast", "potential", "intend", "continue" and variations of these words or comparable words. They appear in a number of places throughout this Integrated Report and include statements with respect to our expected trends and outlook, expected semiconductor industry trends, including incentive for continued innovation and that ASML products enable future industry growth, expected strong business growth and being on our way to achieve 2020 ambitions, including opportunity, outlook and expected customer demand in specified market segments including memory, logic and foundry, systems backlog and bookings, expected financial results, including expected sales levels and profitability, expected EUV revenue, gross margin, SG&A and R&D expenses, other income, tax rate, capital expenditures and repayment obligations, annual revenue opportunity and target EPS by 2020 with significant further growth potential into the next decade, expected impact of adoption of new accounting standards, expected growth in profitability and sales in 2018, expected lower attrition rate in the near future, anticipated impact of US tax reform legislation, customer, partner and industry roadmaps, including shrink roadmaps and continued semiconductor process scaling, the development of High-NA and the expected production of higher performance microchips at lower costs, the expected benefits of the acquisition of HMI and of an indirect interest in Carl Zeiss SMT GmbH, including expected contribution to ASML's results, further development of our EUV lithography chip-making systems and extension of EUV beyond the next decade, expected multi e-beam innovation and the provision of e-beam metrology and inspection capability and its effect on Holistic Lithography solutions, including the introduction of a new class of pattern fidelity control and the improvement of customers' control strategy, statements with respect to DUV competitiveness, strategy alignment with international standards such as United Nations Sustainable Development Goals, expected growth of our service business, expected shipments of systems, the planned shipment of advance products to domestic Chinese customers in 2018, planned shipments of EUV tools in 2018, productivity of our tools and systems, including EUV productivity targets and goals, and system performance, expected industry adoption of EUV and statements with respect to the intent of customers to insert EUV into volume manufacturing, supply chain and service capabilities, the development of EUV technology and EUV industrialization, the number and timing of EUV systems expected to be shipped, expected use of EUV systems in high-volume manufacturing and revenue recognition, expected industry trends and expected trends and opportunities in the business environment, including the expected continuation of Moore's law, dividend policy, our proposed dividend and intention to repurchase and cancel shares, including statements with respect to the share repurchase plan for 2018-2019.

These forward-looking statements are not historical facts, but rather are based on current expectations, estimates, assumptions and projections about the business and our future financial results and readers should not place undue reliance on them. Forward-looking statements do not guarantee future performance, and actual results may differ materially from projected results as a result of certain risks, and uncertainties. These risks and uncertainties include, without limitation, those described under Management Board Report - Risk Factors. These forward-looking statements are made only as of the date of this Integrated Report. We do not undertake to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

Message from our CEO

Dear stakeholders,

Our business has never been more exciting than it is today. Adoption of semiconductors in an ever expanding application space has created a more connected world. Continued advancements in electronics are opening new markets in car navigation, industrial automation, personal health and artificial intelligence that offer tremendous growth opportunities in the future. All these exciting new growth opportunities are enabled by the semiconductor industry's unwavering commitment to innovation. Profits generated by products and services built on semiconductor innovation total almost USD 300 billion every year. This helps fuel a powerful incentive for continued innovation in the years ahead and drives our customers' appetite for our cutting-edge technology solutions.

ASML enables our customers to produce the most advanced and cost effective semiconductors by delivering superior integrated patterning solutions. Our products help create ever-smaller and more powerful chips that provide significant value and enable future industry growth. Our strategic priorities around EUV, DUV and Holistic Lithography are designed to support this objective and our roadmap stretches well into the next decade. You can read more about this in this Integrated Report, combining for the first time what were formerly three separate reports.¹

In 2017 we made significant progress on our EUV technology. We have not only demonstrated all key system performance specifications on the scanner, but significant improvements were also made in the ecosystem. EUV is now ready to enter volume production and enable cost effective scaling well into the next decade. While our customers are preparing for a future with EUV, we also continue to serve our customers with innovations in DUV scanners and Holistic Lithography solutions. We introduced new DUV systems with improved performance to meet our customers' technology requirements. In Holistic Lithography, where we bring together scanner, metrology and software, we continue to provide high value integrated solutions, including shipment of our first ASML-HMI jointly developed product less than one year after closing the HMI acquisition.

As we execute our product roadmap and deliver solutions to meet our customers' roadmap, we continue to see strong business growth and are well on our way to achieve our stated 2020 ambitions. Our net sales grew to a record EUR 9.1 billion over 2017, as our net income rose to EUR 2.1 billion. To secure future innovation, we created about 2,500 jobs throughout our company and increased our R&D expenses by EUR 153.9 million to EUR 1,259.7 million.

Delivering great products is entirely dependent on good people, strong processes and a sustainable business model. We will continue to invest in growing our pool of talented people by helping our employees develop their skills, as well as by providing an inspiring and safe place for them to work. In addition, we will continue to support the communities we operate in, by building stronger local innovation eco-systems. We do this through our technology promotion program, our support of universities, research institutes and start-ups as well as by supporting the ASML Foundation's global educational projects. Our business strategy seeks to balance the interests of our customers, employees, suppliers, shareholders and society. You can read more about our strategic and Corporate Priorities and how we make this work in this Integrated Report.

We are also working to align our strategy with the United Nations Sustainable Development Goals, which are aimed at ending poverty and protecting the planet. As an example, we are working towards using green electricity throughout our operations. We have identified the five most relevant United Nations Sustainable Development Goals we can contribute to and are excited that we are making good progress towards our sustainability objectives. Our sustainability efforts are recognized by ASML's inclusion in the Dow Jones Sustainability World Index for the first time in 2017.

After adding strategic acquisitions in recent years to secure or complement our product offerings, we are well placed to realize our future potential. We continue to operate in a flexible way with suppliers and temporary staff and work closely with them to ensure that risks and benefits are shared and are fully transparent.

We are very aware that our success comes from sharing knowledge and constantly building on innovation and we would like to thank our customers, suppliers, peers and employees for their trust and commitment. We look forward to many more successful years of working together towards realizing our vision of a world in which semiconductor technology helps tackle society's toughest challenges.

Peter Wennink

President and Chief Executive Officer

Dated: February 6, 2018

1. We publish two versions of the Integrated Report: one version containing Financial Statements based on US GAAP and one version containing Financial Statements based on IFRS-EU.

ASML INTEGRATED REPORT 2017 1

ASML Integrated Report 2017

All information disclosed in this Management Board Report is provided as a supplement to, and should be read in conjunction with, our Corporate Governance and Consolidated Financial Statements.

Board of Management

Peter T.F.M. Wennink (1957)

Term expires 2018

President, Chief Executive Officer and Chairman of the Board of Management

1 Mr. Wennink joined ASML in 1999 and was appointed as Executive Vice President, CFO and member of our BoM per the 1999 AGM. Mr. Wennink was appointed as President and CEO in 2013.

1 Mr. Wennink has an extensive background in finance and accounting. Prior to his employment with ASML, 1 Mr. Wennink worked as a partner at Deloitte Accountants B.V., specializing in the high technology industry with an emphasis on the semiconductor equipment industry.

1 Mr. Wennink is a member of the Dutch Institute of Registered Accountants, a member of the supervisory board of the Eindhoven University of Technology, and a member of the Advisory Board of the Investment Committee of 1 Stichting Pensioenfond ABP (Dutch pension fund for government employees). Mr. Wennink further serves on the board of the FME-CWM (the employers' organization for the technology industry in the Netherlands).

Martin A. van den Brink (1957)

Term expires 2018

President, Chief Technology Officer and Vice Chairman of the Board of Management

1 Mr. Van den Brink joined ASML when the company was founded in 1984. Mr. Van den Brink held several positions in engineering and from 1995 he served as Vice President Technology. Mr. Van den Brink was appointed as 1 Executive Vice President Product & Technology and member of the BoM per the 1999 AGM. Mr. Van den Brink was appointed as President and CTO in 2013.

1 Mr. Van den Brink earned a degree in Electrical Engineering from HTS Arnhem (HAN University), and a degree in Physics (1984) from the University of Twente, the Netherlands.

1 Mr. Van den Brink was awarded an honorary doctorate in physics by the University of Amsterdam, the Netherlands in 2012.

Frédéric J.M. Schneider-Maunoury (1961)

Term expires 2018

Executive Vice President and Chief Operations Officer

1 Mr. Schneider-Maunoury joined ASML in December, 2009, as Executive Vice President and COO and was 1 appointed to our BoM per the 2010 AGM.

1 Prior to joining ASML, Mr. Schneider-Maunoury served as Vice President Thermal Products Manufacturing of the power generation and rail transport equipment group ALSTOM. Previously, Mr. Schneider-Maunoury was general 1 manager of the worldwide Hydro Business of ALSTOM. Further, Mr. Schneider-Maunoury held various positions at the French Ministry of Trade and Industry.

1 Mr. Schneider-Maunoury is a graduate of Ecole Polytechnique (1985) and Ecole Nationale Supérieure des Mines 1 (1988) in Paris.

Frits J. van Hout (1960)

Term expires 2021

Executive Vice President and Chief Program Officer

Mr. Van Hout joined ASML in 1984 and rejoined ASML in 2001, after an eight year absence. He was appointed as Executive Vice President and Chief Marketing Officer and became a member of our BoM per the 2009 AGM.

1 Mr. Van Hout was appointed as Executive Vice President and Chief Program Officer on July 1, 2013. Prior to his BoM membership, Mr. Van Hout served as ASML's Executive Vice President Integral Efficiency, Senior Vice President Customer Support and held various other positions.

1 Mr. Van Hout served as CEO of the Beyeler Group and held various management positions at Datacolor International from 1992 until 2001.

1 Mr. Van Hout earned a Master's degree in Theoretical Physics (1981), University of Oxford; and a Master's degree in Applied Physics (1984), Eidgenössische Technische Hochschule, Zürich.

1 Mr. Van Hout is a member of the Board of the Stichting Brainport, the Eindhoven Region Economic Development Board.

Wolfgang U. Nickl (1969)

Term expires 2018

Executive Vice President and Chief Financial Officer

1 Mr. Nickl joined ASML in December, 2013, as Executive Vice President and CFO and was appointed as a member of our BoM per the 2014 AGM.

1 Prior to joining ASML, Mr. Nickl served as Executive Vice President and CFO at Western Digital Corporation, a US-headquartered, NASDAQ-listed developer and manufacturer of storage devices, where he held several financial and operational leadership roles. Before Western Digital, Mr. Nickl gained experience in finance and IT consulting.

1 Mr. Nickl earned a Bachelor of Arts in Business from the University of Cooperative Education in Stuttgart, Germany, and a Master of Business Administration from the University of Southern California's Marshall School of Business in Los Angeles, United States.

1 Mr. Nickl will step down from his position with ASML as per the 2018 AGM, completing his current term. ¹

Edgar Filing: ASML HOLDING NV - Form 20-F

On January 17, 2018, we announced that the SB intends to appoint Roger Dassen as Executive Vice President and CFO to the BoM, effective June 1, 2018, subject to notification of the 2018 AGM.

ASML INTEGRATED REPORT 2017 6

The Role of Lithography Lithography is the critical process step in the production of microchips. Our systems are essentially projection systems, comparable to a slide projector, using laser light to lay out the transistors - the 'brain cells' of a microchip. The light is projected using a so-called mask (also known as a reticle), containing the blueprint of the pattern that will be printed. A lens or mirror focuses the pattern onto the wafer - a thin, round slice of semiconductor material - which is coated with a light-sensitive material. When the unexposed parts are etched away, the pattern is revealed. Because lithography patterns the structures on a microchip, lithography plays an important role in determining how small the features on the chip can be and how densely chip makers can pack transistors together.

ASML INTEGRATED REPORT 2017 7

Faster, smaller, greener

Our guiding principle is continuing Moore's Law towards ever-smaller, cheaper, more powerful and energy-efficient semiconductors. The long-term growth of the semiconductor industry is based on the principle that the power, cost and time required for every computation on a digital electronic device can be reduced by shrinking the size of transistors on chips. One of the main drivers of shrink is the resolution that our systems can achieve. This, in turn, is mainly determined by the wavelength of the light that is used and the numerical aperture of the optics. A shorter wavelength - like a finer brush used for painting - can resolve smaller features. A larger numerical aperture can focus the light more tightly, which also leads to smaller resolution. The industry has gone through a series of technology transitions where it shortened the wavelength of the light from 365 nm (i-line) to 193 nm (ArF) in the DUV part of the spectrum. Currently ASML is helping customers to transition to 13.5 nm (EUV), which again allows lithography systems to resolve smaller features.

In 2017, leading-edge chip makers routinely produced chip features with geometries of between 20 nm and 10 nm, compared to typical geometries of 10,000 nm in the early 1970s. The number of transistors on the most advanced microchips has increased from several thousand to over 2 billion.

This trend was first observed by Intel co-founder Gordon Moore in 1965. Moore stated that chip makers could double the number of transistors in - and boost the performance of - a typical microprocessor every year, while maintaining the same cost. He later adjusted this to every 2 years. The trend has held for more than 50 years. While some industry observers are questioning if, and how long, Moore's Law can continue, ASML and our customers are confident that it can be extended beyond the next decade, which is the time frame the industry has always used to plan its roadmap.

Our Company

It is hard to imagine the world without microchips. They are at the heart of the devices that we use to work, travel, stay healthy and be entertained - from smartphones to cars, from MRI scanners to industrial robots. Delivering new functionalities, better performance and lower cost with each generation, advances in chips have spawned new products and transformed industries. New technologies and trends, such as artificial intelligence, augmented reality and the Internet of Things, result in additional demand for semiconductor chips to generate, transfer, store, analyze and apply vast amounts of data.

As one of the world's leading manufacturers of chip-making equipment, ASML provides its customers with tools - hardware, software and services - to create the patterns that define the electronic circuits on a chip. As we improve our products, our customers can increase the value and reduce the cost of chips for their customers.

We are a global company with 19,216 employees and achieved total net sales of EUR 9,052.8 million during 2017, resulting in a net income of EUR 2,118.5 million. Our thousands of engineers work in multi-disciplinary teams and with a network of suppliers and technology partners, innovating to maintain our technology leadership. We set ourselves ambitious goals and take pride in the impact we have on the world around us.

A short company history

Our company was founded in 1984 in Eindhoven under the name of ASM Lithography. By 1985 we had grown into a company of more than 200 employees and moved to Veldhoven, where we have been headquartered ever since. In 1991 we launched our PAS 5500, which became a major success for ASML and continues to be in use today. After we incorporated as 'ASM Lithography Holding N.V.' in the Netherlands on October 3, 1994, we became a public company in 1995 with listings on the NASDAQ and Euronext Amsterdam.

We continued our growth and technological advancement also by acquiring the Silicon Valley Group in 2001, whose site in Wilton, Connecticut in the US, is now a major R&D and manufacturing center. That same year we introduced our TWINSCAN system which, using 'dual-stage' technology, exposes one wafer while the next wafer is already being measured, maximizing performance and productivity. In 2001, we also changed our name to ASML Holding N.V. In 2007, we acquired Brion, a US company specialized in computational lithography for ICs, which became a cornerstone of our Holistic Lithography product strategy. In 2013 we completed the acquisition of Cymer, a manufacturer of light sources in the US, to accelerate the development of the next-generation lithography technology EUV. To further enhance our Holistic Lithography product portfolio we bought HMI in Taiwan, in 2016. In 2017, we completed the acquisition of a 24.9 percent indirect interest in Carl Zeiss SMT GmbH in Germany, to facilitate the further development of our EUV lithography chip-making systems.

Industry Trends and Opportunities

The exponential increase in data generation, transfer, storage, analysis and application has become the major driver for semiconductor industry growth. Fueling this growth is the Internet of Things (smart homes, infotainment, lighting, autonomous driving, healthcare, and factory automation) which combines sensors and smart devices with machine learning and artificial intelligence to process data autonomously into value added applications for consumers and businesses. These growth engines complement the maturing smartphones, PC, laptop and tablet semiconductor market segments which continue to refresh product offerings with more advanced ICs to process and store more data to offer new applications like smart assistants, augmented and virtual reality.¹

To address these market requirements our customers continue to invest in developing more advanced semiconductor processes to enable more powerful, energy efficient, cost effective, logic and memory ICs, for further information on these markets see Management Board Report - Markets and Products - Our markets. Industry and customers' roadmaps indicate a path for continued semiconductor process scaling beyond the next decade. We are addressing this trend by extending the accuracy and productivity of our TWINSCAN XT and NXT lithography systems while in parallel maturing TWINSCAN NXE lithography to the point where it can be used for high-volume IC manufacturing. To secure the tighter accuracy requirements for the more advanced processes we continue to also develop enhancements to our YieldStar optical metrology systems and associated feedback and control software. This has been further strengthened with the acquisition of HMI in 2016 to provide higher resolution e-beam metrology and inspection capability.

Beyond technology and productivity our customers continue to focus on cost and quality of our products and services. To address this we are investing in programs to enhance quality and drive lean processes in our development, manufacturing and supply chain operations.

We believe these industry trends offer continued strong business opportunities for ASML for the coming 10 years and beyond. For a broader overview of trends, risks and opportunities in our industry and global environment, see Management Board Report - Materiality Assessment - Graphic: ASML's stakeholder groups and environment. We also follow developments regarding international guidelines, such as the United Nations Sustainable Development Goals, which aim to end poverty, protect the planet and ensure prosperity for all. We support this ambition and have started to look at how to align our strategy with the United Nations Sustainable Development Goals, see also Management Board Report - Materiality Assessment - Sustainable Development Goals.

1. Source: BI Intelligence, CCS Insights, Gartner.

Business Strategy

How we create value

ASML creates economic value with strong financial performance; social value by enhancing the welfare of our employees, suppliers, customers and the communities we operate in; and environmental value by improving the energy efficiency of chips.

Our value chain

Geared towards providing long-term value to our customers and other stakeholders, our value chain consists of our R&D partners, our supply chain and our manufacturing and service activities, as shown below:

Creating value

We use input from stakeholders and analyses of trends in our industry and society to develop our strategy and to develop and provide our products and services. As such, we aim to create long-term value for our customers and other stakeholders.

For details on the value we created in the past year see Management Board Report - Products and Technology, People, Partners and Operations for our social and environmental impact and Management Board Report - Financial Performance for our economic impact. For the topics most relevant to our stakeholders see Management Board Report - Materiality Assessment and Non-Financial Statements - Stakeholder Engagement. For details on our value creation over the past 5 years see Highlights - Graphic: Last 5 Years.

Our vision and mission

Our vision is a world in which semiconductor technology is everywhere and helps to tackle society's toughest challenges. We contribute to this goal by creating products and services that let our customers define the patterns that ICs are made of, and we continuously raise the capabilities of our products, enabling our customers to increase the value and reduce the cost of chips. By helping to make chips cheaper and more powerful, we help to make semiconductor technology more attractive for a larger range of products and services, which in turn enables progress in fields such as healthcare, energy, mobility and entertainment.

Our strategy

We are a focused supplier of patterning and metrology products and services to IC manufacturers, providing high-performance hardware and software that allow our customers to increase the value and capability of their microchips, while reducing their cost. We work with a network of long-term partners to share the risk and reward of inventing, designing and manufacturing our high-end and market-leading technology. We set ourselves targets to get our innovations into the hands of our customers faster, while enhancing the value and reliability of our products with well-integrated software and services.

In determining our strategy we carefully consider the input and interests of all of our stakeholders. See Management Board Report - Materiality Assessment. We also analyze the risk and opportunities based on the industry and global trends and set strategic and corporate priorities aimed at creating value for all of our stakeholders. Our strategic priorities remain unchanged for 2018 and focus on the successful industrialization of EUV, securing our DUV competitiveness, building a leadership position in pattern fidelity control, and aligning the plan for the introduction of High-NA with our customers and key technology providers.

The strategic priorities are translated into Corporate Priorities that guide our entire company.

The following table demonstrates how the execution of Corporate Priorities addresses our key risk areas and supports the themes material to our stakeholders in creating value for them.

	Corporate Priority 1:	Corporate Priority 2:	Corporate Priority 3:	Corporate Priority 4:	Corporate Priority 5:
Corporate Priorities	Execute the product and installed base services roadmap in EUV, DUV and Holistic Lithography.	Deliver quality products and services that consistently meet or exceed the expectations as agreed with customers, reinforced by an ASML quality culture.	Drive the patterning ecosystem with customers, suppliers and peers in target market segments.	Improve return on investments for ASML and its stakeholders, with a focus on cost of ownership and cost awareness.	Develop our people and processes to support the growth of the organization towards a EUR 11 billion revenue company by 2020.
Related material themes ¹	<ul style="list-style-type: none"> • Innovation • Knowledge management 	<ul style="list-style-type: none"> • Sustainable relationships with customers • Operational excellence 	<ul style="list-style-type: none"> • Sustainable relationships with suppliers • Sustainable relationships with customers • Innovation 	<ul style="list-style-type: none"> • Financial performance 	<ul style="list-style-type: none"> • Employee safety • Business ethics & compliance • Talent management • Sustainable relationships with our people • Business risk & continuity
Key related risks ²	<ul style="list-style-type: none"> • Rapid and complex technological changes • Ability to execute our R&D programs 	<ul style="list-style-type: none"> • Managing product industrialization 	<ul style="list-style-type: none"> • Supplier dependency • Rapid and complex technological changes • Managing product industrialization 	<ul style="list-style-type: none"> • Success of new product introductions • High cyclicality of the semiconductor industry • Competition • High % of net sales derived from few customers • Revenues derived from a small number of products 	<ul style="list-style-type: none"> • Attraction and retention of adequately skilled people • Use of hazardous substances
Related KPIs	<ul style="list-style-type: none"> • R&D expenses • Technology Leadership Index • Technical Competence and Functional Ownership • maturity 	<ul style="list-style-type: none"> • Customer Loyalty Survey Score 	<ul style="list-style-type: none"> • Supplier Relationship Satisfaction Survey Score • VLSI Survey Results 	<ul style="list-style-type: none"> • Total net sales • Gross margin • EPS • Cash flow • ROAIC 	<ul style="list-style-type: none"> • Employee engagement • Employee attrition rate (overall, high performers) • Promotion rate of high performers •

	Number of technical training hours			Recordable incident rate
Related impact areas ³	<ul style="list-style-type: none"> Affordable technology • Knowledge creation & sharing Resource efficient • chips Financial • performance 	<ul style="list-style-type: none"> • Affordable technology Financial performance 	<ul style="list-style-type: none"> • Employment creation Affordable technology • Knowledge creation & sharing Resource efficient chips Financial performance 	<ul style="list-style-type: none"> • Employment creation • Employees welfare • Financial performance

1. See Management Board Report - Materiality Assessment.
2. See Management Board Report - Risk Factors.
3. See Management Board Report - Business Strategy - How we create value.

Profitability / Acquisitions

Our long-term business and financial model targets for 2020 are an annual revenue opportunity (ASML including HMI) of around EUR 11 billion and a target EPS of more than EUR 9, thereby creating significant value for all stakeholders. Our roadmap to an annual revenue opportunity of EUR 11 billion is primarily based on organic growth. ASML continuously reviews its product roadmap and has, from time to time, made focused acquisitions / equity method investments to enhance the industrial value of its product offering. Based on such reviews and the assessment of clear potential product and value synergies, ASML may also evaluate and pursue focused merger and acquisition activities in the future.

Markets and Products

Our markets

Our main customer groups are memory and logic chip makers. Memory chips can store a large amount of data in a very small area and are used in an increasing variety of electronic products like smartphones, high performance computing, automotive or personal computers and other communication devices. There are two main classes of memory: NAND and DRAM. With NAND chips, information can be stored even when the device is powered off. DRAM memory is used to enhance the performance of the electronic product. These DRAM and NAND chips are made in dedicated memory chip factories.

Logic chips process information in electronic devices. They are produced by two groups of manufacturers. The first group designs and manufactures logic chips and is referred to as IDMs. The second group are contract manufacturers known as foundries. Foundry manufacturers do not design chips, but produce chips for other companies.

Our products

We sell three categories of products: DUV lithography, EUV lithography, and Holistic Lithography solutions. We also provide services that ensure a rapid, efficient installation of our systems, superior support, and training to optimize the manufacturing processes of our customers. In addition, we provide services to upgrade and refurbish our systems, helping our customers extend their systems' lifespan and maximizing our customers' capital efficiency.

We offer TWINSCAN (N)XT (DUV) systems for imaging wafers. The DUV range consists of systems that operate at a specific wavelength of the light source, varying from the so-called i-line (365 nm) to KrF (248 nm) and ArF (193 nm). Although these systems are usually referred to as dry systems, the DUV range is completed with immersion lithography systems that provide imaging capability down to a resolution of 38 nm. In these systems, a film of water is placed between the wafer and the projection lens. This film of water acts as an extra lens, which results in smaller features compared with the previous generation of dry systems. We fostered this wet technology and there is strong demand for our immersion-based systems. Using the immersion systems in combination with so-called multiple patterning technology, our customers are able to produce integrated circuits with resolutions much lower than 20 nm. Our next-generation lithography systems, TWINSCAN NXE (EUV), are equipped with an entirely new EUV light source technology and a new optical technology that uses reflective mirrors rather than the traditional lenses. The shorter wavelength of this light (13.5 nm) results in a higher resolution to enable manufacturing of denser and faster chips. The EUV platform can produce ICs of 13 nm resolution and smaller. We have also started developing the future generation of EUV lithography systems due in the first few years of the next decade, using a technology called High-NA. This technology will enable the semiconductor industry to produce higher performance microchips at lower costs. The next generation of EUV optics will offer a higher numerical aperture, making it possible to further reduce critical dimensions in the lithography process. The current EUV systems have an optical system with a numerical aperture of 0.33, whereas the new optics will have a numerical aperture greater than 0.5, enabling several generations of geometric chip scaling.

Our customers optimize the performance of their chip-making systems by taking into account the entire chip creation process, from design to volume manufacturing. We call this approach Holistic Lithography. We have complemented our scanner products with a rapidly expanding Holistic Lithography portfolio of software and metrology products, for example our YieldStar system. This portfolio of products helps our customers optimize and control semiconductor scanner performance, provide a faster start to chip production, and achieve better patterning at higher resolutions, resulting in higher product yields. Holistic Lithography offers cost saving opportunities for our customers. The addition of HMI's e-beam technology to our existing Holistic Lithography portfolio extends our control scope. We have also identified new process control opportunities, built on the same unique and proven approach that will continue to provide additional value to our customers. This approach, pattern fidelity metrology, allows us to guide the e-beam inspection system to the most critical areas, based on the predictive model, on the wafer in order to increase the effective productivity. We will extend this technology even further with a multi beam design in the coming years. The biggest new opportunity resides in the extension of overlay control to a comprehensive control of pattern fidelity.

See our systems overview below.

Upgrading and refurbishing our systems

We develop and sell a range of product options and enhancements designed to increase the throughput and improve patterning and overlay. This also optimizes the cost of ownership over the entire lifespan of our systems. We have developed field upgrade packages, allowing our DUV and EUV scanners to be upgraded from one model to another in the field. This enables customers to migrate these systems in production from one process technology node to another, meeting tighter lithography requirements for increasingly advanced processes. In addition, our Mature Products and Services business refurbishes used lithography equipment and offers associated services. Both upgrades and refurbishments help our customers extend their systems' lifespan and maximize our customers' capital efficiency, supporting our circular economy approach.

We support our customers with a broad range of applications, services, and technical support products to maintain and maximize the performance of our systems. Furthermore, we offer our customers OnPulse contracts on DUV sources, providing on-site support from certified service engineers and continuous real-time light source monitoring.

We expect our service business, which is critical to our overall success, to continue to grow over the coming years.

Our aim is to deliver a comprehensive and cohesive service product offering to keep the systems our customers have installed in continuous competitive operation. Our service business strategy prioritizes customer value and satisfaction, while also optimizing our total net sales and gross margin. To maximize our total value proposition to customers, our Installed Base Management product portfolio and its wide range of service and upgrade product offerings is structured in line with the life cycle of our customers' technology nodes.

ASML Integrated Report 2017

Innovation is our lifeblood

Innovation is ASML's lifeblood and the engine that drives our business. As the Internet of Things expands, consumers across the world are using ever-more powerful and sophisticated devices that are increasingly interconnected. These developments drive demand for microchips, which in turn drives demand for the chip-making systems that produce ever-smaller, faster, cheaper, more powerful and energy-efficient microchips. We can only meet this demand by making consistent and continuous technological advances.

Our innovations in 2017 helped improve our DUV technology. We sold 163 new TWINSCAN DUV systems in 2017, 66 of which were the TWINSCAN NXT:1980 model. Since their introduction in 2015, 119 of the TWINSCAN NXT:1980 systems have been shipped. This ramp equals the fastest ever for an NXT platform and underscores the market demand for leading-edge lithography as well as our ability to ship significant numbers to meet that demand. We provided early access to our latest TWINSCAN NXT:2000i immersion system for initial development of the 5 nm node. This new system features several hardware innovations that deliver improved imaging and overlay performance in support of the aggressive matched system overlay to EUV that is required for future nodes.

Continuous improvements in innovation helped us further improve our new EUV technology, bringing it closer to the high-volume production introduction requirements of more than 125 wafers per hour productivity and 90 percent production time (availability) with consistent performance. In 2017 we demonstrated a productivity of 125 wafers per hour for an NXE:3400B EUV system at our production site. In addition, the availability of our new EUV systems in the field improved, with systems achieving a 4-week availability of more than 80 percent more regularly across the installed base. The best result was more than 90 percent over 4 weeks. Consistency between tools and across sites still needs to be improved however. We shipped 10 NXE:3400B EUV systems to customers in 2017, taking another step towards the large-scale introduction of EUV systems that will enable high-volume microchip production. We also conducted a power capability test with our EUV pellicle, which protects the mask from particles during exposure, and showed that the current design can withstand 250 watts of EUV power.

In Holistic Lithography, we shipped the first product that was jointly developed with the engineering team of HMI, which ASML acquired in 2016. The product, ePfm5, is a pattern fidelity metrology tool that offers our customers enhanced capabilities for detecting patterning defects. It leverages HMI high resolution e-beam metrology technology, state-of-the-art computational modeling, machine learning and scanner metrology data to create defect maps for more wafers with a significantly higher accuracy than existing solutions can do. We also shipped the first HMI eXplore 6000 EUV reticle defect inspection system to a foundry customer. This system offers high resolution multi-column technology that supports full reticle qualification in production.

In July 2017, we announced a Holistic Lithography product suite for the 7 / 5 nm node. This product suite consisted of a TWINSCAN NXE:3400B EUV lithography system, a TWINSCAN NXT:2000i immersion system and a HMI eP5 e-beam metrology system. Our Holistic Lithography integrates a set of products that enables chip makers to develop, optimize and control the production process at the 7 / 5 nm logic and 16 nm DRAM nodes.

We measure innovation based on an internal KPI that we call the Technology Leadership Index. This index comprises 3 objectives; see Products and technology objectives in the table near the end of this chapter.

Another important indicator of our focus on innovation is the amount we spend on R&D. In 2017, we spent EUR 1,259.7 million or 14 percent of total net sales on R&D, compared to EUR 1,105.8 million or 16 percent of total net sales in 2016 and EUR 1,068.1 million or 17 percent of total net sales in 2015, which again demonstrates our commitment to investing in R&D.

How we manage innovation

We manage innovation based on 'roadmaps' - the semiconductor industry's standard term for product development planning. Our marketing organization first assesses our customers' needs, the required functionality of our systems and the deadline for these requirements. This 'marketing roadmap' of customer requirements includes detailed system specifications and functionalities. Our product organization then puts together a 'product roadmap' outlining the specifications and functionalities of the new types of system that are feasible for us to produce and that meet our customers' demands.

Concurrently, we draw up a 'technology roadmap', identifying what technology we need to build in the system as described in the product roadmap. We create this trio of roadmaps for each of our main product groups: DUV, EUV and Holistic Lithography. Roadmaps typically look five years ahead. They are adjusted when required, depending on

changing customer needs or unexpected technological breakthroughs or challenges.

In addition to the innovation steered by these roadmaps, we invest in innovation by conducting research with a longer-term horizon. Run by our Research department, this research aims to create technological solutions that our D&E experts can tap into when developing new systems or improving our existing models. Our research teams collaborate with a wide network of external technology partners, such as universities and other research institutions. We manage our innovation efforts through our Product Generation Process. Our CTO is responsible for R&D at board level. Our Executive Vice-President Development and Engineering and our Senior Vice-President Technology report to the CTO.

ASML's 'open innovation' concept

The concept of 'open innovation' helps us sustain our pace of invention. This means that we develop our technology in close collaboration with partners inside and outside our company, sharing the rewards and the risks. This way of working ensures easy access to leading-edge knowledge and skills across a wide range of technologies, which our partners can also use in other markets.

In 2015, researchers from ASML, the Advanced Research Center for Nanolithography, Tata Steel and Vrije Universiteit Amsterdam joined forces to develop new techniques for imaging surfaces based on lensless microscopy. In 2016, we announced an agreement with Carl Zeiss AG to strengthen our long-standing and successful partnership in the semiconductor lithography business. In that same year, we acquired HMI. See Management Board Report - Our Company - A short company history.

As announced in our press releases during the year covered by this report, we extended our holistic patterning strategy in February 2017 by entering into a partnership with Cadence Design Systems and in June 2017 we signed a memorandum of understanding with Circuit Research and Development Center to set up a jointly-owned world-class training center in Shanghai.

Lighthouse project seeks to use accidental discovery for good

We occasionally invent things we don't need for our own operations, but that can be of value to society. One example of such serendipity is the Lighthouse project. While researching a possible new light source for our new EUV systems, we discovered that a high-energy electron beam we were working with could also be used to produce the medical isotope 'Mo-99'. This isotope is essential for diagnosing cancer. Currently, it is mainly produced from enriched uranium in nuclear plants that require extensive maintenance and produce radioactive waste. We are exploring opportunities to use our invention in alternative ways to produce medical isotopes.

In 2017, our annual ASML Technology Conference focused on the theme 'Innovations for the perfect machine'. This gave us the opportunity to discuss ways to further improve the reliability and uptime of our systems, both of which are priorities for us. The about 3,200 delegates who attended included external technology experts and representatives from our customer base, such as the COO of Hynix. As in previous years, the conference touched upon our perennial dilemma, namely how to strive for innovation to deliver new generations of chip-making systems to customers as quickly as possible, while also working hard to achieve excellence in execution to ensure our systems are rock-solid in terms of reliability, safety and efficiency. Always meeting both these demands sometimes proves challenging. Our experts shared their ideas on how to balance and promote the two demands.

Knowledge management

Our major investment in R&D means it is crucial for us to share and protect our inventions and knowledge.

Knowledge management is a key focus area for us.

To maintain our technological leadership and pace of innovation, we need to develop the right knowledge and share it quickly and efficiently. We share our knowledge internally and externally, with partners such as suppliers and customers. Faster access to knowledge spurs faster development, allowing problems to be solved more quickly. It also makes our investments in knowledge creation more effective and efficient.

Our ambition is to ensure that the right knowledge is available to the right people at the right time. This means we must acquire or develop the required competencies at an early stage, maintaining a knowledge pipeline that allows us to build the system functions we need. This process is facilitated by our Technical Training Center. Our line managers regularly assess the technical competencies we need, varying from software programming to laser physics, and take steps to fill capability gaps where necessary.

To guide our knowledge management, we measure our Technical Competence maturity and Functional Ownership maturity. Technical Competence maturity gauges the capabilities and spread of technical competencies among our people and also the extent to which they are embedded in our processes and operations. We have identified over 80 different competencies that are relevant to our technology. Functional Ownership maturity measures the level of required knowledge among our teams of experts about the system functions they are responsible for. A system is divided into about 90 distinct functions, and responsibility for each function is assigned to a 'function owner' and their team. We score the maturity KPIs on a scale of 1 to 5. Levels 1 and 2 cover the basic requirements, showing that teams are establishing links with departments they cooperate with, setting individual targets, etc. Levels 3, 4 and 5 are

more advanced, reflecting mechanisms to gather and process feedback, make processes predictable, and ensure they function well at customers' sites.

While continuing to build and maintain a solid knowledge base, in 2017 we focused on raising the maturity level of our employees in terms of their technical and functional knowledge. To achieve this, we paid particular attention to using feedback from customers, e.g. feedback loops. We met our target to achieve an average maturity score of 3.6 in 2017; see Products and technology objectives in the table near the end of this chapter.

We have roadmaps in place for most system functions. These plans will be updated on a regular basis. We have mechanisms to process feedback from customers and co-development partners, helping to reduce the recurrence of technical function issues.

Our 'MyLearning' management system, which covers the activities of all our training centers, helps our employees and their managers to decide what courses to attend to further develop their skills and competencies. The system also provides information on training hours and the sort of training our employees have attended. It also helps our employees to design their individual Development Action Plans, see also Management Board Report - People - Talent management. The number of technical training hours per full-time employee increased to 18.2 in 2017 from 15.9 in 2016.

Protecting our intellectual property

We rely on intellectual property rights such as patents, copyrights and trade secrets to protect our proprietary technology. We aim to obtain ownership rights on technology developed by us or for us, alternatively, to have license rights in place with respect to such technology.

In our management of our intellectual property rights we focus on protecting ASML's intellectual property and respecting the intellectual property of others. Preservation of intellectual property and other assets is one of our Business Principles and part of our Code of Conduct.

As of December 31, 2017, we had approximately 12,000 patents and patent applications across the main equipment and chip manufacturing countries around the world and covering various fields of our business.

See also Management Board Report - Risk Factors - Failure to adequately protect the intellectual property rights upon which we depend could harm our business and Defending against intellectual property claims brought by others could harm our business.

Product stewardship

While putting continuous effort into innovation and effectively managing and protecting our knowledge, we also seek to ensure our products are manufactured and can be operated responsibly. Our commitment to product stewardship means that we work to make our manufacturing processes and systems more environmentally friendly, improving their resource efficiency.

Energy measurements have shown that the energy efficiency of our latest DUV system, the TWINSCAN NXT:2000i, is similar to the TWINSCAN NXT:1980Di, while the latest system will deliver improved imaging and overlay performance to our customers, see Non-Financial Statements - Non-financial Indicators - Products and technology.

As we were bringing our EUV systems to the point of high-volume production in 2017, we began exploring how we can realize energy savings for these systems. As a first step, we focus on how we can reduce the additional energy needed to run EUV systems in a factory environment. We found we can redesign the pre-vacuum systems for our EUV systems to make them more energy efficient, thereby enabling a reduction of the power consumption of the complete EUV system by 100kW. We expect to implement this energy-saving measure in 2018. In addition, we made progress towards recycling the H₂ used for our systems, initial tests show an up to 80 percent recycling rate. In 2018, we will further study the implementation of the H₂ recycling. Furthermore, we will study an improved cooling concept in our systems, where some sections of the EUV system operate at higher temperatures to enable 'free cooling' at our customer's sites.

We support the circular economy concept - a model for industry moving from the linear model of 'Take, Make, Dispose' to one where we extract the maximum value from resources we use and then recycle and regenerate products at the end of their lives. We believe this circular economy model is essential to ensuring the future success and competitiveness of the semiconductor equipment industry, hence we have incorporated circular economy into our Business Principles. We are keen to play our part, not only by enhancing energy efficiency and the efficient use of other resources and materials, but also by refurbishing systems, remanufacturing parts ('As-new' program) and by upgrading systems to an higher performance level while in use 'in the field' to extend their lives. Our systems have a modular design which is suitable for reuse and can be upgraded. About 45 percent of the weight of a typical NXT system consists of a fixed architecture that can be kept when upgrading the system and therefore does not have to be scrapped, see Graphic: ASML NXT system: Modular upgradeable design, in this section.

Extending our systems' lifetime

Our Mature Products and Services business refurbishes older lithography systems and offers associated services. A well-maintained ASML lithography system has a useful life that is measured in decades. Typically, an ASML lithography system will be used in a leading-edge Fab for many years, and will then be given a second life with, for example, a manufacturer that makes specialized devices, such as accelerometers, radio frequency chips, thin-film heads for hard disk drives, or LEDs, which require relatively less sophisticated chips.

In 2017 we developed new software and hardware to replace the operating system of our older generation systems, such as the PAS 5500 and AT / XT systems. Without this new operating system, these systems would not have been able to continue operating in the foreseeable future, due to the lack of dedicated computer hardware and operating system software maintenance. Thanks to the new software and hardware, we can significantly extend the lifespan of about 90 percent of our systems currently in use at our customers' production locations.

We also further engaged with our customers about the introduction of 'As-new' modules into our mainstream manufacturing. 'As-new' modules (segments of our systems) are modules suitable for multiple product life cycles. They are returned from the field and, after a thorough re-qualification process, restored to an as-new condition offering a level of performance equal to new ones. We make these efforts in close cooperation with our customers and suppliers. In 2017, we continued a pilot project launched in 2016 to explore how we can effectively use 'As-new' parts and modules in new systems. In collaboration with our customers and suppliers, we aim to steadily increase the number of 'As-new' parts used in the future.

By enabling the production of cheaper and more powerful computer chips, we also fuel the development of new electronic applications. This development poses a challenge for our entire industry, as these new applications may increase energy use and require potentially scarce resources. For us, it emphasizes the importance of working with all relevant stakeholders in the value chain to make our industry more sustainable and of contributing to this process through research and innovation.

RoHS and REACH

We are committed to complying with EU regulations for handling hazardous materials and chemicals, the so-called RoHS and REACH directives, even though the products we manufacture are currently excluded from the RoHS directive. We are committed to reducing and eliminating its use of hazardous substances and aims to replace non-compliant parts with RoHS-compliant alternatives whenever possible.

Product safety and compliance

Our products must be safe to work with, starting at the design stage. Our engineers develop systems that meet international safety regulations. A specially developed tool ensures our designers are instantly connected to risk experts for every part or function of a system that bears a safety risk. This enables us to address any safety issue at an early stage.

Our products and non-commercial tools comply with all relevant legislation, including EU safety regulations and SEMI S2, the semiconductor industry guidelines. A third party verifies our compliance with SEMI S2. During 2017, a report confirming SEMI S2 compliancy was available for each and every product type we shipped.

Products and technology objectives

Theme	Objective	Target year	How we did
Innovation	<p>Realize the following as part of our Technology Leadership Index:</p> <p>a) Enable DUV immersion / dry performance to produce 10 nm production and 7 nm R&D node.</p>	2016-2017	See Innovation is our lifeblood above.
	<p>b) Drive economics and enhance capability to extend EUV.</p> <p>c) Enable enhanced product performance through improved metrology.</p>	1	
	<p>Realize the following as part of our Technology Leadership Index:</p> <p>a) DUV performance enabling memory 1x and 7/5 nm logic nodes.</p>	2018	1
	<p>b) Enable on product performance.</p> <p>c) Drive economics and extendibility of EUV.</p>		
Knowledge management	<p>Increase the Technical Competence and Functional Ownership maturity score to 3.6.</p>	2017	See Products and technology KPIs in the table below - we achieved a maturity score of 3.7 for Technical Competence and 4.0 for Functional Ownership, exceeding our 2017 target.
	<p>Maintain the Technical Competence and Functional Ownership maturity score at a level around 3.8.</p>	2020	We shall continue to focus on Technical Competence and Functional Ownership maturity.
	<p>Each year have on average 15 hours of technical training per FTE (D&E employees).</p>	2016-2017	See Products and technology KPIs in the table below - the number of training hours was 18.2, exceeding our 2017 target.
Product stewardship	<p>Annual reduction of RoHS non-compliant parts by 15%.²</p>	2016 and beyond	In 2017, we have assessed that 89% of the parts in scope are RoHS compliant (with 1% non-compliant and 10% unknown). We have therefore reduced the RoHS non-compliant parts by 21%, thus exceeding our annual target of 15% reduction. We will continue to investigate unknown parts and further reduce the RoHS

non-compliant parts.

¹ In 2017, we fine-tuned the definition of objective a) Enable DUV performance to produce 1x memory and 7/5 nm logic nodes.

² Due to our change in methodology as reported in 2016, we re-assessed our annual reduction target from 30 percent to 15 percent.

Products and technology KPIs

KPI	2015	2016	2017
R&D expenses (in million EUR)	1,068.1	1,105.8	1,259.7
Technical Competence maturity score ¹	3.0	3.4	3.7
Function Ownership maturity score ¹	3.2	3.6	4.0
Number of technical training hours per FTE	14.4	15.9	18.2
Sales of lithography systems (in units) ²	169	157	198

1. Measured on a scale from 0 to 5.

² Lithography systems do not include metrology and inspection systems. See Management Board Report - Financial Performance - Operating results - Total net sales and gross profit.

ASML Integrated Report 2017

Talent management

Attracting and retaining talent is crucial to maintaining our fast pace of innovation and essential to our long-term success as a company. Highly skilled people with a technical background are scarce in the labor market. The increasing complexity of our products means that new and existing employees face a steep learning curve. As such, we look to develop our talented and highly skilled professionals through tailor-made training and development programs. This ensures continuity in our workforce and retains the required knowledge, skills, and competencies of our people.

To attract talent, we focus on two areas:

- Internal talent - We assess the development potential of our employees for new roles and identify candidates for critical positions. Employees discuss their career ambitions with managers, jointly considering next steps. Employees can pursue opportunities themselves or be approached within the organization. We also have internal career fairs to provide information on internal career opportunities.

External talent - We cooperate closely with universities in Europe, the US, and Asia to attract highly talented staff, including offering internships and scholarships. For positions that cannot be developed and filled internally, we scan the labor market for the skills we need and run targeted recruitment campaigns.

Developing our people is crucial to the sustained success of our business. Every year our employees' personal targets and development plans are aligned with our business targets through our People Performance Management process.

This process helps us decide the actions required to achieve short-term goals as well as longer-term career development. Together, managers and employees define individual Development Action Plans.

Our company enjoyed strong growth in 2017. We had to set ambitious recruitment targets to support this growth and ensure we have the people we need, with the right skills. As in previous years, we were successful in meeting our recruitment objectives. We view our recruitment and employee development efforts as an ongoing process that we continuously seek to improve and professionalize, responding to changing business requirements and developments in the labor market. In 2017, we made strides in expanding our global talent acquisition governance structure, continued building our new governance model in the US, and started implementing one in Asia. We have started rolling out a number of additional measures to support recruitment and onboarding. As such we will be making specific training available for line managers to enhance their interviewing and selection skills. Online testing of candidates has also been further implemented throughout the organization. A pre-onboarding app has been rolled out in several countries, already strengthening the onboarding of new hires, and it will be deployed more widely in future too.

Our attrition rate, i.e. the number of employees leaving the company, increased slightly to 4.4 percent in 2017 (2016: 3.9 percent), which was mainly caused by the further integration of Cymer and HMI into ASML. In 2017 we harmonized the compensation and benefits, and as a result we expect a lower attrition rate in the near future. The attrition rate of our best people ('high performers') was 1.8 percent in 2017 (2016: 1.7 percent). We also measured the extent to which high performers move to higher level positions. This promotion rate was 37 percent (compared to an overall promotion rate of 13 percent), indicating our best people were over-proportionally promoted and thus able to further develop themselves. We fast-track the careers of our most promising managers through our Potentials Acceleration programs, with 431 people participating in 2017. We also introduced a new management development curriculum, geared to the needs and requirements of all managers at ASML.

Succession management is an essential part of building a pipeline of talent throughout the company. Our efforts in this area ensure we have sufficient talent ready to replace managers and employees as they are promoted or if they choose to leave the company. We completed assessments of about 7,200 employees to determine their potential to take over higher level positions, up from around 6,500 employees in 2016. We had succession plans in place for more than 300 senior positions. Two potential successors were identified in most of these cases.

We also support technical studies through scholarships. In 2017, 50 students entered our ASML Technology Scholarship program as planned. Starting in 2018, our scholarship program will also be made available to students in the US, increasing our total number of scholarships.

For further information, see Non-Financial Statements - Non-financial Indicators - People - Talent Management.

Sustainable relationship with our people

We strongly believe building sustainable relationships motivates our people to develop themselves, to make the most of their talents, and perform to the best of their abilities. All of this serves to boost our productivity, innovative

strength and competitiveness.

Employee engagement and employability are the cornerstones of a sustainable relationship with our employees. To us, engagement is the dedication our employees have for their jobs and ASML. Engaged employees feel that their efforts make a difference and are motivated to go the extra mile. Employability is the capacity of our employees to sustain and improve their performance over time and adjust to change.

To build an engaged and enabled workforce, we have our Place to Work, Meet, Learn and Share framework. Our aim is to create an inspiring and safe work environment that is conducive to our employees' personal development and helps them strike a good balance between their work and personal life. There are three dimensions to the Place to Work, Meet, Learn and Share framework: People (our employees), Bricks (our campuses and buildings) and Bytes (IT innovation to improve collaboration and work processes).

In 2017, we introduced smart boards, Microsoft Surface Hubs, as teleconferencing and presentation tools to facilitate cross-sector and worldwide collaboration at ASML. Straight away this allowed us to cut both travel time and costs. It also enhanced the efficiency of our interactive design sessions and remote training, leading to increased productivity and letting us reach more employees. We believe this contributed to employee engagement.

We have also continued our program to convert our offices into activity based working environments, promoting more interaction in the work place and providing the facilities that meet our employees' needs. In 2017 we added more than 2,100 flexible work places so overall we have now more than 5,600 flexible work places worldwide.

Our employee survey me@ASML showed an average engagement level of 7.0, the same as the previous year. This was slightly below our target, as we aimed to achieve the same level as our peer group benchmark, which is 7.2. We achieved a record 91.2 percent response rate, with scores for employee commitment and loyalty also being exceptionally high. Employees again said they thought the efficiency of their work leaves room for improvement, for instance by making approval of decisions and other processes simpler. They left about 45,000 personal comments in the survey's open comment boxes, saying what they liked or disliked and making improvement suggestions. We view this as a sign that many of our employees are highly motivated to contribute to the success of our company. This engagement of our employees resulted in feedback sessions at a team level to improve efficiency of our processes and learn from each other.

For further information, see Non-Financial Statements - Non-financial Indicators - People - Sustainable relationship with our people.

Promoting diversity and inclusion

We believe a diverse and inclusive workforce helps us develop new solutions and ideas. Different voices and points of view are necessary to drive our innovation. We maintained our high level of diversity in terms of culture and nationality, employing people of 115 different nationalities in 2017 (up from 105 in 2016). Thanks to our continuous efforts to recruit and retain women, our percentage of female employees increased from 11 percent in 2010 to 14 percent in 2017. Gender diversity is still, however, an area in which we can improve. To increase our future talent pool and get young women interested in technology, ASML supports initiatives in the Netherlands such as Girls' Day, where girls aged 10-15 can get acquainted with technology. In 2017 our CEO signed the 'Declaration of Amsterdam', a call to action for employers, unions and governments to implement concrete changes that ensure progress in matters affecting LGBTI people. The declaration is an initiative by Workplace Pride, an Amsterdam-based international non-profit organization that strives for greater worldwide acceptance of LGBTI people in the workplace. In signing the declaration, we want to show our commitment to building an inclusive corporate culture where LGBTI people feel valued and can realize their full potential. For more information on our diversity and inclusion performance data, see Non-Financial Statements - Non-financial Indicators.

Fair remuneration

Our remuneration should be fair for employees and not be a distraction for the motivation and engagement they experience from their job content and from working at ASML as a great place to work. In our remuneration policies, we strive towards global consistency, while respecting what is common practice in local markets. We want our employees to work together towards shared company goals, and we believe that they are key to the success of our company and deserve to share in this success. We want to ensure that we pay our employees fair and balanced salaries and that we offer competitive benefits. Our remuneration is based on an individual employee's contribution to the company, their experience and the local labor market. We apply objective criteria and our remuneration is unrelated to factors such as gender, nationality, religion, social position or age.

Every year we analyze paid salaries for any gender disparity and in 2017, like in previous years, we found no major differences in these salaries. See Non-Financial Statements - Non-financial Indicators for details on gender payment. We continuously review how our remuneration compares to the market benchmark for technology professionals in every region where we operate. Where necessary, we make changes to our remuneration policies and levels. In 2017, we made changes to our remuneration policies for our operations in all regions to ensure alignment with our overall corporate remuneration philosophy and to facilitate the harmonization of remuneration packages after the acquisition of Cymer and HMI.

At ASML, where we strive for salaries that are competitive in each market and where we have a predominantly highly educated workforce with relatively high levels of remuneration, we are confident that we meet adequate 'living wage' requirements, meaning that employees earn salaries that meet their basic needs.

Human rights and labor relations

We believe that human rights, as defined by the United Nations in its Universal Declaration of Human Rights, are a common standard that all employers should uphold. We support the principles laid down in the OECD Guidelines for Multinational Enterprises and those in the International Labor Organization's Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy. In the spirit of these principles, we support our employees' right to organize in labor unions and to collectively negotiate fair wages and working conditions. We believe these rights must be respected for all ASML employees at our locations worldwide.

We want to provide fair labor conditions and social protection for all our employees, regardless of whether they are on a fixed contract or a flex one. In the Netherlands, we negotiate with and consult labor unions and our company's Works Council, our employees' representative body. As required by Dutch law, our BoM must seek the non-binding advice of the Works Council before taking certain decisions, such as those related to a major restructuring or a change of control. Some decisions directly involving employment matters that apply either to all employees or certain groups of employees may only be taken with the Works Council's approval. In case the Works Council renders a contrary advice on a particular decision and the BoM nonetheless wishes to proceed, the BoM must temporarily suspend any further action while the Works Council determines whether to appeal to the Enterprise Chamber of the Amsterdam Court of Appeal.

We strive to comply with the relevant legislation in every country we operate in. In the US, for instance, we aim to comply with all state and federal laws and regulations regarding labor practices and employees' rights to organize. This means we do not interfere with, restrain, or coerce employees who want to organize themselves in a labor organization for collective bargaining purposes. In Taiwan, where we have several business operations, all employees, except those working in government administrative organizations, can form unions. ASML seeks to comply with all relevant legislation, such as the Taiwanese Union Act and the Law Governing Collective Bargaining Agreements.

At ASML, the principle of free choice of employment is respected. It applies to every employee in every country we operate in. We adhere to the Responsible Business Alliance Code of Conduct and expect our suppliers to also adhere to this code, as well as other human rights principles, see Management Board Report - Partners - Sustainable relationships with suppliers. We updated our human rights policy in 2017 to incorporate the latest developments of the Responsible Business Alliance Code of Conduct and to explain in more detail what we expect from our suppliers. Our policy now stipulates that compliance to human rights standards and other Responsible Business Alliance standards shall be included in our supplier agreements.

Protecting privacy

In all countries in which we operate we aim for compliance with the legal requirements regarding the protection of our employees' privacy, as well as the privacy of our customers and suppliers, and that of their employees in turn. Especially in Europe, legislation on these matters is developing fast. As such, we are implementing ASML's binding corporate rules, or Privacy codes, on employee data as well as business partner data accordingly. Additionally, we are developing a program to increase privacy awareness globally within our company. We have a Privacy Officer who reports to our Senior Vice President Corporate Legal.

Our flexible labor model

The flexible labor model we have in the Netherlands comprises employees either on a fixed contract or a flex one. This model allows us to adapt to semiconductor market cycles, including providing support for potential 24 / 7 production activities as and when it is needed. Maximizing the flexibility of our technically-skilled workforce means we can reduce lead times, which in turn adds value for customers.

We used to have four categories of sourced labor in the Netherlands: flex ('temporary'), consultant, outsourcing on-site, and outsourcing off-site. In total, 16 percent of our employees were flex workers at year-end 2017.

We changed our flexible labor model in 2017 and will now be able to reduce the volume of our flexible workforce by offering a high number of our current flex employees fixed contracts in the run up to January 1, 2019.

We identified 3 categories of flex workers: those hired to fill gaps in our fixed workforce and who will be offered a fixed contract after 1 year; those hired to temporarily increase our operational capacity, with flex contracts of a maximum of 2 years; and those with skills we need temporarily and who can stay on a flex contract for a maximum of 3 years. As we gradually implement this new flexible labor model, we expect the percentage of flex workers to decrease in the next few years and the percentage of employees on a fixed contract to increase.

Overtime

Protecting our employees from working overtime during peak times requires our constant attention. The nature of our business often requires employees to work significant amounts of overtime - something they are usually keen to do because they feel responsible for finishing projects on time. It is our policy to follow local rules regarding working hours. However we apply our own company standards when these are stricter. Our company standards are based on Responsible Business Alliance norms.

We improved our monitoring of employee overtime in 2017 to ensure we had a realistic picture of the situation. As a result, we noticed there was still a lot of overtime. In most cases, this concerned employees in the Netherlands who were temporarily working at an ASML or a client location abroad.

We are committed to eliminating excessive overtime and raising awareness about our standards. However, the workforce this mainly concerns is often highly motivated to work extra hours, making it very challenging for us to reduce overtime. As overtime remains an important issue for management, we will continue to implement appropriate measures to manage the situation.

Community involvement

As a global technology leader and employer, ASML plays an active role in the communities we operate in. By fostering close community ties we learn more about the world around us and raise awareness of our business, our industry and our interests. Our community involvement is also a way for us to fulfill our leadership role, as the community can benefit from our success and position.

Our community relations program, which falls under the remit of our CEO, is built on three pillars:

- Making the local communities we operate in attractive places to live for our (international) employees and their families.

- Promoting and providing technical education in local communities to strengthen the knowledge infrastructure.

- Being a good corporate citizen and giving back to communities by supporting local charities and global education projects.

The following table provides an overview of some of our community programs and what they have achieved.

Pillars	Key programs	Results
Making communities attractive places to live	<ul style="list-style-type: none"> • Together with our partners in the Brainport Eindhoven region and key public stakeholders in The Hague, we developed the Brainport National Action Agenda, which invites the Dutch government to invest more in our high-tech region. An important part of this is creating a pleasant environment to live in, as we need to be able to attract talented employees from all over the world. 	The Dutch government has recognized the unique and valuable contribution of the Brainport Eindhoven region. In collaboration with the new government, the Brainport National Action Agenda will be developed further, moving a step closer towards realization.
	<ul style="list-style-type: none"> • Through our sponsorship program, we support several local organizations, such as The Hub and the Expat Center in Eindhoven, the Netherlands. We also support local events such as Veldhoven Tasting in Veldhoven, the Netherlands, Habitat for Humanity in San Diego, California in the US and Community Food events in Wilton, Connecticut and San Diego, California, both in the US. 	<ul style="list-style-type: none"> • We provided funds to PSV Eindhoven football club, the GLOW light art exhibition and the Muziekgebouw concert hall in Eindhoven. Approximately 3,000 ASML employees visit the PSV football stadium or Muziekgebouw every year. In 2017, we committed EUR 620,000 to our sponsorship program.
Strengthening knowledge infrastructure in local communities	<ul style="list-style-type: none"> • We run an intensive technology promotion program to boost interest in technology among young people and increase the local and regional talent pool. As such, we also raise the awareness of career opportunities in a well-paid and fulfilling sector. 	<ul style="list-style-type: none"> • The Science Camp in Korea is a three-year program run by 30 employees, aimed at providing science education to underprivileged children. To inspire young people with a talent for engineering, ASML China sponsored the Future Engineer Competition in Shanghai. This competition attracts around 1,500 elementary school and junior high school students.
	<ul style="list-style-type: none"> • We help technology startups through our active role in the Eindhoven Startup Alliance, mostly supporting high-tech business initiatives. 	<ul style="list-style-type: none"> • In the Netherlands, we organized Girls Day and the Dutch Technology Week. Middle school students from San Diego county joined us on-campus for half a day of technology-related experiments and activities.
	<ul style="list-style-type: none"> • We grant ASML Makers Awards to help develop good ideas into concrete prototypes and prototypes into products that can be produced locally. 	We have seen several high-tech hardware startups thrive and some scale up to become more mature businesses. We organized two Get in the Ring events, attracting startups from all over the world. Five winners were selected and will get support from ASML to develop their activities.
		<ul style="list-style-type: none"> • At least four ideas that won an ASML Makers Award were brought to the next

level, and one has been made ready for market introduction and production. ASML supports Eindhoven University of Technology's research activities in the new and highly innovative field of integrated or smart photonics with an annual donation of EUR 122,000 for 5 years, ending in 2021.

Being a good corporate citizen and giving back to communities

-
-

Our volunteer work policy allows ASML employees to do eight hours of volunteer work annually during working hours.

We provide financial support to projects related to education for underprivileged children and teenagers, mostly through the ASML Foundation.

- ASML employees in the Netherlands completed a total of 4,545 hours of volunteer work in 2017.
-

Employees, family and friends got together on the San Diego campus to pack food for underprivileged families in San Diego and Haiti. The team packed 50,000 meals. The ASML Foundation is sponsoring the Hope Project - One Day Parent Program, an annual event organized by the YMCA Social Welfare Foundation, for a three-year period, providing financial support, and after-school and vacation classes to prevent underprivileged children from dropping out of school. In China, ASML Foundation sponsors the Shanghai Technology Innovator Program through the local charity A-dream, which helps implement the program. Targeting junior high-school students, this program aims to boost enthusiasm for optics technology through a 16-hour course on this topic.

The ASML Foundation

The ASML Foundation focuses on the UN’s fourth Sustainable Development Goal: to ensure inclusive and quality education for all and promote lifelong learning.

The ASML Foundation aims to increase the self-sufficiency of disadvantaged children through educational initiatives that develop their talents and help unlock their potential. Although closely linked to our company, the ASML Foundation operates independently. It is our charity of choice and in 2017, we donated EUR 650,000 to the foundation.

The ASML Foundation mainly supports projects in the regions where ASML operates: Asia, Europe and the US. The projects it supports in the US mainly focus on preventing school drop-outs in underprivileged areas, while projects in Asia focus on education for girls to prevent child marriages and on vocational training for young people to help increase their self-sufficiency. In Europe, the foundation focuses on education for disadvantaged children and children lacking in education that suits their specific needs. In 2017, the ASML Foundation supported 9 projects in 6 countries.

We encourage our employees to support the ASML Foundation, either financially or through volunteer work.

For more information, see www.asmlfoundation.org.

People objectives

Theme	Objective	Target year	How we did
Talent management	2017 focus areas: a. Develop our employees to their full potential by having 100% individual targets defined, mid-year reviews performed and updated high quality Development Action Plans.		The majority of employees have defined individual targets (as demonstrated by the 98% of completed People Performance Management reviews) and Development Action Plans (89% completed).
	b. Develop our employees to their full potential and enable them to contribute to our success by having individual targets aligned with the business priorities.	2017	Business priorities were sufficiently cascaded down from senior management to employees.
	c. Systematically identify and develop future leadership through succession management, cross-sector / regional career moves and leadership development programs.		For details about succession management see Talent management above.
	Attrition rate high performers < overall employee attrition.	2017 - 2020	See People KPIs in the table below - our attrition rate of high performers is 1.8%, lower than our overall attrition rate of 4.4%.
	Promotion rate of high performers > overall promotion rate.	2017 - 2020	See People KPIs in the table below - our promotion rate of high performers is 37%, well above the overall promotion rate of 13%.
	2018 focus areas: a. Secure Workforce Management and Workforce Planning to support future growth.	2018	

b. Execute recruitment strategy by implementing the new Applicant Tracking System, focused communication strategy on labor market and deploying a strengthening selection process.

c. Strengthen onboarding activities on a global scale by further roll out of our pre-onboarding app, develop a social onboarding program and further deployment of the buddy program.

Sustainable

relationships. Achieve an employee engagement score from our me@ASML engagement survey at least equal to the 2017 peer benchmark group score.

We are slightly below the peer group benchmark. Seeking improvement, we discuss the me@asml results at team level across the company and define team specific action plans.

People KPIs

KPI	2015	2016	2017	
Average engagement score me@ASML survey ¹	n/a	7.0	7.0	
Employee Attrition (in %)	4.2	3.9	4.4	
Attrition rate of high performers (in %)	1.7	1.7	1.8	
Promotion rate of high performers ²	n/a	35	%37	%
Promotion rate - Overall ²	n/a	12	%13	%
% of People Performance Management process completion	98	%98	%98	%
% of Development Action Plan completion	91	%92	%89	%

1. Measured on a scale from 0 to 10. No survey was held in 2015.

2. The promotion rate was measured for the first time in 2016.

ASML Integrated Report 2017

Sustainable relationships with our customers

Our top priority is to provide our customers with the best-possible products and services. We work closely with them to ensure we understand their needs, priorities and challenges. The high cost of new chip-making equipment and factories is a major incentive for building partnerships, sharing knowledge and risks, and aligning our investments in innovation with those of our customers.

Staying close to our customers

Our sales teams market and sell our products directly to our customers, without the assistance of any agencies or other intermediaries. Our account managers, field and application engineers, service and technical support specialists are located throughout Asia, the US and Europe. We established an industrial site in Linkou and Tainan, Taiwan. This site serves as a supplementary engine to propel our long-term growth, providing customer support and training, logistics, refurbishment, technology and application development. We also produce all YieldStar systems at this site and enable sourcing of equipment modules, components and services in the region. In addition, the site acts as a training center to develop worldwide talent for our workforce and customers.

To support and sustain our partnerships with customers, we have a system of regular customer meetings in place. In 2017, we held 15 Executive Review Meetings, at which members of our senior management team and BoM discussed business and general issues with customers. We also held 12 Technology Review Meetings, at which our senior technology experts and CTO discussed technology plans and requirements with customers. These meetings are an opportunity for customers to set out a roadmap for their technology requirements, such as shrinking chip size. In 2017, we also held 11 Operational Review Meetings to review topics related to the operational activities of our customers. These meetings help to ensure our customers' goals are aligned with our future product plans and also help to identify and close gaps. Besides these important planning sessions, we also held 33 face-to-face meetings between our BoM and customer representatives to discuss business.

Our Voice of the Customer program allows our employees to hear first-hand about our customers' needs and challenges. This is especially important for employees who do not normally have direct access to customers. To reach as many of our people as possible, the program uses different channels of communication: live presentations and Q&As with senior customer representatives; recorded customer interviews; online articles, and personal engagement with customer representatives who are based near our offices in Veldhoven. In 2017, 8 of our customers representatives were based near Veldhoven. To share customer feedback with an even bigger audience at our company, we expanded our Voice of the Customer program in 2017 by adding customer feedback briefings. Our account teams used company gatherings, such as our ASML Day, as an opportunity to inform employees about the feedback we received from customers. Sharing this customer feedback more widely brings in more ideas from employees and helps us act on the feedback and make improvements.

Our Customer Loyalty Survey is an important tool for gauging customer satisfaction and receiving feedback. Along with our Voice of the Customer program, the Customer Loyalty Survey provides us with direct feedback from customers that helps us prioritize our activities for the coming year. Conducted every two years, this survey asks our customers to rate our performance and also presents them with a number of multiple-choice questions on the most important areas of improvement for our account teams and business lines. The latest survey, from 2016, resulted in a satisfaction score of 75.4 percent, which met our target of 75 percent. Our next survey will be held in September 2018. According to an annual customer survey conducted by research specialists VLSI, we ranked 3rd on the list of best suppliers of chip-making equipment with a score of 9.0 (2016: 8.9). Through our Customer Loyalty Survey, customers asked that we focus on quality improvements, product performance in a high-volume manufacturing environment, and providing timely solutions for install-base problems. In 2017, we continued using feedback from the survey to improve our service. Our account teams fine-tuned their priorities and also stepped up their efforts to proactively inform customers about any expected issues in order to find solutions at an earlier stage. We also continued our efforts to ensure customers receive spare parts at the right time and of the right quality, thereby minimizing the downtime of their chip-making operations.

Our customers look to us to help them reduce the cost of ownership. This means they want us to help them lower the overall cost for each microchip manufactured. This occurs primarily by creating technology that allows for shrinking the device, which is why shrink and EUV technology are so important in our technology roadmap. It also occurs by reducing the cost of acquiring, operating and maintaining our chip-making systems. In 2017, we once again made significant progress in bringing our EUV systems a step closer to high-volume production by shipping the first NXE:3400B system, see also Management Board Report - Products and Technology - Innovation is our lifeblood. We continued our program to upgrade our DUV immersion scanners, which enables customers to reuse their installed base, and through our Brion software, allowed them to take advantage of a faster and more efficient patterning process, thereby helping to reduce the overall cost of ownership. We also launched the latest YieldStar 375 system to allow our customers to upgrade their metrology platform.

In 2017, we integrated the sales teams of ASML and HMI to better serve our customers with our holistic lithographic solution including accurate patterning information metrology. Our CCIP, launched in 2012 to accelerate the development of EUV technology, came to an end at the end of 2017.

Sustainable relationships with suppliers

We rely heavily on our suppliers to develop, manufacture and deliver innovative parts for our systems, on time and with the right quality. It is our strategy to develop and manufacture those parts and modules that are unique for lithography in house, both from a manufacturing and a development competence perspective. If this does not prove possible, supplier partnerships are established and well maintained. Contract manufacturers or original equipment manufacturing suppliers are mainly responsible for delivering modules that require non-unique manufacturing or development competencies. It is crucial that we build a world-class supplier network. One of our major priorities is to work with our suppliers to reduce the total cost of ownership of our systems, while meeting our challenging quality standards.

We conduct risk assessments for all key suppliers every year, evaluating risk areas such as our suppliers' financial health, performance issues, potential for supply disruptions (as a result of natural hazards or calamities), and situations where we depend on a single supplier for certain parts or modules. As suppliers operating in the same industry or market are typically exposed to similar risk, we evaluate suppliers' risk and performance within the context of the supply market category, thereby enhancing efficiency. Whenever necessary, we mitigate risks by adjusting our sourcing strategy. We also require our suppliers to meet standards regarding quality, logistics, technology, cost and sustainability. We regularly evaluate our risk assessment and supplier profile methodology and will continue to invest in evolving the norms underpinning the supplier profile to better meet industry requirements.

As most of the raw materials required for our products are purchased and processed by our suppliers, we have limited exposure to price volatility of these materials.

Partnership with Carl Zeiss SMT GmbH

Carl Zeiss SMT GmbH is our single supplier, and we are their single customer, of optical columns for lithography systems. Carl Zeiss SMT GmbH is capable of developing and producing these items only in limited numbers and only through the use of manufacturing and testing facilities in Oberkochen and Wetzlar, Germany.

In 2017, 26.6 percent of our aggregate cost of system sales was purchased from Carl Zeiss SMT GmbH (2016: 27.6 percent; 2015: 26.2 percent).

Our relationship with Carl Zeiss AG is structured as a strategic alliance pursuant to several agreements executed in 1997 and subsequent years. These agreements define a framework in all areas of our business relationship. The partnership between ASML and Carl Zeiss AG is run under the principle of ‘two companies, one business’ and is focused on continuous improvement of operational excellence. Pursuant to these agreements, ASML and Carl Zeiss AG have agreed to continue their strategic alliance until either party provides at least three years notice of its intent to terminate.

In 2017, we completed the acquisition of a 24.9 percent indirect interest in Carl Zeiss SMT GmbH for EUR 1 billion. We also agreed to support Carl Zeiss SMT GmbH's R&D expenses, capital expenditures and other supply chain investments pertaining to High-NA technology over 6 years, beginning in 2016. The main objective of this partnership is to facilitate the further development of our EUV lithography chip-making systems. See Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 10 Equity method investments.

Sustainability criteria

The sustainability criteria that we apply in our quality, logistics, technology, cost and sustainability assessment are based on the Responsible Business Alliance (formerly known as Electronic Industry Citizenship Coalition) Code of Conduct. This code covers, among other things, standards for human rights, anti-corruption and bribery, and for sound environmental practices. Compliance with the Responsible Business Alliance Code of Conduct is a prerequisite for doing business with us, and we actively pursue our suppliers' adherence to this code. The requirement to meet human rights and other ethical Responsible Business Alliance standards is included in our supplier agreements, along with the right to audit to Responsible Business Alliance compliance. We conduct supplier audits to address risks identified in our regular risk assessments. These audits also help ensure suppliers deliver what we expect. Our objective is to conduct a more extensive review of the sustainability efforts of our business-critical suppliers. To this end, we aim to audit their sustainability performance according to a perceived level of risk. If a supplier does not conform to the required standards, it is our policy to discuss mitigating measures.

Responsible Business Alliance

Responsible Business Alliance members commit and are held accountable to a common Code of Conduct and utilize a range of Responsible Business Alliance training and assessment tools to support continuous improvement in the social, environmental and ethical responsibility of their supply chains. The Responsible Business Alliance used to be known as the Electronic Industry Citizenship Coalition and was renamed in 2017. See also www.responsiblebusiness.org.

In 2017, we continued our efforts to improve the quality of products our suppliers deliver. In particular, we focused on ensuring that spare parts shipped to our customers meet the highest possible standards and function well upon arrival. To that end, we discussed with suppliers the importance of carrying out additional quality checks before parts are shipped.

We collaborated with our suppliers to further develop our EUV systems, such as increasing the power of the EUV light source and further improving the quality of pellicles, i.e. the thin film protecting the mask or reticle used in EUV lithography.

Supplier Relationship Satisfaction Survey

We have been conducting an annual Supplier Relationship Satisfaction Survey since 2015 that has helped us set priorities to improve how we collaborate with our suppliers. Based on feedback from our 2016 Supplier Relationship Satisfaction Survey, we made our supplier meeting set-up more transparent so that ASML senior management is involved in a structural way.

The overall rating score of our Supplier Relationship Satisfaction Survey conducted in 2017 was 77 percent. This overall rating score covers both product related suppliers and non-product related suppliers.

In 2017, we made the Supplier Relationship Satisfaction Survey more efficient, shortening it by focusing on some key questions. We also recalibrated the scores for multi-year comparison. The weighted average satisfaction scores for 2017 showed a 2 percent increase for product related suppliers and a 2 percent decrease for non-product related suppliers, compared to 2016, see Partners KPIs in the table near the end of this section.

Across non-product related suppliers, the percentage decrease is mainly due to a lower rating in terms of the 'mutually beneficial relationship with ASML'. We attribute this to our recent efforts to encourage competition in the non-product related supply market. We firmly believe that these efforts are a necessary and healthy step to have taken in our management of indirect spend.

For product related suppliers, the overall rating score increased for almost all individual topics. Insights into our long-term roadmap and the collaboration between ASML and the supplier were especially highly rated. It is important that we continue to improve how we collaborate with our suppliers and ensure that we speak to them with one voice. We believe that regular business reviews and aligning roadmaps and business priorities are key to making this happen.

One way in which we facilitate this and strengthen our relationship with suppliers is our Supplier Day in Veldhoven for our product related suppliers. In 2017, this brought together around 145 representatives from approximately 100 suppliers from across the globe to participate in workshops and attend presentations by our senior management, including our CFO and CTO. It also offers our suppliers the opportunity to familiarize themselves with our business strategy and targets. This year's workshop focused on translating our priorities into concrete tasks that we need to complete and the contribution from our suppliers to meet these targets. Additionally, approximately 100 quality specialists from approximately 70 suppliers are invited twice a year to our 'crossing events'. These are meetings organized by our Supplier Network Management unit and provide a platform to discuss operational improvements for our products, such as improvements in quality or production volume.

'As-new' program helps cut waste

As part of our commitment to the circular economy, we work together with customers and suppliers to remanufacture used system parts so that they can be reused as if they were new parts, see also Management Board Report - Products and Technology - Product stewardship. Our first pilot scheme under this 'As-new' program, conducted in collaboration with our customers and suppliers, demonstrated the positive environmental impact: waste was cut by 450,000 kilograms or 44 percent of materials. In addition, we were able to re-use packaging material. We discussed the program with more than 20 suppliers and decided to expand it to boost the circular economy model even further.

Conflict minerals

As of 2012, Section 1502 of the Dodd-Frank Act in the US requires companies to publicly disclose their use of conflict minerals originating from the Democratic Republic of the Congo or any neighboring countries. These include minerals mined under conditions of armed conflict and human rights abuses. The four main minerals concerned are tin, tantalum, tungsten and gold, also known as 3TG.

We closely monitor use of these materials in our supply chain. We encourage our suppliers and sub-suppliers to have policies and due diligence measures in place that will enable us to investigate if the products and components they supply us with contain any conflict minerals from the Democratic Republic of the Congo or adjoining countries. We have also developed our own due diligence process to identify and manage the sourcing of our components, focusing especially on 3TG. As such, we have been conducting due diligence reviews with relevant suppliers to trace the supply chain back to the smelter and will seek confirmation from the selected suppliers that potential 3TG minerals are responsibly sourced.

We are collaborating with both the Responsible Business Alliance (formerly known as the Electronic Industry Citizenship Coalition) and the Global e-Sustainability Initiative, as well as with other semiconductor and electronics companies, to address conflict-free mineral sourcing on an industry-wide level. The Responsible Business Alliance and Global e-Sustainability Initiative have provided us with the standards and templates we use in reporting and implementing our due diligence. As a member of the Responsible Business Alliance we support initiatives which foster better working conditions in raw material production, as well as the Responsible Business Alliance's efforts to build a trustworthy system that ensures the social and environmental responsibility of mineral sources. We will continue to work with our suppliers on due diligence in the supply chain, supporting industry initiatives and taking appropriate action to fully comply with the SEC rules regarding the Dodd-Frank Act. We hope this concerted effort will dissuade perpetrators of violence and human rights violations and encourage transparent mineral sourcing. Our Conflict Minerals Report is publicly available on our Website.

Partners objectives

Theme	Objective	Target year	How we did
Sustainable relationships with customers	Respond to customer feedback by improving the quality of spare parts upon arrival and addressing cost of ownership issues.	2015 - 2020	We continued initiatives taken at various levels within the organization to increase quality and address cost of ownership issues (e.g. Account teams have received / are receiving training on Cost of Ownership, Voice of the customer sessions, Quality as one of our Corporate Priorities).
	Continue to strengthen executive alignment.	2016-2020	In 2017, 15 Executive Review, 12 Technology Review and 33 face-to-face meetings took place in which members of our (technology) senior management, including board members, discussed business and general issues with customers.
	Additional emphasis on account teams driving customer quality issues through the organization.	2016-2020	Account teams are supporting the Voice of the Customer sessions to ensure customer feedback is widely shared at ASML.
	Achieve top 3 ranking among large suppliers of semiconductor equipment.	2016-2020	ASML ranked 3rd on the list of best suppliers.
Sustainable relationships with suppliers	Supplier due diligence for business critical and new suppliers.	2016-2017	A new risk profile has been rolled-out to all suppliers in scope. We will actively monitor adherence in 2018.
	More extensive review of sustainability efforts at our business critical suppliers.	2016-2018	10 additional theme audits covering sustainability in 2017 took place.
	Introduce revised supplier profiling to separate out performance, capability and risk indicators.	2017-2018	Guiding principles for new supplier profile defined, agreed and communicated to suppliers. Phased roll-out starting Q1 2018.

Partners KPIs

KPI	2015	2016	2017
Supplier Relationship Satisfaction Survey (overall rating score) ¹	77.5 %	77.4 %	77.0 %
Supplier Relationship Satisfaction Survey (overall rating score) Product related suppliers ¹	77.0 %	77.5 %	79.7 %
Supplier Relationship Satisfaction Survey (overall rating score) Non-product related suppliers ¹	80.3 %	77.1 %	74.9 %
Overall Loyalty Score (Customer Loyalty Survey) ²	n/a	75.4 %	n/a

VLSI Survey results ³

Edgar Filing: ASML HOLDING NV - Form 20-F

Large suppliers of chip-making equipment - score	9.0	8.9	9.0
Suppliers of Fab equipment - score	9.0	8.9	9.0
Technical leadership for lithography equipment - score	9.5	9.6	9.4

- The number of questions in the 2017 Supplier Relationship Satisfaction Survey was reduced from 44 to 26. We
1. recalibrated the scores from 2015 and 2016 to match the 2017 structure, so that the results could be compared. The overall rating score covers both product related suppliers and non-product related suppliers.
 2. The Customer Loyalty Survey is held every two years.
 3. Measured on a scale from 0 to 10.

ASML Integrated Report 2017

Operational excellence

We have a long track record of innovation, having introduced several generations of cutting-edge chip-making systems that help our customers produce ever-smaller microchips ('shrink') at affordable prices. As a product matures, our customers increasingly focus on cost of ownership and customer experience. They look to us to reduce costs, deliver faster, and enhance their performance by solving any problems quickly and efficiently, limiting downtime. To meet their expectations, we set up a comprehensive and organized portfolio for structural improvement projects to achieve operational excellence. We aim to deliver products and services with the right quality, on time, at a competitive cost, in a safe work environment and with the optimum use of capital.

Efforts to enhance operational excellence are led by our Operations organization. As our industry evolves and our company grows, we need to ensure that our Operations organization and way of working are scalable, agile, effective and efficient. To achieve this, we carry on developing our Centers of Excellence network where we bring together and exchange expert knowledge and experience from across our business in order to support best-practice decision-making and execution. We are monitoring the maturity level of the competence centers rated on a scale of 0 to 5. Secondly, we work to adjust our basic processes to ensure they meet future needs and support them with state-of-the art IT systems. Thirdly, to achieve the cost, quality and delivery improvements we seek for our customers, we use the Lean principles to build a continuous improvement mindset. This means, among other things, that we seek to eliminate anything that does not add value for our customers. Lean also helps us define a clear end goal and foster a culture of continuous improvement. See also Non-Financial Statements - Non-financial Indicators - Operations and Other Appendices - Appendix - Property, Plant and Equipment.

One of the ways of gauging progress towards achieving operational excellence is measuring the number of employees we have reached with our initiatives to implement Lean principles. Our overall objective is to familiarize over 8,000 operations employees with our Lean way of working. We will do so gradually, targeting a specific number of employees each time. In 2017, we met our first target to reach a group of around 1,500 employees by year-end.

Quality

Quality is an integral part of operational excellence. While ASML has always been known for its innovation excellence, we also invest in our Quality Roadmap to safeguard the quality of our products and services. This roadmap aims to deliver products and services of the highest possible quality that meet customer needs by implementing a range of projects seeking continuous improvement across the entire ASML value chain.

In 2017, we also saw quality improvements in the supplier segment due to our Material Quality Performance Program.

Employee awareness of the importance of quality to our business was evident from our latest me@ASML survey; this year quality was listed as a top 5 priority for the first time. Two company-wide Quality Days were held to address quality issues, and promote our ASML Excellence vision to our employees.

Environment, health and safety

At ASML, we take responsibility for protecting our people and planet. We aim to invent, develop, manufacture and service our products in a safe and sustainable manner, striving towards zero incidents and zero emissions. Employee health and safety is crucial to creating a trusted working environment, where our employees feel respected and can thrive. Our corporate responsibility strategy is based on the premise that all workplace-related injuries and occupational illnesses are preventable.

We are working to reduce CO₂ emissions by ensuring all of our electricity usage will be 'green' by 2020. Other measures include the implementation of safety programs, and energy-, water-, and waste-saving projects.

How we manage environment, health and safety

Our line managers are responsible for day-to-day EHS management, with processes and policies set and overseen by the Corporate EHS Committee, a subcommittee of our Corporate Risk Committee. All employees can access our global online EHS incident reporting tool. It is mandatory to report incidents and unsafe / near-miss situations because this is the first step towards improving our EHS performance. We investigate all incidents to determine the root causes and take corrective actions to prevent them from recurring.

Our EHS Competence Center gathers the best-known practices, defines EHS standards for ASML, and helps managers across the business to implement these. Our EHS management system complies with ISO 14001 requirements and is structured based on the basic idea and purpose of ISO 45001. Since the early 2000s we hold

certificates for ISO 14001 and again we have been recertified for the next 3 years. The renewal of the certificates gives ASML and our stakeholders the confidence that we will continue to be a learning organization, as well as improve results on environmental goals, and meet the requirements of involved regulatory bodies. We provide EHS training to employees to raise their awareness and operational skills and to familiarize them with EHS standards. Based on risk and hazard evaluations we gain insight into our main risk and hazard areas. We identify and manage our lines of defense and take appropriate action to mitigate risk.

How we did in 2017

Our ‘recordable incident rate’ in 2017 was 0.26, better than our target of 0.32. No work-related fatalities were recorded in 2017, just as in previous years. We register EHS-related incidents in line with the US Occupational Health and Safety Act. Given our ambition to have zero incidents, we will continue to take any necessary action to improve safety and remain focused on preventing incidents.

In 2017, contractors who work on our premises received a standardized set of EHS training. We organized a global ‘Have a safe day’ campaign to encourage discussion on safety topics and raise overall awareness. Managers used this day to again stress the importance of safety, urging employees to always speak up if they have any safety concerns. We also ran a global campaign on safe travel, to promote driving safely and urge employees to inform themselves about things such as vaccination requirements and potential risks when traveling abroad. Moreover, we put special focus on safety management in our leadership program for managers in our customer service department, the aim of which was to ensure managers take ownership of safety and promote safe behavior among their teams.

We are on track with our aim to only use electricity from renewable sources for all our operations by 2020. This priority objective is also one of our contributions to Guarantee of Origin (GO2) projects, including for example, the Vetteberget Wind Turbine project that started in 2017 and has a planned commissioning in 2018.

Enhancing energy efficiency is another priority. Our target for 2020 is to achieve an energy saving of 111 TJ, which equates to a 10 percent reduction of our 2015 energy consumption. We are on track to achieve this goal thanks to the energy efficiency initiatives we launched over the past few years.

We aim to cut the amount of waste we generate by 5 percent by 2020, compared to the amount of waste generated in 2015. Although we have made some good progress with this over the past years, we will have to accelerate our programs in the next two years to further reduce our waste production.

Several regulatory inspections were carried out at our locations across the world in 2017, none of which resulted in any significant EHS-related sanctions or fines. ASML was granted all legally required EHS permits required for our operations. In 2017, 3 environmental incidents were reported to the local authorities. Two were related to minor oil leakages (<1 US gallon) and one related to an engine coolant leak (5 US gallon). All took place at our production location in Wilton, Connecticut in the US. These spills caused no significant damage to the environment.

Environment, health and safety objectives

ThemeObjective	Target year	How we did
Reduce recordable incident rate by 15% compared to average of previous 3 years (which results in a target for 2017 of 0.32).	2017	Our recordable incident rate of 0.26 is better than our target of 0.32. We have an ambition to have zero incidents and will continue to take necessary action to improve safety.
Environmental efficiency own operations	2020	We are on track. We achieved a 70.2% renewable electricity level in 2017 and have a plan in place to meet our 2020 target.
100% Renewable electricity.	2020	We are on track based on energy efficiency initiatives launched in prior years however work still needs to be done to identify further opportunities to meet our target for 2020 of achieving an energy saving of 111 TJ (10% of our 2015 energy consumption).
10% Energy savings through projects.	2020	
5% Waste savings through projects.	2020	We ran some waste reduction initiatives though more needs to be done since we have only achieved 1.2% (since 2016) of our targeted waste savings (of 5% of our waste generated in 2015).

Environment, health and safety KPIs
KPI

	2015	2016	2017
ASML recordable incident rate ¹	n/a	0.44	0.26
Renewable electricity (of total electricity purchased) ²	n/a	71	%70.2 %
Energy savings world wide through projects (in TJ) ³	n/a	35.1	48.8
Waste savings world wide through projects ³	n/a	1.2	%1.2 %

^{1.} The number of work-related injuries and illnesses, per 100 full-time workers. As from 2016 we use OSHA guidelines and therefore data previously reported in 2015 is not comparable and not included here.

^{2.} This was a new indicator in 2016.

^{3.} In 2016 we started a new master plan period which terminates in 2020. The savings reported are cumulated compared to base year 2015.

ASML operations update on key performance indicators

The following table presents the key performance indicators used by our BoM and senior management to regularly measure performance.

Year ended December 31 (in millions, unless otherwise indicated)	2016 EUR	2017 EUR	% ¹	% ¹
Sales				
Total net sales	6,794.8	9,052.8		
Increase in total net sales (%)	8.1	33.2		
Net system sales ²	4,672.0	6,373.7		
Net service and field option sales ²	2,122.8	2,679.1		
Sales of lithography systems (in units) ³	157	198		
Profitability				
Gross profit	3,044.5	4,840.7	64.8	74.5
Income from operations	1,657.7	2,424.4	24.4	27.6
Net income	1,471.9	2,118.5	21.7	23.4
Liquidity				
Cash and cash equivalents	2,906.9	2,259.0		
Short-term investments	1,150.0	1,029.3		
Net cash provided by operating activities	1,665.9	1,798.6		
Free cash flow ⁴	1,341.2	1,440.6		

1. As a percentage of total net sales.

As per January 1, 2017, ASML presents net sales with respect to metrology and inspection systems as part of net system sales instead of net service and field option sales. The comparative numbers have been adjusted to reflect this change in accounting policy.

3. Lithography systems do not include metrology and inspection systems.

Free cash flow is a non-GAAP measure and is defined as net cash provided by operating activities (2017: EUR 1,798.6 million and 2016: EUR 1,665.9 million) minus purchase of property, plant and equipment (2017: EUR 338.9 million and 2016: EUR 316.3 million) and purchase of intangible assets (2017: EUR 19.1 million and 2016: EUR 8.4 million). We believe that free cash flow is an important liquidity metric, reflecting cash that is available for acquisitions, to repay debt and to return money to our shareholders by means of dividends and share buybacks.

4. Property, plant and equipment and purchase of intangible assets are deducted from net cash provided by operating activities because these payments are necessary to support the maintenance and investments in our assets to maintain the current asset base. Free cash flow therefore provides an alternative measure (in addition to net cash provided by operating activities) for investors to assess our ability to generate cash from our business. For further details about the purchase of property, plant and equipment and the purchase of intangible assets see Consolidated Financial Statements - Consolidated Statements of Cash Flows.

Operating results

Results of operations 2017 compared to 2016

The following discussion and analysis of our results of operations should be viewed in the context of the risks that may interfere with our business objectives or otherwise affect our results of operations, see Management Board Report - Risk Factors.

Set out below are our Consolidated Statements of Operations data for the years ended December 31, 2016 and 2017:

Year ended December 31 (in millions)	2016 EUR	2017 EUR
Total net sales	6,794.8	9,052.8
Total cost of sales	(3,750.3)	(4,976.1)

Gross profit	3,044.5	4,076.7
Other income	93.8	95.8
Research and development costs	(1,105.8)	(1,259.7)
Selling, general and administrative costs	(374.8)	(416.6)
Income from operations	1,657.7	2,496.2
Interest and other, net	33.7	(50.3)
Income before income taxes	1,691.4	2,445.9
Provision for income taxes	(219.5)	(310.7)
Income after income taxes	1,471.9	2,135.2
Profit (loss) related to equity method investments	—	(16.7)
Net income	1,471.9	2,118.5

Set out below are our Consolidated Statements of Operations data for the years ended December 31, 2016 and 2017 expressed as a percentage of our total net sales:

Year ended December 31	2016	2017
Total net sales	100.0	100.0
Total cost of sales	(55.2)	(55.0)
Gross profit	44.8	45.0
Other income	1.4	1.1
Research and development costs	(16.3)	(13.9)
Selling, general and administrative costs	(5.5)	(4.6)
Income from operations	24.4	27.6
Interest and other, net	0.5	(0.6)
Income before income taxes	24.9	27.0
Provision for income taxes	(3.2)	(3.4)
Income after income taxes	21.7	23.6
Profit (loss) related to equity method investments	—	(0.2)
Net income	21.7	23.4

For further information, see Other Appendices - Appendix - Selected Financial Data and Other Appendices - Appendix - Results of Operations 2016 Compared to 2015.

Total net sales and gross profit

The following table shows a summary of sales data, units sold and gross margin for the years ended December 31, 2016 and 2017:

Year ended December 31	2016	2017
(in millions, unless otherwise indicated)	EUR	EUR
Total net sales	6,794.8	9,052.8
Net system sales ¹	4,672.0	6,373.7
Net service and field option sales ¹	2,122.8	2,679.1
Sales of lithography systems (in units) ²	157	198
Gross margin	44.8	45.0

As per January 1, 2017, ASML presents net sales with respect to metrology and inspection systems as part of net 1. system sales instead of net service and field option sales. The comparative numbers have been adjusted to reflect this change in accounting policy.

2. Lithography systems do not include metrology and inspection systems.

We had another record year in 2017, with contributions from each of our wide range of product offerings; DUV, EUV and Holistic Lithography. It was also the year where the industry turned the corner on the introduction of EUV. We strengthened our partnership with Carl Zeiss AG by completing our acquisition of an indirect interest in Carl Zeiss SMT GmbH to secure the extension of EUV beyond the next decade.

Total net sales increased by 33.2 percent, driven by an increase in net system sales of 36.4 percent and an increase in net service and field option sales of 26.2 percent in 2017 compared to 2016. The increase in net system sales is mainly due to:

• An increase from 4 EUV systems recognized in net system sales in 2016 to 11 EUV systems recognized in 2017.

• An increase from 153 DUV systems recognized in net system sales in 2016 to 187 DUV systems recognized in 2017.

• The inclusion of 12 months HMI net system sales in 2017, whereas 2016 only included 2 months.

The increase in net service and field option sales is mainly driven by an increase in the sales of productivity and focus upgrade packages in combination with a growing installed base.

Gross profit increased by EUR 1,032.2 million mainly due to an increase in sales.

Gross profit as a percentage of net sales increased from 44.8 percent in 2016 to 45.0 percent in 2017 primarily driven by a shift in product mix of systems towards more high-end systems, partly offset by higher EUV systems sales. Due to the accelerated investment in the EUV service infrastructure, we did not achieve a 0 percent gross margin on EUV over 2017. Nevertheless, even with more than tripled EUV net sales compared to 2016 we were able to improve our gross margin to 45.0 percent.

Other income

Other income consists of contributions for R&D programs under the NRE funding arrangements from certain Participating Customers in the CCIP and amounted to EUR 95.8 million for 2017 (2016: EUR 93.8 million).

Research and development costs

R&D costs (net of credits and excluding contributions under the NRE Funding Agreements from Participating Customers in the CCIP) were EUR 1,259.7 million in 2017 as compared to EUR 1,105.8 million in 2016. R&D costs for both 2017 and 2016 were primarily focused on programs supporting EUV, DUV immersion, and Holistic Lithography. In 2017, R&D activities mainly related to:

EUV - Further improving availability and productivity focused on the final stages of development related to our NXE:3400B system, of which we shipped our first systems in 2017. In addition, we are extending our road map by including High-NA to support our customers with 3 nm logic.

DUV immersion - Mainly dedicated to the development of our next generation Immersion system NXT:2000i.

Holistic Lithography - HMI expansion and further development of YieldStar and process window control solutions.

Selling, general and administrative costs

SG&A costs increased by 11.2 percent mainly driven by the inclusion of HMI for the full year and an increase in the number of employees.

Interest and other, net

Interest and other, net decreased by EUR 84.0 million in 2017 compared to 2016. This decrease is mainly due to the recognition of EUR 55.2 million gain in 2016 on foreign currency revaluations of transactions and balances relating to the HMI acquisition in interest and other, net. Other drivers of the decrease are a full year impact of interest on the Eurobond issued in 2016 and lower yields on cash.

Profit (loss) related to equity method investments

The loss related to equity method investments, which consists of the result of our 24.9 percent equity interest in Carl Zeiss SMT Holding GmbH & Co. KG, was EUR 16.7 million for 2017 (2016: no amount). See Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 1 General information / summary of significant accounting policies.

Net income

Net income in 2017 amounted to EUR 2,118.5 million, or 23.4 percent of total net sales, representing EUR 4.93 basic net income per ordinary share, compared with net income in 2016 of EUR 1,471.9 million, or 21.7 percent of total net sales, representing EUR 3.46 basic net income per ordinary share.

Liquidity and capital resources

Our principal sources of liquidity consist of cash and cash equivalents as of December 31, 2017 of EUR 2,259.0 million, short-term investments as of December 31, 2017 of EUR 1,029.3 million and available credit facilities as of December 31, 2017 of EUR 700.0 million. In addition, we may from time to time raise additional capital in debt and equity markets. Our goal is to remain an investment grade rated company and maintain a capital structure that supports this.

Our cash and cash equivalents decreased to EUR 2,259.0 million as of December 31, 2017 from EUR 2,906.9 million as of December 31, 2016 and our short-term investments decreased to EUR 1,029.3 million as of December 31, 2017 from EUR 1,150.0 million as of December 31, 2016.

We invest our cash and cash equivalents and short-term investments in short-term deposits with financial institutions that have investment grade credit ratings and in money market funds that invest in high-rated short-term debt securities of financial institutions and governments. Our investments are mainly denominated in euros and to some extent in US dollars and Taiwanese dollars.

Our available credit facilities amount to EUR 700.0 million as of December 31, 2017 and as of December 31, 2016. No amounts were outstanding under these credit facilities at the end of 2017 and 2016. The amounts available at December 31, 2017 and 2016 consisted of EUR 700.0 million committed revolving credit facility with a group of banks. In 2015, the terms and conditions of the facility were amended by, among other things, removing the financial covenant and by extending the maturity until 2020. In 2017, we exercised our extension option, extending the maturity date to 2022. Outstanding amounts under this credit facility will bear interest at EURIBOR or LIBOR plus a margin that depends on our credit rating.

We have the following repayment obligations relating to our Eurobonds:

EUR 500 million in 2022.

€EUR 750 million in 2023.

€EUR 1,000 million in 2026.

€EUR 750 million in 2027.

In 2017 we repaid EUR 238.3 million of the Eurobonds. We seek to ensure that our principal sources of liquidity will be sufficient to satisfy our liquidity requirements throughout every phase of the industry cycle.

Our liquidity needs are affected by many factors, some of which are based on the normal on-going operations of the business, and others that relate to the uncertainties of the global economy and the semiconductor industry. Although our cash requirements fluctuate based on the timing and extent of these factors, we believe that cash generated from operations, together with our other sources of liquidity are sufficient to satisfy our current requirements, including our expected capital expenditures and debt servicing. We intend to return cash to our shareholders on a regular basis in the form of dividend payments and, subject to our actual and anticipated liquidity requirements and other relevant factors, share buybacks or capital repayments.

See Consolidated Financial Statements - Consolidated Statements of Cash Flows and Notes to the Consolidated Financial Statements 4, 5, 15, 16, 26 and 27.

Trend Information

We expect that Moore's Law will continue beyond the next decade including industry fundamentals of a decline in cost per transistor. There is a strong demand for advanced ICs, supported by a value chain with means and incentive to support this. However, cost and process complexity of shrinking with multiple patterning together with new device structures and materials reshapes customer roadmaps, resulting in a continued need to improve DUV lithography performance while exploiting execution of agreed EUV targets for the future and complementing it with a portfolio of product options, enhancements and upgrade packages that support product stewardship and optimize the cost of ownership over the entire lifetime of our systems. It also results in zero tolerance for non-performance, driving improvement of quality and cost efficiency of our products and services.

Amongst others but certainly due to high demand from the server market, DRAM system demand remains strong as our customers continue to migrate to sub-20nm nodes. Advanced nodes are more litho intensive and thus drive increased litho demand. In 3D NAND, litho demand is also strong as a number of customers continue to ramp new greenfield Fabs and scale vertically with so called stack-of-stacks. Additional lithography is required to connect these stacks, which further drives up litho intensity. When adding the NAND opportunity to the DRAM business outlook for next year, we see another strong memory year ahead.

Logic demand continues to be solid as customers ramp 10nm and start transition to the 7nm node. Litho intensity continues to increase with migration to more advanced nodes and further grows with the adoption of EUV at 7nm. EUV production ramp will accelerate in 2018 as customers are eager to realize the benefits of process simplification, cycle time reductions and yield improvement, ultimately resulting in cost benefits.

We expect continued solid growth in both sales and profitability in 2018. We plan to ship 22 EUV systems in 2018. Shipment profile however will be back-end loaded as our planned step up in move rate will effectively only have an impact in the second half of 2018.

Our expectations and guidance for the first quarter of 2018 can be summarized as follows:

• Total net sales of around EUR 2.2 billion.

• Gross margin of between 47 and 48 percent.

• R&D costs of about EUR 350 million. The increase in R&D costs reflects continued accelerated investments in our portfolio.

• SG&A costs of about EUR 115 million.

• Effective annualized tax rate of around 14 percent.

For discussion on the main key performance indicators indicated above, see Management Board Report - Financial Performance - Operating results and Liquidity and capital resources.

The trends discussed above are subject to risks and uncertainties. See Special Note Regarding Forward-Looking Statements and Management Board Report - Risk Factors.

Business Risk and Continuity

The Corporate Risk Management function helps us accomplish our objectives by being systematic in our approach to setting standards and enable management to improve the efficiency and effectiveness of our governance, risk management, internal control and compliance. It also helps to identify opportunities to achieve the company's objectives and enable continuous sustainable growth.

The BoM is responsible for ensuring that we comply with applicable legislation and regulations. It is also responsible for managing the internal and external risks related to our business activities.

ASML's BoM has delegated its risk oversight to ASML's Corporate Risk Committee. The Corporate Risk Committee is chaired by the COO and comprises senior management representatives from all sectors within ASML, including CEO and CFO. The Corporate Risk Committee acts as a central risk oversight body to review, manage and control risks included in the ASML risk universe. The Corporate Risk Committee approves the risk appetite (i.e. the acceptable level of risk), risk management policies and risk mitigation strategies. ASML's risk universe is reviewed annually taking into account a broad range of internal and external information sources such as macro-economic and industry trends, relevant guidelines and legislation (e.g. the EU Directive on disclosure of non-financial and diversity information and the Dutch Corporate Governance Code) and stakeholders' needs and expectations in all areas including corporate responsibility. ASML may have a different risk appetite for different identified risks and is geared towards mitigating the risks to a reasonable level.

Our risk management and control system is based on the identification of external and internal risk factors that could influence our operational, business continuity and financial objectives and contains a system of multidisciplinary assessments, monitoring, reporting, and operational reviews. For example:

• Quarterly senior management meetings, which are conducted to assess ASML's corporate initiatives which are launched in order to execute ASML's strategy.

• Monthly operational review meetings of the BoM with ASML's senior management on financial performance and realization of operational objectives and responses to emerging issues.

• Quarterly review of key operational risk areas by the Corporate Risk Committee.

• ASML's Anti-Fraud Policy, which facilitates the development of controls which will aid in prevention, deterrence and detection of fraud against ASML.

• Internal control assessments performed by Internal Audit.

• On a semi-annual basis, letters of representation are signed by ASML's key senior management members. They confirm, among other, the following:

• Compliance with local laws and regulations.

• Enable preparation of US GAAP Consolidated Financial Statements.

• Compliance with our Code of Conduct, Business Principles and related Corporate Policies.

• Any material weaknesses and / or deficiencies (if applicable) in design and operation of internal controls over (non) financial reporting.

In the risk management process, the SB provides independent oversight on management's response to mitigating critical risk areas based on bi-annual risk reviews while the SB's Audit Committee provides independent oversight on the risk management process and timely follow-up of high-priority actions based on quarterly progress updates.

Two additional committees - the Disclosure Committee and Internal Control Committee - have been assigned to ensure compliance with applicable external reporting requirements and assessing effectiveness of related internal controls over financial reporting.

We have a Disclosure Committee to ensure compliance with applicable disclosure requirements arising under US and Dutch law and applicable stock exchange rules, US GAAP, IFRS-EU and the Sarbanes-Oxley Act. This Disclosure Committee is composed of various members of senior management, and reports to the CEO and CFO. The chairman of the Disclosure Committee reports to the Audit Committee about the outcome of the Disclosure Committee meetings. The Disclosure Committee gathers all relevant financial and non-financial information and assesses the materiality, timeliness and necessity for disclosing such information. The Disclosure Committee also advises the CEO and CFO on the effectiveness of the disclosure controls and procedures and the effectiveness of the internal control over financial reporting (Sarbanes-Oxley Act).

Our Internal Control Committee, which includes three members of the Disclosure Committee, advises ASML's Disclosure Committee in respect of its assessment of ASML's internal control over financial reporting under section 404 of the Sarbanes-Oxley Act. The chairman of the Internal Control Committee updates the Audit Committee, the CEO and CFO on the progress of this assessment and the chairperson of the Audit Committee includes this item in their report to the full SB.

All material risk management activities have been discussed with the Audit Committee and the SB. For a discussion of ASML's risk factors, see Management Board Report - Risk Factors. See also Corporate Governance - Board of Management - ASML Reports.

We do not rank the individual risks identified in our Management Board Report, as we are of the opinion that doing so defies the purpose of a comprehensive risk assessment. Also, it would be arbitrary since all the risks mentioned have significant relevance for us and our business.

We define strategies to address these risks, which are taken into account when defining the corporate priorities in order to secure risk mitigation in our business processes. For example:

To address the rapid commercial and technological changes in the semiconductor industry as well as the increasing complexity in executing our product introduction roadmap we focus on partnerships, collaboration and sharing knowledge with our customers and suppliers. We work closely to align roadmaps, oversee execution and ensure we maximize customer value. See Management Board Report - Products and Technology and Partners.

To address our dependence on a limited number of suppliers we nurture high quality and collaborative relationships with our suppliers. We share our expert knowledge, including risks and rewards, so we all work together to achieve cost-effective shrink, boost innovation and enable our industry to grow. See Management Board Report - Partners.

To address risks related to intellectual property rights we have developed an intellectual property rights management mechanism to protect our intellectual property rights and to respect the intellectual property of other parties. To protect ourselves from incidents related to cyber security we have also set up a broad information security program addressing preventive, detective and responsive measures to security threats. See Management Board Report - Products and Technology.

To address the scarcity of staff with specific technical expertise we put effort into educating, training and retaining talent. In addition we promote initiatives that encourage young people to study science, technology and engineering. See Management Board Report - People.

Risk Factors

In conducting our business, we face many risks that may interfere with our business objectives. It is important to understand the nature of these risks and the impact they may have on our business, financial condition and results of operations. Some of the more relevant risks are described below. These risks are not the only ones that we face. Some risks may not yet be known to us and certain risks that we do not currently believe to be material could become material in the future.

Our business will suffer if we or the industry do not respond rapidly to commercial and technological changes in the semiconductor industry

Our success in developing new products and in enhancing our existing products depends on a variety of factors, including the successful management of our and our suppliers' R&D programs and the timely and successful completion of product development and design relative to competitors. If the technologies that we pursue to assist our customers in producing smaller and more efficient chips are not as effective as those developed by current or new competitors, or if our customers adopt new technological architectures that are less focused on lithography products, this may adversely affect our business, financial condition and results of operations. The success of our EUV technology, which we believe is critical for keeping pace with Moore's Law, which postulates that the number of transistors on a chip doubles approximately every 24 months at equivalent costs, remains dependent on continuing technical advances by us and our suppliers. We invest considerable financial and other resources to develop and introduce new products and product enhancements, and if we are not successful in developing products that are adopted by customers, we may not recoup the significant investments we have made in such products or enhancements, including in EUV and Holistic Lithography. High-NA, in particular, which is a further extension of our EUV technology, requires significant resources for its R&D. If we are unsuccessful in developing High-NA or if competitors successfully introduce alternative technologies or processes, this could impact our business and we may be unable to recoup some or all of the investments that we have made, which could have a material adverse effect on our business, financial condition and results of operations.

We may incur increased costs related to inventory obsolescence, as a result of technological changes. Such inventory obsolescence costs may be higher with our newer technology products.

Due to increased complexity of our systems or alternative technologies, our customers may purchase existing technology systems rather than new leading-edge systems or may delay their investment in new technology systems to the extent that such investment is not economical or required given their product cycles. Some of our customers have experienced delays in implementing their product roadmaps, which increases the risk of a slowing down of the overall transition period (or cadence) for introduction of new systems and lengthening the period for a return on our investments.

We are also dependent on our suppliers to maintain their development roadmaps to enable us to introduce new technologies on a timely basis, and if they are unable to keep pace whether due to technological factors, lack of financial resources or otherwise, this could prevent us from meeting our development roadmaps, which could have a material adverse effect on our business, financial condition and results of operations.

The success of new product introductions is uncertain and depends on our ability to successfully execute our R&D programs

Our lithography systems have become increasingly complex, and accordingly, the costs and time period to develop new products and technologies have increased, and we expect such costs and time period to continue to increase. In particular, developing new technology including a multi e-beam innovation as part of our Holistic Lithography solutions and EUV technology (including High-NA) requires significant R&D investments by us and our suppliers in order to meet our and our customers' technology demands. Our suppliers may not have, or may not be willing to invest in, the resources necessary to continue the development of the new technologies to the extent such investments are necessary, which may result in our contributing funds to such R&D programs or limiting the R&D investments that we can undertake. Furthermore, if our R&D programs are not successful in developing the desired new technology, our business, financial condition and results of operations could be materially and adversely affected.

We face challenges in managing industrialization of our products and bringing them to high volume production which could impact profitability

Bringing our products to high volume production at a value-based price and in a cost effective manner, depends on our ability to manage the industrialization of our products. Customer acceptance of our products depends on performance of our systems in the field. As our systems become more complex, the risk that our systems may not perform according to specifications or quality standards increases. If quality or performance issues arise, they may result in additional costs and may damage our reputation and reduce demand for our products. In particular, with respect to EUV, there are a number of development milestones that remain to be met, such as predictable availability and source power.

Transitioning our products to full-scale production also requires the growth of our infrastructure, including enhancing our manufacturing capabilities, increasing supply of components and training qualified personnel. Any delay or potential inability to meet these growth requirements due to manufacturing constraints, delays in our suppliers' development roadmaps, or insufficiently increasing knowhow of our employees, could have a material adverse effect on our business, financial condition and results of operations.

The capability, capacity and costs associated with providing the required customer support function to cover the increasing amount of shipments and servicing a growing number of EUV systems that are operational in the field could affect the timing of shipments and the efficient execution of maintenance, servicing and upgrades, which is key to the systems continuing to achieve the required availability. The build-up of the service organization, its people and the complexity of the technology requirements will take time. It may also mean that we have to extend warranty beyond the agreed standard terms. This may delay the profitability of the service business and could also have a material impact on our reputation and relationships with customers.

We face intense competition

The semiconductor equipment industry is highly competitive. Our competitiveness depends upon our ability to develop new and enhanced semiconductor equipment, related applications and services that are competitively priced and introduced on a timely basis, as well as our ability to protect and defend our intellectual property rights. See Management Board Report - Products and Technology - Knowledge management and Protecting our intellectual property, Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 19 Legal contingencies, and Other Appendices - Appendix - Government Regulation.

We compete primarily with Nikon and Canon in respect of systems. Each of Nikon and Canon has substantial financial resources and broad patent portfolios. Each continues to introduce new products with improved price and performance characteristics that compete directly with our products, which may cause a decline in our sales or a loss of market acceptance for our lithography systems. In particular, we have experienced increased competition from Nikon and Canon in existing technologies such as TWINSCAN XT systems, where end-market demand has increased. In addition, adverse market conditions, industry overcapacity or a decrease in the value of the Japanese yen in relation to the euro or the US dollar, could further intensify price-based competition, resulting in lower prices and margins and lower sales which could have a material adverse effect on our business, financial condition and results of operations. We also compete with providers of applications that support or enhance complex patterning solutions, e.g Applied Materials Inc. and KLA-Tencor Corporation. These applications effectively compete with our Holistic Lithography offering, which has become an increasingly significant part of our business. The competition we face in our applications business may be higher than for our systems, as there are more competitors and potential competitors in this market.

Our production is highly dependent on the performance of a limited number of critical suppliers of single source key components

We rely on outside vendors for components and subassemblies used in our systems including the design thereof, each of which is obtained from a single supplier or a limited number of suppliers. Our reliance on a limited group of suppliers involves several risks, including a potential inability to obtain an adequate supply of required components, reduced control over pricing and the risk of untimely delivery of our products as a result of delays in supply of these components and subassemblies.

The number of lithography systems we are able to produce may be limited by the production capacity of one of our key suppliers, Carl Zeiss SMT GmbH, which is our sole supplier of lenses, mirrors, illuminators, collectors and other critical optical components (which we refer to as optics). If Carl Zeiss SMT GmbH is unable to maintain and increase production levels or if we are unable to maintain our business relationship with Carl Zeiss SMT GmbH in the future we could be unable to fulfill orders, which could damage relationships with current and prospective customers and have a material adverse effect on our business, financial condition and results of operations. If Carl Zeiss SMT GmbH is to terminate its supply relationship with us or if Carl Zeiss SMT GmbH is unable to maintain production of optics over a prolonged period, we would effectively cease to be able to conduct our business. See Management Board Report - Partners - Sustainable relationships with suppliers. In addition to Carl Zeiss SMT GmbH's current position as a supplier of optics, a number of other critical components are available from only a limited number of suppliers. Lead-times in obtaining components have increased as our products have become more complex, and our failure to adequately predict demand for our systems or any delays in the shipment of components can result in insufficient supply of components or, conversely, excess inventory or limiting our capabilities to react quickly to changing market conditions. A prolonged inability to obtain adequate deliveries of components or subassemblies, or any other circumstance that requires us to seek alternative sources of supply, could significantly hinder our ability to deliver our

products in a timely manner, which could damage relationships with current and prospective customers and have a material adverse effect on our business, financial condition and results of operations.

A high percentage of net sales is derived from a few customers

Historically, we have sold a substantial number of lithography systems to a limited number of customers. Customer concentration can increase because of continuing consolidation in the semiconductor manufacturing industry. In addition, although Holistic Lithography constitutes an increasing portion of our revenue, a significant portion of those customers are the same customers as those of our systems. Consequently, while the identity of our largest customers may vary from year to year, sales may remain concentrated among relatively few customers in any particular year. In 2017, recognized net sales to our largest customer accounted for EUR 2,480.8 million, or 27.4 percent of net sales, compared with EUR 1,646.2 million, or 24.2 percent of net sales, in 2016. The loss of any significant customer or any significant reduction in orders by a significant customer may have a material adverse effect on our business, financial condition and results of operations.

Additionally, as a result of our limited number of customers, credit risk on our receivables is concentrated. Our three largest customers (based on total net sales) accounted for EUR 1,356.7 million, or 64.7 percent of accounts receivable and finance receivables on December 31, 2017, compared with EUR 655.3 million, or 51.8 percent on December 31, 2016.

As a result of the foregoing risks, business failure or insolvency of one of our main customers may have a material adverse effect on our business, financial condition and results of operations.

The semiconductor industry is cyclical and we may be adversely affected by any downturn

As a supplier to the global semiconductor industry, we are subject to the industry's business cycles, of which the timing, duration and volatility are difficult to predict. The semiconductor industry has historically been cyclical, and certain key end market customers - Memory and Logic, exhibit different levels of cyclicity and different business cycles. Sales of our lithography systems, services and Holistic Lithography products depend in large part upon the level of capital expenditures by semiconductor manufacturers, which in turn are influenced by industry cycles and a range of competitive and market factors, including semiconductor industry conditions and prospects. Large capital expenditures of our customers also impact the available production capacity of the industry to produce chips thereby creating imbalances in the supply and demand of chips. Reductions or delays in capital expenditures by our customers or incorrect assumptions by us about our customers' capital expenditures could have a material adverse effect on our business, financial condition and results of operations.

Our ability to maintain profitability in an industry downturn will depend substantially on whether we are able to lower our costs and break-even level, which is the level of sales that we must reach in a year to not have negative net income. If sales decrease significantly as a result of an industry downturn and we are unable to adjust our costs over the same period, our net income may decline significantly or we may suffer losses. Furthermore, we have grown in terms of employees, facilities and inventories in recent years, so it may be even more difficult for us to reduce our costs in order to respond to an industry downturn.

We derive most of our revenues from the sale of a relatively small number of products

We derive most of our revenues from the sale of a relatively small number of lithography systems (198 units in 2017 and 157 units in 2016), excluding metrology and inspection systems. As a result, the timing of shipment and recognition of system sales for a particular reporting period from a small number of system sales may have a material adverse effect on our business, financial condition and results of operations in that period.

Failure to adequately protect the intellectual property rights upon which we depend could harm our business

We rely on intellectual property rights such as patents, copyrights and trade secrets to protect our proprietary technology and applications. However, we face the risk that such measures could prove to be inadequate because:

• Intellectual property laws may not sufficiently support our proprietary rights or may change in the future in a manner adverse to us.

• Patent rights may not be granted or interpreted as we expect.

• Patents will expire which may result in key technology becoming widely available that may hurt our competitive position.

• The steps we take to prevent misappropriation or infringement of our proprietary rights may not be successful.

• Third parties may be able to develop or obtain patents for broadly similar or similar competing technology.

In addition, legal proceedings may be necessary to enforce our intellectual property rights, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement. Any such proceedings may result in substantial costs and diversion of management resources, and, if decided unfavorably to us, could have a material adverse effect on our business, financial condition and results of operations.

Defending against intellectual property claims brought by others could harm our business

In the course of our business, we are subject to claims by third parties alleging that our products or processes infringe upon their intellectual property rights. If successful, such claims could limit or prohibit us from developing our technology and manufacturing our products, which could have a material adverse effect on our business, financial condition and results of operations.

In addition, our customers or suppliers may be subject to claims of infringement from third parties, alleging that our products used by such customers in the manufacturing of semiconductor products and / or the processes relating to the

use of our products infringe one or more patents issued to such third parties. If such claims were successful, we could be required to indemnify our customers or suppliers for some or all of any losses incurred or damages assessed against them as a result of such infringement, which could have a material adverse effect on our business, financial condition and results of operations.

We also may incur substantial licensing or settlement costs to potentially strengthen or expand our intellectual property rights or limit our exposure to intellectual property claims of third parties, which could have a material adverse effect on our business, financial condition and results of operations.

From late 2001 through 2004, ASML was a party to a series of civil litigation and administrative proceedings in which Nikon alleged ASML's infringement of Nikon patents generally relating to lithography. ASML in turn filed claims against Nikon. Pursuant to agreements executed on December 10, 2004, ASML and Nikon agreed to settle all pending worldwide patent litigation between the companies. The settlement included an exchange of releases, a patent cross-license agreement related to lithography equipment used to manufacture semiconductor devices, and payments to Nikon by ASML. Under the Nikon Cross-License Agreement, ASML and Nikon granted to each other a non-exclusive license for use in the manufacture, sale, and use of lithography equipment, under their respective patents. The license granted relating to many of the patents of each party was perpetual, but the license relating to certain other of the patents expired at the end of 2009. Each party had the right to select a limited number of the other party's patents where the license for such patents expired in 2009 to be subject to a permanent covenant not to sue in respect of patent infringement claims. In October 2016, the Patent Selection was completed.

In addition, the Nikon Cross-License Agreement provided that following the termination of some of the licenses granted in the Nikon Cross-License Agreement on December 31, 2009, there would be a standstill period during which the parties agreed not to bring patent infringement suits against each other. This standstill period ran from January 1, 2010 through December 31, 2014. Damages resulting from claims for patent infringement occurring during the Cross-License Transition Period are limited to three percent of the net sales price of applicable licensed products including optical components. For more information on the Nikon Cross-License Agreement see Management Board Report - Products and Technology - Knowledge management and Protecting our intellectual property.

In April 2017, Nikon sued ASML in both the Netherlands and Japan, alleging that the manufacture, sale, and / or use by ASML of certain equipment infringes asserted Nikon patents, and requesting both damages and injunctive relief prohibiting the sale or manufacture of such equipment. Nikon also sued in Germany, Carl Zeiss SMT GmbH, a supplier to ASML of components that ASML sells with or as part of certain lithography equipment. Nikon alleges that the manufacture, sale, and / or use of certain of these Carl Zeiss SMT GmbH components infringe asserted Nikon patents, and also seeks damages and an injunction prohibiting Carl Zeiss SMT GmbH from manufacturing or exporting certain components. Certain of these proceedings may result in court judgments during early 2018. Nikon has also initiated proceedings in the United States District Court for the District of Arizona in which Nikon has requested that the court order ASML to provide certain information to Nikon.

In response to Nikon's actions, ASML, in some cases jointly with Carl Zeiss SMT GmbH and / or its affiliates, filed several lawsuits against Nikon both in Japan and in a number of venues in the US, alleging patent infringement of certain patents owned by ASML and / or Carl Zeiss SMT GmbH and / or its affiliates.

We may incur substantial legal fees and costs in connection with these lawsuits, and we may not prevail. Patent litigation is complex and may extend for a protracted period of time, giving rise to the potential for both substantial costs and diverting the attention of key management and technical personnel. Potential adverse outcomes from this or any other patent litigation may include, without limitation, payment of significant monetary damages, injunctive relief prohibiting our sale of products, and / or settlement involving significant costs to be paid by us, any of which may have a material adverse effect on our business, financial condition and / or results of operations. We are unable to predict at this time what its outcome might be, or whether any other patent suit, by Nikon or another third party, may arise.

If Nikon is successful in obtaining injunctive relief prohibiting ASML or Carl Zeiss SMT GmbH from manufacturing, exporting or selling systems or components, this could effectively prohibit ASML from selling some of its systems, and, if Nikon is successful in obtaining a damages award such damages could be significant and could have a material adverse effect on our business, financial condition and results of operations.

A disruption in our information technology systems, including incidents related to cyber security, could adversely affect our business operations

We rely on the accuracy, availability and security of our information technology systems. Despite the measures that we have implemented, including those related to cyber security, our systems could be breached or damaged by computer viruses and systems attacks, natural or man-made incidents, disasters or unauthorized physical or electronic access.

From time to time we experience cyber-attacks on our information technology systems. These attacks are increasing and becoming more sophisticated, and may be perpetrated by computer hackers, cyber terrorists or other corporate espionage. These attacks include malicious software (malware), attempts to gain unauthorized access to data, and other electronic security breaches of our information technology systems as well as the information technology systems of our suppliers, customers and other service providers that have led and could lead to disruptions in critical systems, unauthorized release, misappropriation, corruption or loss of data or confidential information (including confidential information relating to our customers, employees and suppliers). In addition any system failure, accident or security breach could result in business disruption, theft of our intellectual property, trade secrets (including our proprietary technology), unauthorized access to, or disclosure of, customer, personnel or supplier information, corruption of our data or of our systems, reputational damage or litigation. In addition, we may be required to incur significant costs to protect against or repair the damage caused by these disruptions or security breaches in the future.

In addition, from time to time, we implement updates to our information technology systems and software, which can disrupt or shutdown our information technology systems. For example, we are currently implementing a new enterprise-wide management system and infrastructure. We may not be able to successfully integrate and launch these new systems as planned without disruption to our operations. Information technology system disruptions, if not anticipated and appropriately mitigated, could have a material adverse effect on our operations.

We are subject to risks in our international operations

The majority of our sales are made to customers outside EMEA, see our Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 21 Segment disclosure. There are a number of risks inherent in doing business in some of those regions, for example:

• Unfavorable political, geopolitical or economic environments;

• Increased exposure to natural hazards;

• Potentially adverse tax consequences;

• Unexpected legal or regulatory changes;

• Failure to comply with regulatory requirements, including anti-corruption, anti-bribery and human rights standards;

• Our inability to attract and retain sufficiently qualified personnel;

• Our inability to protect our intellectual property and information technology systems; and

• Adverse effects of foreign currency fluctuations.

If we are unable to manage successfully the risks inherent in our international activities, our business, financial condition and results of operations could be materially and adversely affected.

In particular, 23.7 percent of our 2017 total net sales and 30.7 percent of our 2016 total net sales were derived from customers in Taiwan. Taiwan has a unique international political status. The People's Republic of China asserts sovereignty over Taiwan and does not recognize the legitimacy of the Taiwanese government. Changes in relations between Taiwan and the People's Republic of China, Taiwanese government policies and other factors affecting Taiwan's political, economic or social environment could have a material adverse effect on our business, financial condition and results of operations. The risks we face by doing business in Taiwan increased with our acquisition of HMI. Our business in People's Republic of China is expected to increase further, which increases our exposure in international operations. Furthermore, certain of our manufacturing facilities as well as customers are located in South Korea. In particular, 33.9 percent of our 2017 total net sales and 23.3 percent of our 2016 total net sales were derived from customers in South Korea. There are tensions with the Democratic People's Republic of Korea (North Korea), which have existed since the division of the Korean Peninsula following World War II, which have increased significantly over the previous year. The worsening of relations between those countries or the outbreak of war on the Korean Peninsula could have a material adverse effect on our business, financial condition or results of operations. Furthermore, we are increasing our presence in a number of new jurisdictions, including the People's Republic of China and Russia. Our international operations are exposed to risks, including risks relating to compliance with anti-corruption and anti-bribery laws and regulations, attracting and retaining sufficiently qualified personnel, and the protection of our intellectual property and information technology systems. If these risks materialize, they could have a material adverse effect on our business, financial condition or results of operations.

We are dependent on the continued operation of a limited number of manufacturing facilities

All of our manufacturing activities, including subassembly, final assembly and system testing, take place in cleanroom facilities in Veldhoven, the Netherlands, in Wilton, Connecticut and in San Diego, California, both in the US, in Pyeongtaek, South-Korea, in Beijing, China, in Linkou and Tainan, Taiwan. These facilities may be subject to disruption for a variety of reasons, including work stoppages, fire, energy shortages, flooding or other natural disasters. We cannot ensure that alternative production capacity would be available if a major disruption were to occur. In addition, some of our key suppliers, including Carl Zeiss SMT GmbH, have a limited number of manufacturing facilities, the disruption of which may significantly and adversely affect our production capacity.

Our business and future success depend on our ability to attract and retain a sufficient number of adequately educated and skilled employees

Our business and future success significantly depends upon our employees, including a large number of highly qualified professionals, as well as our ability to attract and retain employees. Competition for such personnel is intense

and has increased in recent years, and we may not be able to continue to attract and retain such personnel. Our R&D programs require a significant number of qualified employees. If we are unable to attract sufficient numbers of qualified employees, this could affect our ability to conduct our R&D on a timely basis, which could adversely affect our business, financial condition and results of operations.

In addition, if we lose key employees or officers to retirement, illness or otherwise, particularly a number of our highly qualified professionals and / or senior management, we may not be able to timely find a suitable replacement. Moreover, as a result of the uniqueness and complexity of our technology, qualified engineers capable of working on our systems are scarce and generally not available (e.g. from other industries or companies). As a result, we must educate and train our employees to work on our systems. Therefore, a loss of a number of key professionals and / or senior management can be disruptive, costly and time consuming. Our R&D activities with respect to new technology systems, such as EUV and High NA, and our service activities have increased our need for qualified personnel. Competition for qualified personnel is particularly significant in the area surrounding our headquarters in Veldhoven, the Netherlands and in the other regions where our facilities are located, where a number of high technology companies are located.

Furthermore, the increasing complexity of our products results in a longer learning-curve for new and existing employees and suppliers leading to an inability to decrease cycle times and may result in the incurrence of significant additional costs.

Our suppliers face similar risks in attracting qualified employees, including attracting employees in connection with R&D programs that will support our R&D programs and technology developments. To the extent that our suppliers are unable to attract qualified employees, this could adversely affect our business, financial condition and results of operations.

Fluctuations in foreign exchange rates could harm our results of operations

We are exposed to currency risks. We are particularly exposed to fluctuations in the exchange rates between the US dollar, Japanese yen and the euro, as we incur costs of sales predominantly in euros with portions of our net sales and cost of sales also denominated in US dollars.

In addition, a portion of our sales and costs are denominated in US and Taiwanese dollars, particularly following our acquisitions of Cymer in 2013 and HMI in 2016, and a small portion of our operating results are denominated in currencies other than the euro and the US or Taiwanese dollar. Our Financial Statements are expressed in euros. Accordingly, our results of operations are exposed to fluctuations in exchange rates between the euro and such other currencies, and changes in currency exchange rates can result in losses in our Financial Statements. In general, our customers generally run their businesses in US dollars and therefore a weakening of the US dollar against the euro might impact the ability or desire of our customers to purchase our products at quoted prices.

Changes in taxation could affect our future profitability

We are subject to income taxes in the Netherlands and numerous other jurisdictions. Our effective tax rate has fluctuated in the past and may fluctuate in the future.

Changes in tax legislation in the countries where we operate can affect our effective tax rate. For example, in 2012 the OECD has embarked on a project to propose measures against so called Base Erosion and Profit Shifting or BEPS. Based on the BEPS reports the EU has proposed directives to counter base erosion and profit shifting which in turn will result in legislative proposals in EU member states. Similar legislative initiatives inspired by the BEPS reports have been taken in Asian jurisdictions in which ASML operates. Anticipating these legislative initiatives, ASML has implemented and will implement changes in its business flows to align ASML business flows with these anticipated initiatives.

In addition, in October 2017, the newly elected Dutch government issued a coalition agreement in which they outlined, among others, their tax policies for the next four years, which included an increase in the effective innovation box tax rate and a reduction in the general corporate income tax rate over a number of years. Furthermore, in December 2017, the US President signed the Tax Cuts and Jobs Act which significantly changed the US income tax code.

These initiatives have lead to substantial changes to tax legislation in the countries in which ASML operates. We currently expect only a minor tax effect but we are continuing to assess the impact of those initiatives.

Changes to tax legislation of jurisdictions ASML operates in, may adversely impact ASML's tax position and consequently our net income. In addition, jurisdictions levy corporate income tax at different rates. The distribution of our systems sales over the various jurisdictions in which we operate may vary from year to year, resulting in a different mix of corporate income tax rates applicable to our profits, which can affect the world wide effective tax rate

for ASML.

ASML INTEGRATED REPORT 2017 53

Hazardous substances are used in the production and operation of our systems and failure to comply with applicable regulations or failure to implement appropriate practices for the environment, health and safety could subject us to significant liabilities

Hazardous substances are used in the production and operation of our products and systems, which subjects us to a variety of governmental regulations relating to environmental protection and employee and product health and safety, including the transport, use, storage, discharge, handling, emission, generation, and disposal of toxic or other hazardous substances. In addition, operating our systems (which use lasers and other potentially hazardous systems) can be dangerous and can result in injury. The failure to comply with current or future regulations could result in substantial fines being imposed on us or other adverse consequences. Additionally, our products have become increasingly complex. The increasing complexity requires us to invest in continued risk assessments and development of appropriate preventative and protective measures for health and safety for both our employees (in connection with the production and installation of our systems) and our customers' employees (in connection with the operation of our systems). There can be no assurance that our health and safety practices we develop will be effective in mitigating all health and safety risks. Failing to comply with applicable regulations or the failure of our implemented practices for customer and employee health and safety could subject us to significant liabilities, which could have a material adverse effect on our business, financial condition and results of operations.

In addition, we face risks related to the global transition to a lower carbon economy and / or climate change. Such risks may result in an increase in our cost of goods, including as a result of the imposition of carbon taxes or increased regulations on technology restrictions, which could have a material adverse effect on our business, financial condition and results of operations.

We may be unable to make desirable acquisitions or to integrate successfully any businesses we acquire

Our future success may depend in part on the acquisition of businesses or technologies intended to complement, enhance or expand our current business or products or that might otherwise offer us growth opportunities. Our ability to complete such transactions may be hindered by a number of factors, including potential difficulties in obtaining government approvals.

Any acquisition that we do make would pose risks related to the integration of the new business or technology with our business. We cannot be certain that we will be able to achieve the benefits we expect from a particular acquisition or investment. Acquisitions may also strain our managerial and operational resources, as the challenge of managing new operations may divert our management from day-to-day operations of our existing business. Our business, financial condition and results of operations may be materially and adversely affected if we fail to coordinate our resources effectively to manage both our existing operations and any businesses we acquire.

In addition, in connection with acquisitions, anti-trust regulators have in the past and may in the future impose conditions on us, including requirements to divest assets or other conditions that could make it difficult for us to integrate the businesses that we acquire. Furthermore, as the industry is becoming more consolidated, anti-trust clearances may become harder to obtain, which could inhibit future desired acquisitions.

We may also face challenges with integrating any business we acquire into our organization.

As a result of acquisitions, we have recorded, and may continue to record, a significant amount of goodwill and other intangible assets. Under current accounting guidelines, we must assess, at least annually and potentially more frequently, whether there are indicators that the value of goodwill and indefinite-lived other intangible assets have been impaired. Furthermore, we have recorded our indirect interest in Carl Zeiss SMT GmbH as an equity method investment and, therefore, we must assess in each reporting period whether there are triggers that cause this investment to be impaired. Any reduction or impairment of the value of our indirect investment in Carl Zeiss SMT GmbH, goodwill or other intangible assets will result in additional charges against earnings, which could materially reduce our reported results of operations in future periods.

We may not declare cash dividends and conduct share buyback programs at all or in any particular amounts in any given year

We aim to pay an annual dividend that will be stable or growing over time. Annually, the BoM will, upon prior approval from the SB, submit a proposal to the AGM with respect to the amount of dividend to be declared with respect to the prior year. In addition, as part of our plan to return excess cash to shareholders, we conduct share

buyback programs from time to time. The dividend proposal and amount of share buyback programs in any given year will be subject to the availability of distributable profits or retained earnings and may be affected by, among other factors, the BoM's views on our potential future liquidity requirements, including for investments in production capacity, the funding of our R&D programs and for acquisition opportunities that may arise from time to time; and by future changes in applicable income tax and corporate laws. We may also suspend buyback programs from time to time which would reduce the amount of cash we are able to return to shareholders. Accordingly, the BoM may decide to propose not to pay a dividend or pay a lower dividend and may adjust the amount of share buyback programs with respect to any particular year in the future, which could have a negative effect on our share price.

Restrictions on shareholder rights may dilute voting power

Our Articles of Association provide that we are subject to the provisions of Dutch law applicable to large corporations, called "structuurregime". These provisions have the effect of concentrating control over certain corporate decisions and transactions in the hands of our SB. As a result, holders of ordinary shares may have more difficulty in protecting their interests in the face of actions by members of our SB than if we were incorporated in the US or another jurisdiction.

Our authorized share capital also includes a class of cumulative preference shares and we have granted Stichting Preferente Aandelen ASML, a Dutch foundation, an option to acquire, at their nominal value of EUR 0.09 per share, such cumulative preference shares. Exercise of the Preference Share Option would effectively dilute the voting power of our outstanding ordinary shares by one-half, which may discourage or significantly impede a third party from acquiring a majority of our voting shares.

See Corporate Governance - Board of Management and Supervisory Board, and Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 26 Shareholders' equity.

Materiality Assessment

Dialogue and sharing knowledge are important in all areas of an innovation-driven industry, and to that end, we continually and openly communicate with our main stakeholder groups through various channels, see Non-Financial Statements - Stakeholder Engagement and at different levels within our organization. We also analyze global trends, risks and opportunities. ASML's materiality analysis uses all of this input to identify the issues that matter most to our stakeholders and to our business, which in turn contributes to our company vision, mission and strategy.

We define our stakeholders as those parties affected by our activities or those who have a direct interest in or who can influence our company's long-term business success. We have identified 5 main stakeholder groups: customers, shareholders, employees, suppliers and society.

In 2016 we performed a new comprehensive materiality assessment, considering the four GRI G4 principles for defining report content to re-assess the topics that are most important to our stakeholders and to sustain ASML's long-term business growth. We based our materiality analysis on stakeholder feedback, a review of the industry and global trends that may affect us, relevant legislation, guidelines and standards (such as the GRI G4 and ISO 26000), a sector and media analysis, and analysts' questionnaires (such as the Dow Jones Sustainability Index assessment and the Carbon Disclosure Project). This led to a list of relevant topics. To weigh the impact of each of these topics on ASML and our stakeholders, we discussed them with the most relevant internal stakeholders and surveyed representatives from all five stakeholder groups. The results of the assessment were validated and approved by our Corporate Risk Committee.

We identified 11 material themes that are most relevant to our stakeholders and directly contribute to our potential to innovate and excel. We also identified other issues that could affect our business. These include issues our stakeholders expect us to act on or issues that we have an impact on and therefore, as a company with a strong sense of corporate social responsibility, feel we need to address. These issues have been categorized under the 'Responsible business behavior themes'. Each theme is the responsibility of one of our senior managers (referred to as the 'theme owner'). The theme owner monitors progress for this theme in relation to agreed targets and ensures there are sufficient resources to meet the agreed targets and objectives. Insufficient progress is discussed during operational performance review meetings and escalated to our Corporate Risk Committee or during other relevant committee meetings where necessary.

We reviewed our material themes in 2017 and concluded that 2 specific focus areas should be emphasized: cyber security, see Management Board Report - Risk Factors - A disruption in our information technology systems, including incidents related to cyber security, could adversely affect our business operations and privacy, see Management Board Report - People - Human rights and labor relations. In our ongoing efforts to maximize the social and environmental impact of our products and activities, we also identified two specific areas for further investigation: the energy efficiency of our products, see Management Board Report - Products and Technology - Product stewardship and strengthening our support of the innovation eco-system, see Management Board Report - People - Community involvement.

Sustainable Development Goals

We also support the 2030 ambition defined in the United Nations Sustainable Development Goals adopted by the United Nations in 2015. These goals aim to protect the planet and improve the lives of people everywhere. We have mapped out how our strategy and current efforts actively support these goals and the table below outlines the five most relevant United Nations Sustainable Development Goals to which we contribute.

Relevant United Nations Sustainable Development Goal	ASML Theme	Contribution to the United Nations Sustainable Development Goal	Section in this report
Ensure inclusive and quality education for all and promote lifelong learning	Talent management		• People
	Community involvement	• People development & training • Technology promotion program & ASML Foundation Technical training	• People
	• Knowledge management		• Products & Technology
Promote inclusive and sustainable economic growth, employment and decent work for all	Sustainable relationship with suppliers		• Partners
	Responsible supply chain	• Co-development with business critical suppliers Responsible Business Alliance (formerly Electronic Industry Citizenship Coalition) membership • Place to Work, Meet, Learn and Share Employment creation	• Partners • People
	• Sustainable relationship with our people		• Highlights
Build resilient infrastructure, promote sustainable industrialization and foster innovation	Innovation		Products & Technology
	• Knowledge management • Community involvement	• ASML's 'open innovation' concept • Knowledge creation and sharing • Strengthening local knowledge infrastructure	• How We Create Value • People
Ensure sustainable consumption and production patterns	• Product stewardship		• Products & Technology
	• Environmental efficiency own operations	• Circular economy approach • Waste savings	• Operations
Take urgent action to combat climate change and its impacts	• Product stewardship	• Energy efficiency products	• Products & Technology

- Environmental efficiency own operations

- Renewable electricity

- Operations

This Report focuses on the material themes which we disclose in a comprehensive manner. However, we also want to meet our stakeholders' expectations, so for our responsible business behavior themes we seek to address the elements that especially interest them. This results in themes being addressed in different detail.

Business Ethics and Compliance

In an international company like ours, with employees from over 100 different countries and a range of cultural backgrounds, it is crucial to provide clear guidance on ethical behavior. We do this through our Code of Conduct and Business Principles and our Ethics Program. We encourage our management to set the right example and create an environment in which our people and business partners feel comfortable to speak up if they experience or suspect a breach of our Code of Conduct and Business Principles. As a member of the Responsible Business Alliance (formerly known as Electronic Industry Citizenship Coalition), we adhere to this industry organization's code of conduct and integrate its norms and values into our way of working. We are committed to achieving our strategic goals while conducting business in such a way that lawful, ethical and sound practices are ensured.

ASML's Ethics Board, chaired by our CEO, oversees and implements our Ethics Program. The corporate Ethics Office, led by our Corporate Ethics Officer, is responsible for implementing and monitoring this Ethics Program. The program consists not only of providing computer based trainings on ethics, but also enrolls global classroom trainings throughout all layers of the company. In addition, the Ethics Office uses various other means of communication to reach out to employees, such as the yearly ethics week. The Ethics Office also actively promotes our company's Speak Up policy and encourages employees to report any concerns relating to misconduct or suspected misconduct. As part of the Speak Up implementation, great efforts have been made and will continue to be made to further strengthen the global Ethics Liaisons network. Our ethics organization also includes ASML employees who act as Ethics Liaisons in all the countries we operate in. Ethics Liaisons are the trusted points of contact for each local office, offering advice on ethical issues and answering questions from colleagues.

Our Compliance Office, led by our Chief Compliance Officer, oversees, advises, monitors and supports ASML management in complying with laws, regulations and corporate policies. Although the Compliance Office is part of our legal department, it is integrated into the enterprise risk management framework and control system as applied by our Corporate Risk Management function. It is governed by the Corporate Risk Committee. We rely on the integrity and accountability of our senior management to comply with the laws. Our Chief Compliance Officer supports and advises the business in implementing measures to help managers fulfill their responsibilities.

Our Business Principles elaborate on our Code of Conduct and give employees greater clarity about the standards we expect them to follow and the behavior they should adopt. We update our code and principles whenever required to incorporate the latest legal and regulatory requirements. No changes were made in 2017. Our Code of Conduct and Business Principles can be found in the Governance section of our Website.

Our whistleblower Speak Up policy and our internal Ethics Investigation Procedure outline the steps employees are encouraged to take if they experience or suspect a breach of our business ethics. These documents also reassure employees that they can report a breach without fear of repercussions. For employees or external stakeholders who feel more comfortable remaining anonymous, we have a Speak Up system, which is run by an independent external service company. Like our Code of Conduct and Business Principles, our Speak Up policy is available on our Website for external stakeholders.

In 2017, we registered 230 Speak Up messages made by employees. The highest number of these Speak Up messages were related to our business principle 'We respect people and planet', more specifically these concerned issues such as bullying, harassment, problems with style and language of communication and HR related topics (appraisal, demotion, compensation and benefits). Other queries related to our business principle 'We operate with integrity', mostly in the form of questions (am I allowed to accept or give away) but we also received Speak Up messages relating to employees (potentially) crossing the line of what is acceptable, as well as potential conflicts of interest. We have looked into and addressed all Speak Up messages.

The increase in Speak Up messages compared to last year is mainly due to the growth of our workforce, an increase in awareness of our policy and a growing familiarity with the procedure for raising issues due to the specific worldwide efforts of the Corporate Ethics Office.

As in previous years, we did not incur any significant fines for breaches of ethical regulations.

Our global ethics awareness week in 2017 focused on raising awareness on diversity & inclusion and anti-discrimination, work-place harassment, and the right to privacy. We invited external speakers to give presentations on bullying and diversity. Managers also held sessions with their teams where they watched a video about these topics and discussed how to deal with any related issues. We started a review of our fraud policy in 2017 and highlighted fraud prevention, like the misuse of expenses reimbursements, in our ethics training sessions.

With respect to compliance, we continued our efforts to reduce the risk of bribery and corruption, with a particular focus on expanding our awareness measures in key geographical areas and business sectors. In addition, we moved the anti-bribery and corruption program into the Legal department under the Chief Compliance Officer. We will continue to provide in-depth training to each of our employees and provide enhanced training to those conducting business in higher risk countries, i.e. countries with a high ranking for corruption on the Transparency International Corruption Index.

Supervisory Board

Gerard J. Kleisterlee (1946, Dutch)

Member of the SB since 2015; first term expires in 2019

Chairman of the SB, Chairman of the Selection and Nomination Committee and member of the Technology Committee

Mr. Kleisterlee was the President and CEO of the Board of Management of Royal Philips N.V. from 2001 until 2011, after having worked at Philips from 1974 onwards.

Currently, Mr. Kleisterlee is the Chairman of the Board of Vodafone Group Plc. and Non-Executive Director of Royal Dutch Shell Plc.

Antoinette (Annet) P. Aris (1958, Dutch)

Member of the SB since 2015; first term expires in 2019

Member of Technology Committee and Remuneration Committee

Ms. Aris is Adjunct Professor of Strategy at INSEAD, France, a position she has held since 2003.

From 1994 to 2003 Ms. Aris was a partner at McKinsey & Company in Germany.

Currently, Ms. Aris is a Non-Executive Director of Thomas Cook Plc. and a member of the supervisory boards of ProSiebenSat.1 AG, Jungheinrich AG and ASR Nederland N.V.

Clara (Carla) M.S. Smits-Nusteling (1966, Dutch)

Member of the SB since 2013; second term expires in 2021

Chairperson of the Audit Committee

Ms. Smits-Nusteling was CFO and a member of the Board of Management of Royal KPN N.V. from 2009 until 2012.

Prior to that, Ms. Smits-Nusteling held several finance and business related positions at Royal KPN N.V. and PostNL.

Currently, Ms. Smits-Nusteling is a Non-Executive Director of the Board of Tele2 AB, a member of the Management Board of the Foundation Unilever N.V. Trust Office, Non-Executive Director of the Board of Directors of Nokia Corporation and lay judge of the Enterprise Court of the Amsterdam Court of Appeal.

Douglas A. Grose (1950, American)

Member of the SB since 2013, second term expires 2021

Vice Chairman of the SB, Chairman of the Technology Committee and member of the Selection and Nomination Committee

Mr. Grose was CEO of GlobalFoundries from 2009 until 2011.

Prior to that, Mr. Grose served as senior vice president of technology development, manufacturing and supply chain for Advanced Micro Devices, Inc. Mr. Grose also spent 25 years at IBM as General Manager of technology development and manufacturing for the systems and technology group.

Currently, Mr. Grose is a member of the Board of Directors of SBA Materials, Inc.

Johannes (Hans) M.C. Stork (1954, American)
Member of the SB since 2014; first term expires in 2018

Member of the Technology Committee and the Remuneration Committee

Mr. Stork is Senior Vice President and CTO of ON Semiconductor Corporation, a position he has held since 2011. Prior to that, Mr. Stork held various management positions at IBM Corporation, Hewlett Packard Company, Texas Instruments, Inc. and Applied Materials, Inc., including Senior Vice President and CTO of Texas Instruments, Inc. and Group Vice President and CTO of Applied Materials, Inc. Further, Mr. Stork was a member of the Board of Sematech.

Currently, Mr. Stork is a member of the Scientific Advisory Board of imec.

Pauline F.M. van der Meer Mohr (1960, Dutch)
Member of the SB since 2009; third term expires in 2018

Member of the Audit Committee and Selection and Nomination Committee

Ms. Van der Meer Mohr was President of the Executive Board of the Erasmus University Rotterdam, the Netherlands from 2010 up until and including 2015.

Prior to that, Ms. Van der Meer Mohr was managing partner of the Amstelbridge Group, Senior Executive Vice President at ABN AMRO Bank, Head of Group Human Resources at TNT N.V., and has held several senior executive roles at the Royal/Dutch Shell group of companies in various areas.

Currently, Ms. Van der Meer Mohr is the Chairperson of the supervisory board of EY Netherlands LLP, a member of the supervisory board of Royal DSM N.V., Non-Executive Director of HSBC Holdings Plc, and Chairperson of the supervisory board of Nederlands Danstheater.

Rolf-Dieter Schwalb (1952, German)
Member of the SB since 2015; first term expires in 2019

Chairman of the Remuneration Committee and member of the Audit Committee

Mr. Schwalb was CFO and member of the Board of Management of Royal DSM N.V. from 2006 to 2014.

Prior to that, Mr. Schwalb was CFO and member of the Executive Board of Beiersdorf AG and he held a variety of management positions in Finance, IT and Internal Audit at Beiersdorf AG and Procter & Gamble Co.

Wolfgang H. Ziebart (1950, German)
Member of the SB since 2009; third term expires in 2019

Member of the Technology Committee and the Remuneration Committee

Mr. Ziebart was President and CEO of Infineon Technologies A.G. from 2004 until 2008.

Prior to that, Mr. Ziebart was on the Boards of Management of car components manufacturer Continental A.G. and automobile producer BMW A.G.

Currently, Mr. Ziebart is the Chairman of the supervisory board of Nordex SE and a member of the Board of Autoliv, Inc.

Company Secretary : Mr. Robert F. Roelofs

Appointed : 2002

Deputy Company Secretary : Ms. Angela J.F.M. van de Kerkhof

Appointed : 2017

Introduction

As ASML's Supervisory Board we aspire to live up to the highest standards of corporate governance. We focus on the long term and on sustainable value creation, always acting in the best interests of the company and all its stakeholders. We do so by ensuring that our company pursues a strategy that secures our position in the industry, with the right people and policies in place for successful implementation of the company's strategy. We uphold an appropriate system of checks and balances, provide oversight, evaluate performance and give advice where required. ASML is fully compliant with the revised Dutch Corporate Governance Code, which came into effect on January 1, 2017. In this Supervisory Board Report, we report on our activities in 2017 and provide the information required by the Dutch Corporate Governance Code.

Characterized by significant growth, 2017 was a very good year for ASML. It was the breakthrough year for our EUV technology. We shipped a total of 10 EUV systems to all of our major customers, showing that the industry has turned the corner towards using EUV in high-volume microchip production. We also made strides in the integration of HMI, launching the first product jointly developed with the engineering team of this pattern verification specialist which we acquired in 2016. With the strong support of our customers we approved an ambitious product development program for EUV High NA that will further enable the continuation of Moore's Law well into the next decade. In this context we took our cooperation with Carl Zeiss AG a step further, acquiring a 24.9 percent indirect interest in our strategic supplier Carl Zeiss SMT GmbH. All of this puts us well on track towards achieving our stated 2020 ambitions. Strong growth in a demanding high technology industry, however, is also very demanding on our people and organization and therefore we spent a significant part of our meetings with management discussing organizational development and future leadership requirements. We started a project for leadership assessment and development for our top 100 to ensure we have the bench strength required for the continuation of our successful journey. While we still have many technological and organizational hurdles to overcome, we are confident that ASML is very well positioned for the future.

Activities in 2017

In 2017, the SB discussed at length ASML's corporate strategy, including its implementation and translation thereof into Corporate Priorities. EUV, DUV, Holistic Lithography and High-NA, were extensively reviewed and discussed throughout the year. With respect to EUV, the SB provided the BoM with support and advice relating to the further development of this technology as well as its industrialization. In DUV, the SB supported the BoM in its activities to further increase competitiveness and operational excellence. The growing pattern fidelity control business, including Holistic Lithography, was another topic to which the SB devoted a substantial amount of attention. This included monitoring the integration of HMI. The SB also reviewed the High-NA program from a technological and a commercial perspective, as well as the cooperation with Carl Zeiss SMT GmbH in this area.

A recurring item on the SB agenda is a review of the developments in the semiconductor market and in the customer domain, financial performance and the development of ASML's share price and analyst perceptions.

Other topics addressed by the SB were the annual budget and the quarterly results and accompanying press releases, as well as the outcomes of the year-end US GAAP and IFRS-EU audits. The SB reviewed the financing of ASML, including the long term financial plan and ASML's capital return policy and approved the BoM's dividend proposal as submitted to the AGM in 2017. The SB also provided advice to the BoM in relation to the share buyback program, which was resumed in the third quarter of 2017 after having been paused since July 20, 2016. The SB also reviewed ASML's annual and interim financial statements, including non-financial information, prior to publication thereof. A substantial amount of attention was paid to a review of ASML's risk landscape and the risk appetite as well as the risk mitigation measures taken. Part of a significant review on our risk management approach were the assessment and mitigation of supply chain related risks, as well as ASML's quality program.

Furthermore, the SB looked into ASML's organizational structure, which was extensively reviewed in light of the rapid growth of the company. People development was also a recurring agenda item in the SB meetings. In 2017, a detailed review was performed with regard to talent management and succession planning for the BoM and senior management.

Corporate responsibility strategy was another topic discussed by the SB. This included actions implemented or to be implemented to achieve sustainability targets set with respect thereto. Corporate responsibility was also addressed in

the SB's Remuneration Committee as it is a long-term qualitative target for the BoM. Corporate governance developments were also discussed by the SB in 2017. This included a discussion on ASML's implementation of the new Dutch Corporate Governance Code. The SB also closely followed the developments in the legal proceedings between ASML and Nikon.

In 2017, a delegation of the SB met with the Works Council twice in formal meetings. The topics of these meetings generally focused on the strategy and the overall performance of ASML, particularly in EUV, the composition of the SB and the BoM, the Remuneration Policy for the BoM, the alignment of remuneration policies for senior management and the job grades below that level, company culture, and our strategy and business-development process. Other topics included our values and culture, and long-term value creation. Finally, the SB and the Works Council reflected on their cooperation over the past years, as the Works Council's term of office ended in October 2017.

An SB delegation and the Works Council also discussed the process of finding a successor for Ms. Van der Meer Mohr, who will step down per the 2018 AGM and for whose position the Works Council has an enhanced right of recommendation.

Meetings and Attendance

In 2017, the SB held 8 meetings. Of these meetings, 4 were held at the Veldhoven headquarters, 1 was an off-site meeting focused on strategy and 3 meetings were held via telephone conference. Besides these formal meetings and calls, there were several informal meetings and telephone calls among SB and/or BoM members.

The SB meetings and the SB committee meetings are held over several days, ensuring there is time for review and discussion. At each meeting, the SB members discuss among themselves the goals and outcome of the meeting, as well as topics such as the functioning and composition of the SB and the BoM.

The SB meetings and the meetings of the 4 SB committees were well attended. See table below for a full overview of SB members' meeting attendance.

Most BoM members were present for the SB meetings. Besides the formal meetings, SB members were in regular contact with the BoM and its individual members.

Supervisory Board members' meeting attendance

SB member	SB Audit Committee	Remuneration Committee	Selection and Nomination Committee	Technology Committee
Annet Aris	8/8 n/a	5/5	n/a	5/5
Douglas Grose	8/8 n/a	n/a	4/4	5/5
Gerard Kleisterlee ¹	8/8 7/9	n/a	4/4	5/5
Pauline van der Meer Mohr	7/8 8/9	n/a	4/4	n/a
Hans Stork	7/8 n/a	5/5	n/a	5/5
Rolf-Dieter Schwalb	8/8 9/9	5/5	n/a	n/a
Carla Smits-Nusteling	8/8 9/9	n/a	n/a	n/a
Wolfgang Ziebart	8/8 n/a	5/5	n/a	5/5

¹ Mr. Kleisterlee is not a member of the Audit Committee, but attends the Audit Committee meetings whenever possible.

For further details on the structure, organization and responsibilities of the SB, see Corporate Governance - Supervisory Board.

Composition, Diversity and Independence

To ensure an appropriate and balanced composition of the SB, the SB spends considerable time discussing its (future) composition as well as its rotation schedule on an ongoing basis. The SB attaches great importance to its composition, independence and diversity in the broadest possible sense and strives to meet all the associated guidelines and requirements. We believe that all current members of the SB are fully independent as defined by the Dutch Corporate Governance Code. The current composition of ASML's SB is diverse in terms of gender, nationality, knowledge, experience and background. It also meets the Dutch statutory requirements aimed at ensuring a balanced representation of men and women. The SB has formulated a diversity policy which is included in the Profile of the Supervisory Board as published on the Website.

In 2017 no new SB members were appointed. Per the 2017 AGM, the second SB terms of Ms. Van der Meer Mohr and Mr. Ziebart ended, as did the first terms of Ms. Smits-Nusteling and Mr. Grose. Ms. Van der Meer Mohr was

nominated for reappointment because of her contribution to the SB, especially in the field of human resources, employee participation and with respect to audit and management development matters, as well as because of the preference the Works Council expressed with respect to her nomination. Mr. Ziebart was nominated for reappointment particularly because he proved himself to be a valuable contributor to the SB given his background and experience in various industries, including the semiconductor industry, and in various roles. In view of the rotation schedule, Ms. Van der Meer Mohr was appointed for a third term of 1 year and Mr. Ziebart was appointed for a third term of 2 years. Ms. Smits-Nusteling and Mr. Grose were both reappointed for a second term of 4 years.

Per the 2018 AGM, Ms. Van der Meer Mohr and Mr. Stork will retire by rotation. Ms. Van der Meer Mohr announced that she would not be available for reappointment. Mr. Stork has informed the SB that he is available for reappointment and the SB intends to propose to the General Meeting of Shareholders to reappoint Mr. Stork.

For further information and background on the members of the SB, including details on nationality, gender and age, please see the SB members' information in Supervisory Board Report - Supervisory Board.

Evaluation

The SB greatly values the structural and ongoing evaluation process as a means of ensuring continuous improvement of our way of working. Each year, the SB, assisted by the Selection and Nomination Committee, evaluates the composition, competence and functioning of the SB and its committees, the relationship between the SB and the BoM, its committees, its individual members, the chairpersons of both the SB and the committees, as well as the composition and functioning of the BoM and its individual members, and the education and training needs for the SB and BoM members. The SB conducted its annual self-assessment at the end of 2017. The self-evaluation was carried out by means of a web-based survey, as well as by one-on-one meetings between the SB Chairman and the individual members. The results of the self-evaluation were discussed at the start of 2018. This led to the conclusion that the SB continues to function well; some recommendations were made to further improve the effectiveness of the discussion in the boardroom; these recommendations will be implemented in the course of 2018.

The BoM also conducted a self-evaluation in 2017, focusing on the functioning of the BoM collectively as well as on the functioning of the individual BoM members. This self-evaluation was performed with the assistance of an external adviser, who conducted interviews with each of the BoM members. Furthermore, the BoM discussed its functioning in a meeting especially set up for this purpose. The conclusion of the self-evaluation was that ASML has a well-functioning BoM; some suggestions were made in relation to the effectiveness of the BoM meetings. These recommendations will be implemented in 2018.

Supervisory Board Committees

For information on the roles and responsibilities of the SB committees, see Corporate Governance - Supervisory Board - Composition and role of the four committees of the Supervisory Board.

Audit Committee

The current members of the Audit Committee are Ms. Smits-Nusteling (Chairperson), Ms. Van der Meer Mohr and Mr. Schwalb. The Chairman of the SB attends the Audit Committee meetings whenever possible. The members of the Audit Committee are all independent members of the SB. The SB has determined that both Ms. Smits-Nusteling and Mr. Schwalb qualify as an Audit Committee financial expert pursuant to Section 407 of the Sarbanes-Oxley Act and the rules promulgated thereunder, taking into consideration their extensive financial backgrounds and experience. The Audit Committee held 9 meetings in 2017.

The Audit Committee's focus in 2017 was, among other things, overseeing the integrity and quality of our financial reporting and the effectiveness of the internal risk management and internal control systems. The Audit Committee reviewed the Company's annual and interim financial statements, including non-financial information, the quarterly results and the accompanying press releases as well as the outcomes of the year-end US GAAP and IFRS-EU audits. The Audit Committee extensively discussed relevant accounting principles (e.g. revenue recognition and the accounting for the indirect equity investment in Carl Zeiss SMT GmbH) and thoroughly reviewed new accounting standards for revenue recognition and lease accounting. The operational short and long-term performance was also discussed extensively, with a focus on various performance scenarios and their impact on ASML's results, cash generation and financing and capital return policies.

The Audit Committee extensively discussed the effectiveness of the internal control framework in accordance with the US Sarbanes Oxley Act. This included monitoring the scoping, framework updates, control execution and control assessments. The Audit Committee discussed management's assessment of the results from the test of design and test of effectiveness of internal controls over financial reporting.

Furthermore, the Audit Committee reviewed and approved the audit plans of the internal and external auditors, including scoping, materiality levels and the fees of the external auditor. The Audit Committee monitored the progress of the internal and external audit activities including review of observations identified as a result of the internal audit activities over the quarter, quarterly procedures performed by the external auditor, and the audit performed at year end by the external auditor. The Audit Committee oversaw the follow-up by the BoM on the recommendations made in the internal and external management letters. The Audit Committee also evaluated the external auditor at the end of 2017, including a review of their independence.

The Audit Committee closely monitored risk management and the risk management process, including the timely follow-up of high-priority actions based on quarterly progress updates. The Audit Committee looked into the fraud risk assessment as well as developments in the area of business ethics, including the Speak Up policy.

The Audit Committee reviewed and provided the SB with advice regarding the financing of ASML, including the long term financial plan and ASML's capital return policy, the dividend proposal in respect of the 2016 financial year and the resumption of the 2016-2017 share buyback program in the third quarter of 2017. The Audit Committee (and the SB) fully support ASML's principles regarding its current and future financing and capital return policies, which help ASML to respond to the cyclical nature of the semiconductor equipment industry.

The Audit Committee also discussed ASML's tax policy and planning.

Another recurring agenda item in 2017 was ASML's management of the IT landscape, IT security and special IT projects.

Other Audit Committee discussion topics were, among other things, revenue recognition, the accounting consequences of the 24.9 percent indirect interest in Carl Zeiss SMT GmbH and the HMI business combination. In 2017, the Audit Committee also performed a balance sheet review.

After each in person meeting, the Audit Committee held one-to-one meetings with the CFO, with the external auditor and with the internal auditor. The external auditor and the internal auditor attended all Audit Committee meetings, with the exception of one meeting, which was partly attended by the external auditor and the internal auditor.

With respect to the external auditor's management letter over the 2017 financial year, the Audit Committee confirms that the management letter contained no significant items that need to be mentioned in this report.

Remuneration Committee

The current members of the Remuneration Committee are Mr. Schwalb (Chairman), Ms. Aris, Mr. Stork and Mr. Ziebart, each of whom is an independent, non-executive member of our SB in accordance with the NASDAQ Listing Rules. Mr. Schwalb is neither a former member of our BoM, nor a member of the management board of another company. Currently, no member of the Remuneration Committee is a member of the management board of another Dutch listed company.

In 2017, the Remuneration Committee held 5 meetings.

After the Remuneration Committee had recommended to the SB that they update the Remuneration Policy in 2016, a revised Remuneration Policy for the BoM was developed and submitted to the AGM in 2017. This revised policy was adopted and came into effect per January 1, 2017.

In the 2016-2017 time frame, the Remuneration Committee reviewed the group of companies used for reference for BoM remuneration and used this information to make a benchmark and perform scenario analyses. Where applicable, this was debated and used to make recommendations to the SB concerning the total remuneration package of the BoM and the variable remuneration consisting of an STI in cash and an LTI in shares as well for as the assessment of the shareholding positions of the BoM based upon the share ownership guideline of the Remuneration Policy. The Remuneration Committee also reviewed the Remuneration Report as part of the SB Report and Other Appendices - Appendix - Board of Management and Supervisory Board Remuneration, which details the remuneration of members of the SB and the BoM.

Working with the Audit Committee and the Technology Committee, the Remuneration Committee reviewed the STI and LTI targets for the BoM and proposed 2017 targets to the SB. It also provided recommendations to the SB regarding the achievement of the 2017 targets and related compensation levels for the BoM members over 2017.

A specialized external adviser assisted the Remuneration Committee in its BoM remuneration work. This external adviser does not provide services to the BoM.

The external auditor performs certain agreed-upon procedures with respect to the execution of the Remuneration Policy.

For further details see Supervisory Board Report - Remuneration Report.

Selection and Nomination Committee

The current members of the Selection and Nomination Committee are Mr. Kleisterlee (Chairman), Mr. Grose and Ms. Van der Meer Mohr, each of whom is an independent, non-executive member of our SB in accordance with the NASDAQ Listing Rules.

The Selection and Nomination Committee held 4 meetings in 2017.

During 2017 the current and future composition of the BoM, the SB and the SB committees were discussed at length, especially also in light of the succession of Ms. Van der Meer Mohr and the succession of Mr. Nickl, who has informed the SB that he will not extend his current contract that will expire on April 25, 2018. On January 17, 2018, we announced that the SB intends to appoint Roger Dassen as Executive Vice President and CFO to the BoM, effective June 1, 2018, subject to notification of the 2018 AGM. The Selection and Nomination Committee also discussed the intended nomination for reappointment of Mr. Stork, who will retire by rotation per the 2018 AGM as well as the intended reappointment of Messrs. Wennink, Van den Brink and Schneider-Maunoury, whose appointment terms will expire per the 2018 AGM. Other topics of discussion in 2017 were the functioning of the individual members of the SB and the BoM, the outcome of the SB's self-evaluation in 2016, and the self-assessment as

performed in late 2017. For further details on the self-evaluation see Evaluation above. The Selection and Nomination Committee also spent ample time discussing management development and succession planning of the BoM and senior management.

As part of its responsibility to monitor corporate governance developments, the Selection and Nomination Committee paid close attention to, among other things, the implementation of the new Dutch Corporate Governance Code, which became effective on January 1, 2017.

Technology Committee

The current members of the Technology Committee are Mr. Grose (Chairman), Ms. Aris, Mr. Kleisterlee, Mr. Stork, and Mr. Ziebart.

The Technology Committee held 5 scheduled meetings in 2017.

Important topics this year were the execution and implementation of technology programs with particular focus on EUV, DUV, High-NA and Holistic Lithography. The Technology Committee also discussed the technology targets and the achievements related thereto, and provided the Remuneration Committee and the SB with advice in this area. To further increase its knowledge and understanding of technological developments relevant to ASML the Technology Committee spent a full day reviewing certain specific technological areas relevant for ASML and visiting the Advanced Research Center for Nanolithography, an organization ASML cooperates with in the field of fundamental research.

Remuneration of the Supervisory Board

For information on the remuneration of the SB, please see Corporate Governance - Supervisory Board - Remuneration of the Supervisory Board.

A Word of Thanks to ASML Employees

As a supervisory board, we appreciate that ASML's employees are expected to deliver the impossible in a very dynamic environment with strong and sometimes sudden fluctuations in the customer demand for our cutting-edge technology. We would like to thank all ASML employees and their management, their suppliers and all those who work for ASML on a temporary basis, for their hard work. Your input and relentless focus has once again helped ASML achieve so much this past year.

The Supervisory Board,
Gerard Kleisterlee, Chairman
Douglas Grose, Vice Chairman
Annet Aris
Pauline van der Meer Mohr
Carla Smits-Nusteling
Rolf-Dieter Schwalb
Hans Stork
Wolfgang Ziebart
Veldhoven, February 6, 2018

Remuneration Report

The SB, on recommendation of the Remuneration Committee, determines the remuneration of the members of the BoM. In 2017, the SB revised the Remuneration Policy that had been in force since 2014 to reflect market developments and ASML's growth. Adjustments mostly concerned changes to the group of reference companies and the mix of base and variable remuneration (see Supervisory Board Report - Supervisory Board Committees - Remuneration Committee). This revised Remuneration Policy was adopted by the AGM on April 26, 2017 and applies as from January 1, 2017 onwards.

In this Remuneration Report, an overview is provided of the Remuneration Policy for the BoM and the application thereof in 2017. For details regarding the remuneration of the BoM in 2017, see Other Appendices - Appendix - Board of Management and Supervisory Board Remuneration.

Remuneration policy

The Remuneration Policy supports the long-term development of the company in a highly dynamic environment, while aiming at fulfilling all stakeholders' requirements and keeping an acceptable risk profile. More than ever, the challenge for us is to drive technology, to serve our customers and to satisfy our stakeholders. These drivers are the backbone of the Remuneration Policy. The SB ensures that the policy and its implementation are linked to the company's objectives.

The objective of the Remuneration Policy is to enable ASML to attract, motivate and retain qualified industry professionals for the BoM in order to define and achieve our strategic goals. The policy acknowledges the internal and external context as well as our business needs and long-term strategy. The policy is designed to encourage behavior that is focused on long-term value creation, while adopting the highest standards of good corporate governance. The policy is aimed at motivating for outstanding achievements, using a combination of non-financial and financial performance measures. Technology leadership and customer value creation are the key drivers of sustainable returns to our shareholders.

The policy is built on the following principles:

- Transparent - The policy and its execution are clear and practical;
- Aligned - The Remuneration Policy is aligned with the policy for ASML senior management and other ASML employees;
- Long term oriented - The incentives focus on long-term value creation;
- Compliant - ASML adopts the highest standards of good corporate governance; and
- Simple - The policy and its execution are as simple as possible and easily understandable to all stakeholders.

Reference group and market positioning

We offer a remuneration package that is competitive as compared to a relevant labor market. To define this market, a reference group is created, consisting of companies that are comparable to us in terms of size and complexity, data transparency and geographical area. For as long as ASML is positioned around the median of the group of companies with respect to size (measured by enterprise value, revenue and number of employees), the median market level may serve as a reference in determining the level of pay for the BoM.

The reference group consists of the following companies:

Reference group composition

AkzoNobel	Leonardo-Finmeccanica
Alstom	Linde
Continental	Nokia
Covestro	Philips Healthcare and Consumer Electronics
DSM	Schindler
Essilor	Shire
Evonik	Smith & Nephew
Gemalto	Solvay
Givaudan	UCB
Infineon Technologies	Yara International
Legrand	

In principle, a benchmark assessment is conducted every 2 years. In the year without a market assessment, the SB considers the appropriateness of any change of base salary on the market environment as well as the salary adjustments for other ASML employees. To ensure an appropriate composition of the relevant labor market, the SB reviews the composition of the reference group in conjunction with the frequency of the benchmark. Substantial changes applied to the composition of the reference group will be proposed to the shareholders.

Total direct compensation

The remuneration levels are determined using the total direct compensation. Total direct compensation consists of base salary, an STI and an LTI. Each component and corresponding performance measures are described in this section.

Other remuneration elements are pension and expense reimbursements. The latter may include company car costs, travel expenses, representation allowances, housing costs (gross amount before taxes), social security costs, and health and disability insurance costs.

Base salary

The policy prescribes a benchmark that will be conducted for the total direct compensation level. The base salary of BoM members is derived from this level.

Variable income

The performance parameters are set by the SB and consist of financial and qualitative measures. The SB may adjust the performance measures and their relative weighting of the variable income based on the rules and principles as outlined in this policy, if required by changed strategic priorities in any given year.

The SB assesses the extent to which performance standards are met at the end of a performance period.

Variable compensation (on-target)	Presidents	Other Board members
-----------------------------------	------------	---------------------

STI	65%	65%
LTI	100%	85%
Total variable compensation as % of base salary	165%	150%

In order to comply with the highest standards of Corporate Governance, the appropriate claw-back and change-in-control provisions are incorporated in the employment contracts and management services contracts of all members of the BoM.

The SB has the discretionary power to adjust the incentive pay-out upward or downward if it feels that the outcome is unreasonable due to exceptional circumstances during the performance period ('ultimum remedium'). Scenario analyses of the possible outcomes of the variable remuneration components and their effect on the remuneration of the BoM are conducted.

Short-term incentive

The STI refers to the annual performance-related cash incentive that is applicable to all members of the BoM. The target level of the STI is set at 65 percent of base salary for all members. In case of excellent performance the maximum opportunity amounts to 150 percent of target.

In order to achieve alignment in the remuneration structure of the BoM and other ASML employees, the policy includes a modifier on the STI pay-out that is connected to the profit-sharing program for employees. In applying the modifier, the SB will take into account the pay-out under the profit-sharing scheme for all ASML employees. The modifier enables the SB to discretionarily adjust the STI pay-out of the BoM upward with 10 percent or downward with 20 percent of base salary.

For the STI the following criteria are set:

Performance Measure	Weight
---------------------	--------

Qualitative

Technology Leadership Index	20%
Market position	20%

Financial ¹	60%
Total	100%

¹ Every year, prior to the performance period, the SB chooses several financial measures, depending on business challenges and circumstances, with a total weight of 60 percent.

The financial measures are chosen from the below list. The SB may still deviate from this list when necessary given any specific challenges in a given year, but will as much as possible choose measures from the pre-defined list. The actual financial performance criteria selected for the financial years 2017 and 2018 are set out in Other Appendices - Appendix - Board of Management and Supervisory Board Remuneration.

Measure	Description
Sales	Total net sales as included in the US GAAP Consolidated Financial Statements
Gross Margin	Gross Profit as a percentage of total net sales
R&D opex	R&D costs as included in the US GAAP Consolidated Financial Statements
SG&A opex	SG&A costs as included in the US GAAP Consolidated Financial Statements
EBITDA Margin %	Income from operations (plus depreciation and amortization) as percentage of total net sales
EBIT Margin %	Income from operations as percentage of total net sales
Net Margin %	Net income as a percentage of total net sales
Free Cash Flow	Cash flow from operations minus purchases of property, plant and equipment and intangible fixed assets
Cash Conversion Cycle ¹	Days Inventory Outstanding + Days Sales Outstanding -/- Days Payable Outstanding
Capital Expenditures	Investment in property, plant and equipment

The SB could also decide to focus on certain elements of Cash Conversion Cycle in any year, i.e. Days Inventory Outstanding, Days Sales Outstanding and / or Days Payable Outstanding, instead of Cash Conversion Cycle only. Days Inventory Outstanding = Average (last 4 quarters) annual inventory divided by last 4 quarters cost of sales. Days Sales Outstanding = Average (last 4 quarters) accounts receivable divided by last 4 quarters total net sales. Days Payable Outstanding = Average (last 4 quarters) accounts payable divided by last 4 quarters cost of sales. The performance measures form a balanced mix of financial (60 percent) and other business measures (40 percent). For each of the performance criteria the SB sets challenging, but realistic target levels. The target setting and performance review occur on an annual basis, except for circumstances where the SB considers semi-annual target setting more appropriate. All performance measures are set in advance and will not change during the performance period.

The pay-out levels are prorated upon the level of achievement of the aforementioned performance criteria. Below threshold performance, there is no pay-out. Meeting threshold performance will result in a pay-out of 50 percent of target pay-out. In case of excellent performance, the maximum pay-out is capped at 150 percent of the target pay-out. The STI is paid on an annual basis.

Long-term incentive

The LTI refers to the share-based incentive. All members of the BoM are eligible to receive performance-related shares. The target level of the LTI is set at 100 percent of base salary for the Presidents and 85 percent for the other members of the BoM. In case of excellent performance the maximum opportunity amounts to 200 percent of target. The performance shares are conditionally granted on an annual basis to the members of the BoM. The shares will become unconditional depending on the achievement of predetermined performance targets during a 3-year period. Each performance cycle starts on the first day of the year of grant. The number of performance shares to be conditionally awarded is calculated at the beginning of this period using the volume-weighted average share price during the last quarter of the year preceding the conditional award.

Performance measures

Three types of performance measures relate to the LTI:

- ASML's total shareholder return compared to a reference index.

- ASML's ROAIC compared to a pre-defined target to be set by the SB prior to the performance period.

- Long-term strategic qualitative targets to ensure ASML's ability to keep performing at high standards. Depending on the strategic requirements the definition and relative weight may change upon the discretion of the SB:

- Technology Leadership Index

- Sustainability

The definition of the total shareholder return target and calculation is as follows:

ASML's relative change in share price, plus dividends paid over the relevant performance period. The total shareholder return is calculated as the difference between (i) the average (closing) share price during the last quarter of the performance period and (ii) the average (closing) share price during the quarter preceding the performance period; in the calculation, dividends are re-invested at the ex-dividend date. The total shareholder return of ASML (calculated with the ASML New York share) is compared to the PHLX Semiconductor Sector Index. This NASDAQ index is designed to track the performance of a set of companies engaged in the design, distribution, manufacture, and sale of semiconductors. There are two versions of this index, a price return index and a total return index, the latter of which is chosen (NASDAQ: X.SOX), since this index reinvests cash dividends, equivalent to the total shareholder return definition described above).

The definition of the ROAIC target and calculation is as follows:

ASML's rate of return on capital it has put to work, regardless of the capital structure of the company. It is used as a fundamental metric to measure value creation of the company. The ROAIC is calculated by dividing the Net Operating Profit After Tax by the Average Invested Capital.

The aforementioned performance measures receive the following weights:

LTI performance measures	Weight
ROAIC	40%
Total shareholder return	30%
Technology Leadership Index	20%
Sustainability	10%
Total	100%

Performance incentive zone

The vesting of performance shares depends on the relative total shareholder return as compared to the aforementioned index, the ROAIC performance as compared to the pre-defined target and the evaluation of the qualitative targets by the SB. The vesting will be calculated at the end of the 3-year performance period for all performance measures, based on a predefined pay-out matrix.

Performance ASML vs PHLX Index

(total shareholder return ASML -/- total shareholder return X.SOX)

Pay-out as a % of target

≥ 20%	200%
Between 0% and 20%	Linear between 100% and 200%
Between -20% and 0%	Linear between 50% and 100%
< -20%	0%

For ROAIC, the Technology Leadership Index and Sustainability targets, the same principle of threshold, target and maximum levels applies as for the STI, with the maximum pay-out equal to 200 percent of target. The SB, in cooperation with the relevant subcommittees (Technology Committee, Audit Committee and Remuneration Committee) will assess the performance achieved against ROAIC and the qualitative targets. Both the STI and LTI make use of the Technology Leadership Index as a qualitative performance measure. The objective is equal, but the applicable measures, targets and performance periods are different and aligned with specific short- and long-term strategic priorities.

Grant date

Performance shares will be granted 2 days after the publication of ASML's annual results in January of the year in which the 3-year performance period starts.

Holding period

The minimum holding period is 2 years after the vesting date. Upon termination of the employment contracts / management services contracts the transfer restrictions will remain in place during the holding period except in case of decease.

In case a tax payment is due by the members of the BoM over the retrieved variable income, performance shares may be partially sold at vesting ('sell to cover') in accordance with the law and internal regulations.

Share ownership guidelines

Members of the BoM are required to hold at least the value of two times base salary in the form of shares; for the 2 Presidents this is 3 times base salary. This ensures an alignment of the interests of members of the BoM with long-term value creation throughout their employment with / services for the Company. The Remuneration Committee of the SB will (i) after each financial year, determine the value of ASML shares then held by the individual members of the BoM, based on the shareholding data of the members of the BoM (to be) published in the Integrated Report over that year, (ii) include vested ASML shares that are still in the holding period when determining the value of the ASML shares held by the individual members of the BoM, (iii) not define penalties upfront should the value of ASML

shares held by a member of the BoM be lower than agreed, but determine potential penalties by using its discretionary judgment, thereby taking into consideration all relevant circumstances, and (iv) allow new members of the BoM time to meet the share ownership requirements (3 years, depending on the actual situation).

Other remuneration

Benefits

The pension arrangement for the BoM is based on the 'excedent' (supplementary) arrangement for our employees in the Netherlands. The plan is a defined contribution opportunity as defined in Dutch fiscal regulations. The total defined contribution is a percentage of the pensionable salary and depends on the participants' age at the beginning of the year. The total net contribution is according to the maximum level as allowed by Dutch fiscal legislation, of which the participant contributes 3.9 percent of his pension base.

Dependents pension and disability pension are insured on a risk basis, the premium of which is paid by ASML. As a guiding principle, the value of the pension arrangement is set at the median of executive pensions in the Netherlands using a general industry sample of companies.

Severance payment

All employment agreements, respectively management services agreements, with members of the BoM contain specific provisions regarding benefits upon termination of those agreements. If the Company gives notice of termination of the agreement for reasons which are not exclusively or mainly found in acts or omissions on the side of the BoM member, a severance amount equal to one year base salary will be made available upon the effective date of termination.

This severance payment will also be made available in case of a termination of the agreement of a BoM member with mutual consent between such BoM member and the Company.

Change of control over the company

BoM members are also entitled to the aforementioned severance payment in the event ASML or its legal successor gives notice of termination due to a change of control or if the BoM gives notice of termination, which is directly related to such change of control and such notice is given within twelve months from the date on which the change of control occurs. For further information, see Corporate Governance - Other Information on Governance - Severance payments under agreements with members of Board of Management

The change of control provision includes a mitigation of the pay-out under the LTI. This entails that the share price will be fixed on the average of i) the average closing share price over a period of 15 trading days prior to the first public announcement of change in control negotiations and ii) the average share price over a period of 30 trading days prior to the closing of the transaction.

Loans

ASML does not grant any loans or guarantees to any of the members of the BoM.

Other information

Additional information on BoM remuneration in 2017 is included in Other Appendices - Appendix - Board of Management and Supervisory Board Remuneration.

General

ASML Holding N.V. is a public limited liability company operating under Dutch law and has a two-tier board structure with a board of management responsible for managing the company under supervision of an independent supervisory board. ASML's shares are listed on Euronext Amsterdam and NASDAQ. The address of our registered office is De Run 6501, 5504 DR Veldhoven, the Netherlands (Tel.: +31 40 268 3000).

We endorse the importance of good corporate governance, of which independence, accountability and transparency are the most significant elements. These are also the elements on which a relationship of trust between us and all our stakeholders (employees, customers, suppliers, shareholders and the public) can be built.

We continuously monitor and assess applicable Dutch, US and other relevant corporate governance codes, rules, and regulations. ASML is subject to the Dutch Corporate Governance Code, and because we are listed on NASDAQ, we are also required to comply with the Sarbanes-Oxley Act, as well as NASDAQ Listing Rules, and the rules and regulations promulgated by the SEC.

The Dutch Corporate Governance Code Monitoring Committee started a consultation process in February 2016 that has led to a revision of the Code. The amended Code was published on December 8, 2016 and came into effect on January 1, 2017. We have performed a full review of the implications for our corporate governance structure and, where relevant, have amended the rules of procedure and processes of the SB and the BoM accordingly.

Our SB and BoM will continue their efforts to ensure that our practices and procedures comply with the applicable rules and regulations, including the Code. This section of the report addresses our corporate governance structure, as part of which it refers to the principles and best practices set forth in the Code, as well as with the applicable laws on corporate governance. Our SB and BoM are of the opinion that we comply with all recommendations in the Code.

Board of Management

Role and procedure

ASML's BoM is responsible for managing ASML, under the chairmanship of the President and CEO, and the vice chairmanship of the President and CTO, which together constitutes a dual leadership. The current BoM comprises 5 members.

Although the various management tasks are divided among the members of the BoM, the BoM remains collectively responsible for the management of ASML, establishing a position on the relevance of long-term value creation for ASML and its business, the deployment of ASML's strategy, ASML's risk profile and policies, the achievement of ASML's objectives, ASML's results and the corporate social responsibility aspects relevant to ASML.

In fulfilling its management tasks and responsibilities, the BoM considers the interests of ASML and the business connected with it, as well as the interests of ASML's stakeholders. The BoM is accountable to the SB and the General Meeting of Shareholders for the performance of its management tasks.

The SB supervises and advises the BoM in the execution of its tasks and responsibilities, while the BoM provides the SB with all the information, in writing or otherwise, necessary for the SB to fulfill its duties. Besides the information provided in the regular meetings, the BoM provides the SB with regular updates on developments relating to our business, financials, operations, and industry developments in general.

Important decisions of the BoM that require the approval of the SB are, among others:

- ▲ ASML's operational and financial objectives;
- ▣ The strategy designed to achieve the objectives;
- ▣ The parameters to be applied in relation to the strategy designed to achieve the objectives; and
- Corporate responsibility issues that are relevant to ASML.

The main elements of the operational and financial objectives, the strategy to achieve the objectives, and the parameters to be applied are included in the Management Board Report. The Management Board Report - Risk Factors included in this 2017 Integrated Report outlines the sensitivity of the results to both external and internal factors and variables.

The BoM's rules of procedure include such matters as the general responsibilities of the BoM, the relationship with the SB and various stakeholders, the decision-making process within the BoM, and the logistics surrounding the meetings.

The BoM's rules of procedure are published in the Governance section on our Website.

Appointment, other functions

Members of the BoM are appointed by the SB upon recommendation by the Selection and Nomination Committee and upon notification to the General Meeting of Shareholders. Members of the BoM are appointed for a period of 4 years, after which reappointment is possible.

The SB may suspend and dismiss members of the BoM, but this can only be done after consulting the General Meeting of Shareholders.

Pursuant to Dutch legislation a member of the BoM may not be a supervisory board member in more than 2 other large companies (within the meaning of Dutch Corporate Law). A member of the BoM may never be the chairman of a supervisory board of a large company. BoM members may only accept a supervisory board membership of another large company after having obtained prior approval from the SB. Members of the BoM are also required to notify the SB of other important functions held or to be held by them. Currently, no members of our BoM hold more than 2 supervisory board seats in other large companies and no member of the BoM is a chairman of a supervisory board of a large company.

Until January 1, 2016, Dutch legislation provided for statutory provisions to ensure a balanced representation of men and women on the management boards and supervisory boards of companies governed by this legislation. Balanced representation of men and women was deemed to exist if at least 30 percent of the seats were filled by men and at least 30 percent were filled by women. These statutory rules have expired, but a new bill entered into force on April 13, 2017, extending the provision on gender balance to December 31, 2019. Within the meaning of the new legislation, our SB currently qualifies as balanced, but no seats are taken by women on the BoM and as such the BoM would not qualify as balanced. We have the ambition to meet the statutory requirements for ensuring a balanced gender representation. In order to increase gender diversity in the BoM, we aim to increase the number of women throughout ASML. We have a specific program in place to improve gender diversity, aimed at getting women more interested in science, engineering and technology. In this way, we try to increase our future talent pool so that more women will be available in the future for technical positions and (senior) management positions. Given the specific nature of our industry, this is a long term process. Female participation in our total workforce has improved, our percentage of female employees increased from 11 percent in 2010 to 14 percent in 2017. For more information on our diversity and inclusion initiatives and performance data, see Management Board Report - People - Promoting diversity and inclusion and Non-Financial Statements - Non-financial Indicators - People.

ASML Reports

ASML publishes, among others, the following annual reports regarding the financial year 2017: the Integrated Report comprising the Management Board Report and the Financial Statements in accordance with Part 9 of Book 2 of the Dutch Civil Code and IFRS-EU, as well as the SB Report in accordance with the Code; and the Integrated Report on Form 20-F in conformity with US GAAP. Both reports have the same qualitative base and describe the same risk factors that are specific to the semiconductor industry, ASML and ASML's shares. We also provide sensitivity analyses by providing:

- A narrative explanation of ASML's financial statements.
- The context within which financial information should be analyzed.
- Information about the quality, and variability, of our earnings and cash flow.

With respect to the process of creating the Integrated Report, we have extensive guidelines for the lay-out and the content of our report. These guidelines are primarily based on applicable laws and regulations. For Dutch statutory purposes, we follow the requirements of Dutch law and regulations, including those on the preparation of the consolidated financial statements in accordance with IFRS-EU. For the Integrated Report on Form 20-F, we apply the requirements of the Exchange Act, and prepare the financial statements included therein in accordance with US GAAP. With respect to the preparation process of these and the other financial reports, we apply internal procedures to safeguard the completeness and accuracy of such information as part of its disclosure controls and procedures. See also Management Board Report - Business Risk and Continuity where ASML's internal risk management and control systems are discussed.

Code of Conduct

Our Code of Conduct describes what ASML stands for and believes in:

- We respect people and planet.
- We operate with integrity.
 - We preserve our assets.
- We manage professionally.
 - We encourage Speak Up.

The Code of Conduct and Business Principles can be found on the Governance section of our Website.

Remuneration of the Board of Management

For detailed information see Supervisory Board Report - Remuneration Report and Other Appendices - Appendix - Board of Management and Supervisory Board Remuneration.

Indemnification

Our Articles of Association provide for the indemnification of the members of the BoM against claims that are a direct result of their tasks as members of the BoM, provided that such claim is not attributable to willful misconduct or intentional recklessness of such member of the BoM. The SB has further implemented the indemnification of the BoM members by means of separate indemnification agreements for each BoM member.

Conflicts of interest

Conflicts of interest procedures are incorporated in the BoM's rules of procedure and reflect Dutch law and the principles and best practice provisions of the Code with respect to conflicts of interest.

There have been no transactions in 2017, nor are there currently any transactions, between ASML or any of ASML's subsidiaries, or any significant shareholder and any member of the BoM or officer or any relative or spouse thereof, other than ordinary course compensation arrangements.

Supervisory Board

Role and procedure

As mentioned before, our SB supervises the BoM and the general course of affairs of ASML and its subsidiaries. The SB also supports the BoM with its advice. As we have and intend to keep a two-tier structure, the SB is a separate and independent body from the BoM and from ASML.

In fulfilling its role and responsibilities, the SB takes into consideration the interests of ASML and its subsidiaries, as well as the relevant interests of its stakeholders. The SB supervises how the BoM determines its position on the long-term value creation strategy and how the BoM implements that strategy. The SB supervises and advises the BoM in performing its tasks, with a particular focus on:

- The achievement of ASML's objectives.
- ASML's corporate strategy and the management of risks inherent to ASML's business activities.
- The structure and operation of internal risk management and control systems.
- The financial reporting process.
- ASML's culture and the activities of the BoM in that regard.
- Compliance with applicable legislation and regulations.
- The relationship with shareholders.
- The corporate social responsibility issues important for ASML.

Major management decisions, such as ASML's strategy, major investments and budget, require the SB's approval. The SB selects and appoints new BoM members, prepares the Remuneration Policy for the BoM, and decides on the remuneration for the individual members of the BoM. Also, the SB is the body that nominates new SB candidates for appointment and submits remuneration proposals for the SB members to the General Meeting of Shareholders.

The SB, through its Selection and Nomination Committee, closely follows the developments in the area of corporate governance and the applicability of the relevant corporate governance rules for ASML. For a more detailed description on the SB's activities in the area of corporate governance see Supervisory Board Report.

Meetings and activities of the Supervisory Board

For detailed information on the meetings and activities of the SB in 2017, see Supervisory Board Report - Meetings and Attendance.

The rules of procedure

The SB's rules of procedure include requirements based on the Code, the Sarbanes-Oxley Act and on any other applicable laws, as well as corporate governance practices developed by the SB over the past years. Given the continuous developments in corporate governance, these rules of procedure are subject to regular review. Items covered in these rules include the responsibilities of the SB and its committees, the composition of the SB and its committees, logistics surrounding the meetings, the meeting attendance of members of the SB, and the rotation schedule for these members.

The SB's rules of procedure also include the charters of the 4 committees. The SB has assigned some of its tasks and responsibilities to the 4 committees. That said, the plenary SB remains responsible for the fulfillment of these tasks and responsibilities. The SB and its committees may obtain information from officers and external advisors, if necessary for the execution of its tasks. The committees in particular occasionally call upon external advisors, who assist the committees with preparing the recommendations to be decided upon by the full SB.

The SB's rules of procedure, as well as the charters of the 4 committees, are regularly reviewed and, if needed, amended. Changes to the SB's rules of procedure need to be approved by the full SB. Changes to the charters of the committees are approved by the committee concerned. The Audit Committee charter is reviewed annually, to check whether the charter still complies with the applicable rules and regulations, especially those relating to the Sarbanes-Oxley Act. The SB's rules of procedure, and those of the 4 committees, have been revised pursuant to the

amended Code and to ensure that our practices and procedures comply with Dutch corporate governance requirements.

Expertise, composition, appointment

The SB currently consists of 8 members, the minimum being 3 members. The SB determines the number of SB members required to perform its functions.

The members of the SB show a diverse mix with respect to background, nationality, age, gender and expertise, in line with the diversity policy as included in the current profile drawn up by the SB. The aim of this profile is to ensure that the SB has an international and fitting composition that reflects our global business activities and has a suitable level of experience in the financial, economic, technological, social, and legal aspects of international business. In the case of (re)appointments, the Selection and Nomination Committee checks whether the candidates fit in the SB's profile. See also Supervisory Board Report - Composition, Diversity and Independence.

We are subject to the law applicable to large corporations ('structuurregime'). As such, members of the SB are appointed by the General Meeting of Shareholders based on binding nominations proposed by the SB. The SB informs the General Meeting of Shareholders and the Works Council about upcoming retirements by rotation at the AGM in the year preceding the actual retirement(s) by rotation to ensure that they have sufficient opportunity to recommend candidates for the upcoming vacancies. The SB has the right to reject the proposed recommendations. Furthermore, the Works Council has an enhanced right to make recommendations for one-third of the members of the SB. This enhanced recommendation right implies that the SB may only reject the Works Council's recommendations in limited circumstances: (i) if the relevant person is unsuitable or (ii) if the SB would not be duly composed if the recommended person were appointed as SB member.

The General Meeting of Shareholders may reject binding nominations of the SB by way of a resolution adopted with an absolute majority of the votes cast, representing at least one-third of ASML's outstanding share capital. If the votes cast in favor of such a resolution do not represent at least one-third of the total outstanding capital, a new shareholders' meeting can be convened at which the nomination can be overruled by an absolute majority.

Mr. Stork, Ms. Van der Meer Mohr and Ms. Aris were (re)appointed as per the Works Council's enhanced recommendation right.

For newly appointed SB members, we prepare an introduction program. SB members are regularly given the opportunity to follow technical tutorials to maintain and increase their knowledge of our ever progressing technology. In addition, specific training is also provided for new committee members based on individual needs. Every year, the SB and / or committees members determine their need for further training on specific topics.

Members of the SB serve for a maximum term of 4 years from the date of their appointment or a shorter period as per the SB's rotation schedule. Members can be reappointed, provided that their entire term of office does not exceed 12 years. A member of the SB may be reappointed once for another 4-year period. After that, the member may subsequently be reappointed again for a period of 2 years, which appointment may be extended for a final term of no more than 2 years. The rotation schedule is available in the Corporate Governance section on our Website.

The General Meeting of Shareholders may, by an absolute majority of the votes representing at least one-third of the total outstanding capital, withdraw its confidence in the SB. This resolution shall result in the immediate dismissal of the entire SB. In such case, the Enterprise Chamber of the Amsterdam Court of Appeal shall appoint 1 or more members of the SB at the request of the BoM.

Legal restrictions apply to the overall number of executive board positions (including a one-tier board) and supervisory board positions that a member of the supervisory board (or a non-executive director in the case of a one-tier board) of a large company, may hold. None of the members of the SB is in violation of these rules.

For detailed information on the members of our SB, see Supervisory Board Report - Supervisory Board.

Role of the Chairman of the Supervisory Board and the Company Secretary

Mr. Kleisterlee is the Chairman of the SB and Mr. Grose is the Vice Chairman. The role and responsibilities of the Chairman of the SB are described in its rules of procedure. The Chairman sets the agenda of the SB meetings, he acts as the main contact between the SB and the BoM and ensures orderly and efficient proceedings at General Meetings of Shareholders. The Chairman will amongst others also ensure that:

- ☑ The members of the SB follow an introduction and training program;
- ☑ The SB elects a vice chairman;
- ☑ The members of the SB receive all information necessary for the proper performance of their duties on a timely basis;
- ☑ There is enough time for consultation and decision making by the SB;
- ☑ The committees function properly;
- ☑ The BoM performs activities in respect of culture;
- ☑ The communication with our shareholders is effective;

¶The performance of the members of the BoM and the SB members is assessed at least once a year; and

¶The SB has proper contact with the BoM and the Works Council.

The Company Secretary assists the SB in the performance of its duties, ensures that the correct procedures are followed, and that the SB acts in accordance with its legal and statutory obligations. The Company Secretary assists the Chairman of the SB in the organization of the affairs of the SB and its committees. The Company Secretary is appointed by and may also be dismissed by the BoM after prior approval from the SB. The Company Secretary is assisted by a Deputy Company Secretary.

Composition and role of the four committees of the Supervisory Board

Although the SB retains ultimate responsibility, the SB has delegated some of its tasks to its 4 committees. Their roles and functions are described in separate chapters in the SB's rules of procedure which is available on our Website. In the plenary SB meetings, the chairpersons of the committees report on the issues and items discussed in the committee meetings, and also the minutes of the committee meetings are available for all SB members, enabling the full SB to make the appropriate decisions.

For detailed information on the composition, meetings and activities of the committees of the SB, see Supervisory Board Report - Supervisory Board Committees

Audit Committee

In general, the Audit Committee meets at least 4 times a year and always before the publication of the quarterly, half-year and annual financial results.

The Audit Committee assists the SB in overseeing the integrity and quality of our financial reporting and the effectiveness of the internal risk management and internal control systems. Frequently discussed topics are the annual results, the 2016 and 2017 audits and the internal and external audit plans and their execution, our internal control systems, including testing of internal controls over financial reporting in light of Section 404, 302 and 906 of the Sarbanes-Oxley Act, our risk management systems, and our financial- and cash position, our long-term financial plan and the supervision of the enforcement of the relevant legislation and regulations.

We provide the Audit Committee with all relevant information to be able to adequately and efficiently supervise the preparation and disclosure of financial information. This includes information on the status and development of the (semiconductor) market to be able to judge the outlook and budget for the next 6-12 months, the application of IFRS-EU and US GAAP, the choice of accounting policies and the work of internal and external auditors. Each year, the Audit Committee discusses and reviews such matters as our financing policy and strategy, tax planning policy, investor relations activities and strategy, fraud policy, and information and communication technology policy.

With regard to internal audit, the Audit Committee reviews the internal audit charter, the internal audit plan and the interaction with the external auditor. As a general rule, the internal auditor attends the Audit Committee meetings and then meets with the Audit Committee after the meeting without management present.

The Audit Committee reviews and approves the external audit plan, including the scope of the audit, the materiality level and the fees of the external auditor, as well as the external auditor's independence and performance. The Audit Committee is the first point of contact for the external auditor if the external auditor discovers irregularities in the content of the financial reports. As a general rule, the external auditor attends the Audit Committee meetings and then meets with the Audit Committee after the meeting without management present to discuss the relationship between the Audit Committee and the external auditor, the relationship between the BoM and the external auditor, and any other matters deemed necessary to be discussed.

In addition to the internal auditor and the external auditor, the Audit Committee generally invites the CEO, CFO, Corporate Controller, Corporate Chief Accountant and Vice-President Corporate Risk and Assurance to its meetings. In general, after each Audit Committee meeting, the Audit Committee also meets with the CFO alone. From time to time, other ASML employees are invited to Audit Committee meetings to address subjects that are of importance to the Audit Committee such as the return policy (including the share buyback program), tax and IT.

Remuneration Committee

In general, the Remuneration Committee meets at least 2 times a year and more frequently when deemed necessary. The Remuneration Committee oversees the development and implementation of the Remuneration Policy. In cooperation with the Audit Committee and the Technology Committee, the Remuneration Committee reviews and proposes to the SB corporate goals and objectives relevant to the variable part of the BoM's remuneration. Also in cooperation with the Audit Committee and the Technology Committee, the Remuneration Committee evaluates the performance of the members of the BoM in view of those goals and objectives, and - based on this evaluation - recommends to the SB appropriate compensation levels for the members of the BoM. In doing so, the Remuneration Committee takes note of the views of the individual members of the BoM with regard to the amount and structure of their own remuneration.

Selection and Nomination Committee

In general, the Selection and Nomination Committee meets at least 2 times a year and more frequently when deemed necessary.

The Selection and Nomination Committee assists the SB with:

- Preparing the selection criteria and appointment procedures for members of the SB and BoM.

- Periodically evaluating the scope and composition of the BoM and the SB, and proposing the profile of the SB in relation thereto.

- Periodically evaluating the functioning of the BoM and the SB and the individual members of those boards and reporting the results thereof to the SB.

- Proposing (re)appointments of members of the BoM and the SB, and supervising the policy of the BoM in relation to the selection and appointment criteria for senior management.

The Selection and Nomination Committee also discusses developments in corporate governance, for example those based on legislative proposals or revisions of the Code, but also the outcome of the Report of the Monitoring Committee with respect to compliance with the Code.

Technology Committee

The Technology Committee meets at least 2 times a year and more frequently when deemed necessary.

The Technology Committee provides advice to the SB with respect to our technology plans required to execute our business strategy, including but not limited to, technology trends, the study of potential alternative strategies, the technology strategy, product roadmaps, required technical resources and operational performance in R&D. The Technology Committee makes recommendations to the SB on technology related projects with respect to ASML's competitive position. In addition, the Technology Committee discusses the technology targets set to measure short- and long-term performance as well as the achievements related thereto, and advises the Remuneration Committee on this topic.

External experts as well as experts from within ASML may act as advisers to the Technology Committee with respect to the subjects reviewed and discussed by this committee. The advisers do not have voting rights, but regularly attend committee meetings (except for those meetings or calls specifically designated to set and / or evaluate technology targets). External experts may include representatives of customers, suppliers and partners to increase the committee's understanding of the technology and research required to develop our leading-edge systems.

The Technology Committee's in-depth technology discussions and the subsequent reporting on the main points of these discussions in the full SB increases the SB's understanding of our technology requirements and enables the SB to adequately supervise the strategic choices we face, including our investment in R&D.

Conflict of interest

Conflict of interest procedures are incorporated in the SB's rules of procedure and address Dutch law and the principles and best practice provisions of the Code with respect to conflicts of interest.

There have been no transactions during 2017, nor are there currently any transactions, between ASML or any of its subsidiaries, and any other significant shareholder, and any SB member or any relative or spouse thereof other than ordinary course compensation arrangements.

Remuneration of the Supervisory Board

The General Meeting of Shareholders determines the remuneration of the SB members; this remuneration is not dependent on our (financial) results. At the 2017 AGM, the General Meeting of Shareholders adopted the SB's proposal to increase the SB's remuneration, effective per April 1, 2017. In addition to their fee as members of the SB, the members are also paid a fee for each committee membership, as well as a net cost allowance. The SB remuneration is not dependent on our financial results. Detailed information on the SB's remuneration can be found in Other Appendices - Appendix - Board of Management and Supervisory Board Remuneration.

No member of the SB personally maintains a business relationship with ASML, other than as a member of the SB. The members of the SB do not receive ASML shares, or rights to acquire ASML shares, as part of their remuneration. Members who acquire or have acquired ASML shares or rights to acquire ASML shares must intend to keep these for long-term investment only. No member of the SB currently has any ASML shares or rights to acquire ASML shares. In concluding transactions in ASML shares, members of the SB must comply with our Insider Trading Rules.

We have not granted any personal loans, guarantees, or the like to members of the SB. Our Articles of Association provide for the indemnification of the members of the SB against claims that are a direct result of their tasks as members of the SB, provided that such claims are not attributable to willful misconduct or intentional recklessness of the member of the SB. We have also implemented the indemnification of the members of the SB by means of separate indemnification agreements for each member.

Shareholders and General Meeting of Shareholders

Powers

A General Meeting of Shareholders is held at least once a year and generally takes place in Veldhoven, the Netherlands. During this meeting, at least the following items are discussed and / or approved:

• The written report of the BoM containing the course of affairs at ASML and the conduct of the management over the past financial year.

• The adoption of the financial statements for the past financial year, as prepared in accordance with applicable laws and regulations.

• The discharge of the members of the BoM in respect of their management during the previous financial year.

• The discharge of the members of the SB in respect of their supervision during the previous financial year.

• Our reserves and dividend policy and justification thereof by the BoM.

Each material change in our corporate governance structure. The material changes in our corporate governance structure and ASML's compliance with the amended Code will be discussed at the AGM of 2018 as a separate agenda item.

• Any other item the BoM or the SB decide to put on the agenda.

The General Meeting of Shareholders also has (with due observance of the statutory provisions) the power:

• To resolve to amend the Articles of association.

• To resolve to dissolve ASML.

• To resolve to issue shares if and insofar as the BoM has not been designated by the General Meeting of Shareholders for this purpose.

• To resolve to reduce the issued share capital.

• To appoint members of the SB.

• To withdraw its confidence in the SB (resulting in a dismissal of the SB in its entirety).

• To adopt the Remuneration Policy for members of the BoM.

• To determine the remuneration of the members of the SB.

• To approve resolutions regarding a significant change in the identity or character of ASML or its business, as referred to in article 2:107 of the Dutch Civil Code.

Proposals placed on the agenda by the SB, the BoM, or by shareholders, provided that they have submitted the proposals in accordance with the applicable legal provisions, are discussed and resolved. Shareholders representing at least 1.0 percent of ASML's outstanding share capital or representing a share value of at least EUR 50.0 million are entitled to place agenda items on the agenda of a General Meeting of Shareholders at the latest 60 days before the date of said meeting.

A recurring agenda item is the limited authorization for the BoM to issue (rights to) shares in ASML's capital, and to exclude preemptive rights for such issuances. This agenda item typically includes 2 elements: i) the authorization to the BoM to issue 5.0 percent (rights to) shares of ASML's issued share capital as of the date of authorization, plus an additional 5.0 percent of ASML's issued share capital as of the date of authorization that may be issued in connection with mergers, acquisitions and / or (strategic) alliances, and ii) the authorization to exclude preemptive rights in relation to the above share issue, with a maximum of 10.0 percent of ASML's issued share capital as of the date of authorization.

A simple majority is required for the authorization to issue shares. For the authorization to exclude the preemptive rights a simple majority is required in case at least 50 percent of ASML's issued share capital is present or represented at the AGM, otherwise a majority of two thirds of the votes cast is required. The BoM must obtain the approval of the SB for the issuance of ASML shares as well as for excluding the preemptive rights.

It is important for us to be able to issue (rights to) shares and to exclude the preemptive shareholders' rights in situations where it is imperative to be able to act quickly, for example when financial opportunities arise. This authorization has been used in the past, especially to optimize our financial position. Given the dynamics of the global capital markets, such financing transactions generally need to be executed within a short window of opportunity. The opportunity to issue shares or rights to shares, such as convertible bonds, would be limited if we needed a resolution of the General Meeting of Shareholders to issue shares and / or to exclude the shareholders' preemptive rights and may therefore interfere with the financial flexibility of ASML.

As communicated in our press release of January 17, 2018, a proposal will be submitted to the 2018 Annual General Meeting of Shareholders to declare a dividend in respect of 2017 of EUR 1.40 per ordinary share (for a total amount of approximately EUR 600 million), compared with a dividend of EUR 1.20 per ordinary share paid in respect of 2016.

In addition to dividend payments, we intend to return cash to our shareholders on a regular basis through share buybacks or capital repayment, subject to our actual and anticipated level of liquidity requirements and other relevant factors.

In December 2017, we concluded our 2016-2017 share buyback program, under which we repurchased 8.2 million of our shares at an average price of EUR 109.33 per share, resulting in a total repurchase of EUR 900 million. On July 6, 2017, 7.7 million shares were canceled. The remainder of the shares bought back under this program are intended to be canceled in 2018.

On January 17, 2018, we announced a new share buyback program, to be executed within the 2018–2019 time frame. As part of this program, we intend to purchase shares up to EUR 2.5 billion. ASML intends to cancel these shares after repurchase, with the exception of up to 2.4 million shares which will be used to cover employee share plans. The share buyback program will be executed within the limitations of the existing authority granted by the Annual General Meeting of shareholders on April 26, 2017 and of the authority granted by future AGMs. The share buyback program may be suspended, modified or discontinued at any time.

Logistics of the General Meeting of Shareholders

The convocation date for the AGM is legally set at 42 days, and the record date at the 28th day prior to the day of the AGM. Those who are registered as shareholders on the record date are entitled to attend the meeting and to exercise other shareholder rights.

The BoM and SB shall provide the shareholders with the facts and circumstances relevant to the proposed resolutions, by way of an explanation to the agenda and other documents necessary and / or helpful for this purpose. All documents relevant to the General Meeting of Shareholders, including the agenda with explanations, shall be posted in the Investors and Governance sections on our Website. The agenda indicates which agenda items are voting items, and which items are for discussion only.

ASML shareholders may appoint a proxy who can vote on their behalf at the AGM. We also use an Internet proxy voting system, thus facilitating shareholder participation without having to attend in person. Shareholders who voted using their Internet proxy voting are required, however, to appoint a proxy to officially represent them at the AGM in person. We also provide the option for shareholders to issue voting proxies or voting instructions to an independent third party (civil law notary) prior to the AGM.

Voting results from the AGM will be made available on our Website within 15 days after the meeting.

The draft minutes of the AGM are available on our Website, and also upon request by letter or e-mail, no later than 3 months after the meeting. Shareholders are given the opportunity to provide their comments in the subsequent 3 months, after which the minutes are adopted by the Chairman and the Secretary of the meeting. The adopted minutes are also available on our Website and on request by letter or e-mail.

Information to the shareholders

To ensure fair disclosure, we distribute company information that may influence the share price to shareholders and other parties in the financial markets simultaneously and through means that are public to all interested parties. In case of bilateral contact with shareholders, we follow the procedure related thereto as published on our Website.

When our annual and quarterly results are published by means of a press release, interested parties, including shareholders, can participate through conference calls, listen to a web cast and view the presentation of the results on our Website. The schedule for communicating the annual financial results is posted on our Website. In addition, we provide information to our shareholders at our AGM. We also publish an Integrated Report on our Website every year, reporting on financial and non-financial performance, as well as a Statutory Interim Report.

It is our policy to post the presentations given to analysts and investors at investor conferences on our Website.

Information regarding presentations to investors and analysts and conference calls are announced in advance on our Website (for details see our financial calendar as published in the Investor Relations section on our Website).

Meetings and discussions with investors and analysts will, in principle, not be held shortly before the publication of regular financial information. We do not assess, comment on, or correct analysts' reports and valuations in advance, other than to comment on factual errors. We do not pay any fees to parties carrying out research for analysts' reports, or for the production or publication of analysts' reports, and take no responsibility for the content of such reports.

At the AGM, the BoM and the SB provide shareholders with all requested information, unless this is contrary to an overriding interest of ASML. If this is the case, the BoM and SB will provide their reasons for not providing the requested information.

The Corporate Governance section on our Website also provides links to websites that contain information about ASML published or filed by ASML in accordance with applicable rules and regulations.

Our sole anti-takeover device is the possibility of issuing cumulative preference shares in its share capital to the Foundation under an option agreement between ASML and the Foundation.

Relationship with institutional investors

It is important to us that our institutional investors participate in our General Meetings of Shareholders. To increase the participation rate, several measures have been taken, including providing internet proxy voting. In addition, we actively approach our institutional investors to discuss their participation at the AGM.

The Audit of Financial Reporting and the Position of the Internal and External Auditor Function

Financial reporting

We have comprehensive internal procedures in place for the preparation and publication of our Integrated Report, quarterly figures, and all other financial information. These internal procedures are frequently discussed by the Audit Committee and the SB. The Disclosure Committee assists the BoM in overseeing ASML's disclosure activities and ensures compliance with applicable disclosure requirements arising under Dutch and US law, and other regulatory requirements.

The Audit Committee reviews and approves the external auditor's audit plan for the audits planned during the financial year. The audit plan also includes amongst others the activities of the external auditor with respect to their limited procedures on the quarterly results other than the annual accounts. The external auditor regularly updates the Audit Committee on the progress of the audits and other activities.

The SB has reviewed, and all SB members signed, ASML's 2017 financial statements as prepared by the BoM. KPMG has duly examined our financial statements, and the Auditor's Report is included in the Consolidated Financial Statements.

Appointment, role, assessment of the functioning of the external auditor, and the auditor's fee

In accordance with Dutch law, our external auditor is appointed by the General Meeting of Shareholders and is nominated for appointment by the SB upon advice from the Audit Committee and the BoM. ASML's current external auditor, KPMG, was appointed by the General Meetings of Shareholders in 2016 for the reporting year 2017. Every year, the BoM and the Audit Committee provide the SB with a report on the relationship with the external auditor.

The external auditor is present at our AGM to respond to questions, if any, from the shareholders about the auditor's report on the Consolidated Financial Statements.

The Audit Committee approves the remuneration of the external auditor on behalf of the SB after consultation with the BoM. It has been agreed among the members of the SB and the BoM that the Audit Committee has the most relevant insight and experience to be able to approve this item, and therefore the SB has delegated these responsibilities to the Audit Committee.

The Audit Committee monitors compliance with the Dutch and US rules on non-audit services provided by the external auditor, which outlines strict separation of audit and advisory services for Dutch public interest entities. In principle the external auditor attends all the Audit Committee meetings, unless the Audit Committee deems this unnecessary. The external auditor's findings are discussed at these meetings.

The Audit Committee reports to the SB on all issues discussed with the external auditor, including the external auditor's reports with regard to the audit of the annual reports as well as the content of the annual reports. The independent auditor's report refers to materiality, scope of the group audit, key audit matters (such as revenue recognition and the 24.9 percent indirect interest in Carl Zeiss SMT GmbH), the responsibilities of management, the SB and the external auditor for the financial statements and reports on other legal and regulatory requirements. For more information on principal accountant fees and services see Other Appendices - Appendix - Principal Accountant Fees and Services.

Internal Audit function

The Internal Audit function assesses our systems of internal controls by performing independent procedures such as risk-based operational audits, IT audits and compliance audits. The Internal Audit department reports directly to the Audit Committee and the BoM. The department's annual Internal Audit plan is discussed with and approved by the Audit Committee, the BoM and the SB. The follow-up on the Internal Audit findings and progress being made compared to the Internal Audit plan are discussed on a quarterly basis with the Audit Committee. The external auditor and Internal Audit department have meetings on a regular basis.

Other Information on Governance

General

The EU Takeover Directive requires that listed companies publish additional information providing insight into the defensive structures and mechanisms which they use. The relevant provision has been implemented into Dutch law by means of a decree made on April 5, 2006. The information required to be disclosed in accordance with this decree is listed below.

Our BoM has the power to issue ordinary shares and cumulative preference shares insofar as the BoM has been authorized to do so by the General Meeting of Shareholders. The BoM requires approval of the SB for such an issue. The authorization by the General Meeting of Shareholders can only be granted for a certain period not exceeding 5 years and may be extended for no longer than 5 years on each occasion. If the General Meeting of Shareholders has not authorized the BoM to issue shares, the General Meeting of Shareholders will be authorized to issue shares on the BoM's proposal, provided that the SB has approved such proposal.

Share capital

ASML's authorized share capital amounts to EUR 126.0 million and is divided into:

700,000,000 Cumulative Preference Shares with a nominal value of EUR 0.09 each.

699,999,000 Ordinary Shares with a nominal value of EUR 0.09 each.

9,000 Ordinary Shares B with a nominal value of EUR 0.01 each.

As of December 31, 2017, 431,464,705 ordinary shares with a nominal value of EUR 0.09 each were issued and fully paid up; this includes 4,071,113 treasury shares. No ordinary shares B and no cumulative preference shares have been issued.

A total of 96,566,077 depository receipts for ordinary shares were issued at the launch of the CCIP. This number has since decreased with the sell down by the relevant customers following expiry of the lock-up. For further information see Reporting obligations under the Act on the supervision of financial markets ('Wet op het financieel toezicht', the FMSA) and under US securities laws below.

Ordinary shares

An ordinary share entitles the holder thereof to cast 9 votes at the General Meeting of Shareholders. Each ordinary share consists of 900 fractional shares. Fractional shares entitle the holder thereof to a fractional dividend, but do not entitle the holder thereof to voting rights. Only those persons who hold shares directly in the share register in the Netherlands, held by us at our address at 5504 DR Veldhoven, de Run 6501, the Netherlands, or in the New York share register, held by JP Morgan Chase Bank, N.A., P.O. Box 64506, St. Paul, MN 55164-0506, United States, can hold fractional shares. Those who hold ordinary shares through the deposit system under the Dutch Securities Bank Giro Transactions Act ('Wet giraal effectenverkeer'; the Giro Act) maintained by the Dutch central securities depository Euroclear Nederland or through the Depository Trust Company cannot hold fractional shares. At our 2017 AGM, the BoM was authorized from April 26, 2017 through October 26, 2018, subject to the approval of the SB, to issue shares and / or rights thereto representing up to a maximum of 5.0 percent of our issued share capital at April 26, 2017, plus an additional 5.0 percent of our issued share capital at April 26, 2017 that may be issued in connection with mergers, acquisitions and / or (strategic) alliances. At our 2018 AGM, our shareholders will be asked to extend this authority through October 25, 2019.

Holders of ASML's ordinary shares have a preemptive right, in proportion to the aggregate nominal amount of the ordinary shares held by them. This preemptive right may be restricted or excluded. Holders of ordinary shares do not have preemptive right with respect to any ordinary shares issued for consideration other than cash or ordinary shares issued to employees. If authorized for this purpose by the General Meeting of Shareholders, the BoM has the power, subject to approval of the SB, to restrict or exclude the preemptive rights of holders of ordinary shares. At our 2017 AGM, our shareholders authorized the BoM through October 26, 2018, subject to approval of the SB, to restrict or exclude preemptive rights of holders of ordinary shares up to a maximum of 10 percent of our issued share capital. At our 2018 AGM, our shareholders will be asked to extend this authority through October 25, 2019.

We may repurchase our issued ordinary shares at any time, subject to compliance with the requirements of Dutch law and our Articles of Association. Any such repurchases are and remain subject to the approval of the SB and the authorization by the General Meeting of Shareholders, which authorization may not be for more than 18 months. At the 2017 AGM, the BoM has been authorized, subject to SB approval, to repurchase through October 26, 2018, up to a maximum of 2 times 10.0 percent of our issued share capital at April 26, 2017, at a price between the nominal value of the ordinary shares purchased and 110.0 percent of the market price of these securities on Euronext Amsterdam or NASDAQ. At our 2018 AGM, our shareholders will be asked to extend this authority through October 25, 2019.

For details on our share buyback program, see Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 27 Purchases of equity securities by the issuer and affiliated purchasers.

Ordinary shares B

Our Articles of Association provide for 9,000 ordinary shares B with a nominal value of EUR 0.01. Each ordinary share B entitles the holder thereof to cast one vote at the General Meeting of Shareholders. Holders of fractional shares had the opportunity, until July 31, 2013, to convert fractional shares into ordinary shares B to obtain voting rights with respect to those fractional shares. No ordinary shares B have been issued.

Special voting rights on the issued shares

There are no special voting rights on the issued shares in our share capital.

Limitation voting rights on ordinary shares indirectly held by the Participating Customers

Pursuant to the agreements entered into with them, the Participating Customers (and their respective foundations) will not be entitled to vote with the ordinary shares that were acquired by (the foundations of) the Participating Customers as part of the CCIP or any other ordinary shares otherwise transferred to the foundations (under the circumstances described under 'Standstill; Additional Purchases', prior to a Shareholder Agreement Termination Event except when a Suspension Event occurs and is continuing or where the following matters are proposed at any General Meeting of Shareholders (the 'Voting Restrictions'): (i) an issuance of ASML shares or grant of rights to subscribe for ASML shares representing 25 percent or more of the issued and outstanding share capital of ASML or the restriction or exclusion of preemption rights relating thereto (in each case, on an aggregate basis during the preceding 12 months) or the designation of the BoM as the authorized body to resolve on these matters; (ii) an authorization to repurchase 25 percent or more of ASML's issued and outstanding share capital on an aggregate basis during the preceding 12 months; (iii) the approval of a significant change in the identity or nature of ASML or its business, including a transfer of all or substantially all business or assets of ASML and its subsidiaries to a third party, the establishment or cancellation of a long-lasting cooperation of essential importance with a third party and an acquisition or disposition of an interest in the capital or assets of a person with a value of at least one third of the assets of ASML (on a consolidated basis); (iv) an amendment to ASML's Articles of Association that would materially affect the specific voting rights of the Participating Customers, would materially affect the identity or nature of ASML or its business, or would disproportionately (or uniquely) and adversely affect the rights or benefits attached to or derived from the ordinary shares held by the Participating Customers through the foundations as compared to the shareholders; (v) the dissolution of ASML; and (vi) any merger or demerger which would result in a material change in the identity or nature of ASML or its business.

Cumulative preference shares

In 1998, we granted the Preference Share Option to the Foundation. This option was amended and extended in 2003 and 2007. A third amendment to the option agreement between the Foundation and ASML became effective on January 1, 2009, to clarify the procedure for the repurchase and cancellation of the preference shares when issued. The nominal value of the cumulative preference shares amounts to EUR 0.09 and the number of cumulative preference shares included in the authorized share capital is 700,000,000. A cumulative preference share entitles the holder thereof to cast 9 votes in the General Meeting of Shareholders.

The Foundation may exercise the Preference Share Option in situations where, in the opinion of the Foundation's Board of Directors, ASML's interests, ASML's business or the interests of ASML's stakeholders are at stake. This may be the case if a public bid for ASML's shares is announced or made, or there is a justified expectation that such a bid will be made without any agreement having been reached in relation to such a bid with ASML. The same may apply if one shareholder, or more shareholders acting in concert, hold a substantial percentage of ASML's issued ordinary shares without making an offer or if, in the opinion of the Foundation's Board of Directors, the (attempted) exercise of the voting rights by one shareholder or more shareholders, acting in concert, is materially in conflict with ASML's interests, ASML's business or ASML's stakeholders.

The Foundation's objectives are to look after the interests of ASML and of the enterprises maintained by ASML and of the companies which are affiliated in a group with ASML, in such a way that the interests of ASML, of those enterprises and of all parties concerned are safeguarded in the best possible way, and influences in conflict with these interests which might affect the independence or the identity of ASML and those companies are deterred to the best of the Foundation's ability, and everything related to the above or possibly conducive thereto. The Foundation seeks to realize its objects by the acquiring and holding of cumulative preference shares in the capital of ASML and by exercising the rights attached to these shares, particularly the voting rights attached to these shares.

The Preference Share Option gives the Foundation the right to acquire a number of cumulative preference shares as the Foundation will require, provided that the aggregate nominal value of such number of cumulative preference shares shall not exceed the aggregate nominal value of the ordinary shares that have been issued at the time of exercise of the Preference Share Option for a subscription price equal to their nominal value. Only one-fourth of the subscription price would be payable at the time of initial issuance of the cumulative preference shares, with the other three-fourths of the nominal value only being payable when we call up this amount. Exercise of the preference share option could effectively dilute the voting power of the outstanding ordinary shares by one-half.

Cancellation and repayment of the issued cumulative preference shares by ASML requires the authorization by the General Meeting of Shareholders of a proposal to do so by the BoM approved by the SB. If the Preference Share Option is exercised and as a result cumulative preference shares are issued, ASML, at the request of the Foundation, will initiate the repurchase or cancellation of all cumulative preference shares held by the Foundation. In that case ASML is obliged to effect the repurchase and cancellation respectively as soon as possible. A cancellation will result in a repayment of the amount paid and exemption from the obligation to pay up on the cumulative preference shares. A repurchase of the cumulative preference shares can only take place when such shares are fully paid up. If the Foundation does not request ASML to repurchase or cancel all cumulative preference shares held by the Foundation within 20 months of issuance of these shares, we will be obliged to convene a General Meeting of Shareholders in order to decide on a repurchase or cancellation of these shares.

The Foundation is independent of ASML. The Board of Directors of the Foundation comprises four independent members from the Netherlands' business and academic communities. In 2017, the members of the Foundation's Board of Directors were: Mr. H. Bodt, Mr. M.W. den Boogert, Mr. J.M. de Jong and Mr. A.H. Lundqvist. On January 1, 2018 Mr. M.W. den Boogert retired as a member of the Foundation's Board of Directors and was succeeded by Mr. S. Perrick.

Limitations to transfers of shares in the share capital of ASML

There are currently no limitations, either under Dutch law or in ASML's Articles of Association, on the transfer of ordinary shares in the share capital of ASML. Pursuant to ASML's Articles of Association, the SB's approval shall be required for every transfer of cumulative preference shares.

Reporting obligations under the Act on the supervision of financial markets ('Wet op het financieel toezicht', the FMSA) and under US securities laws

The following table sets forth the total number of ordinary shares owned by each shareholder that reported to the AFM or SEC a beneficial ownership of ordinary shares that is at least 3.0 percent (5.0 percent, in the case of the SEC) of our ordinary shares issued and outstanding as well as the ordinary shares (including shares underlying options) owned by our members of the BoM (which includes those persons specified in Management Board Report - Board of Management), as a group, as of December 31, 2017. The information set out below with respect to shareholders is based on public filings with the SEC and AFM as of January 31, 2018.

Identity of Person or Group	Shares Owned	Percent of Class ⁶	
Capital Group International, Inc ¹	67,265,695	15.74	%
BlackRock Inc. ²	27,139,122	6.35	%
Stichting Administratiekantoor MAKTSJAB/Intel ³	21,418,707	5.01	%
Members of ASML's Board of Management (5 persons) ^{4,5}	126,049	0.03	%

As reported to the AFM on April 25, 2014, Capital Group International, Inc. and Capital Research & Management Company, which we believe to be an affiliate of Capital Group International, Inc., indirectly have 605,391,255 voting rights corresponding to 67,265,695 shares (based on 9 votes per share) of our ordinary shares but do not have ownership rights related to those shares. Capital World Investors reported on a Schedule 13-G/A filed with the SEC on February 13, 2017, that it is the beneficial owner of 51,659,993 shares of our ordinary shares as a result of its ¹ affiliation with Capital Research & Management Company. In addition, the Growth Fund of America reported to the AFM on May 15, 2014 that it owns 3.08 percent of our outstanding shares and the EuroPacific Growth Fund reported to the AFM on June 6, 2017 that it owns 3.03 percent of our outstanding shares. We believe that some or all of these shares are included within the shares reported to be owned by Capital Group International, Inc., as set forth above.

Based solely on the Schedule 13-G/A filed by BlackRock Inc. with the SEC on January 30, 2018; BlackRock ² reports voting power with respect to 24,678,344 of these shares. A public filing with the AFM on September 26, 2017 shows aggregate holdings of various BlackRock funds of 4.93 percent, based on total number of issued shares at the time, and 5.96 percent in voting rights.

Based solely on the November 29, 2017 filing with the AFM; Intel reported ownership of 4,590,832 ordinary shares ³ (held through Intel Holdings B.V. and Intel Overseas Funding Corporation) and 16,827,877 certificates (held through Intel's wholly owned subsidiary Intel Holdings B.V. and corresponding to ordinary shares owned by Stichting Administratiekantoor MAKTSJAB).

Does not include unvested shares granted to members of the BoM. For further information see Supervisory Board ⁴ Report - Remuneration Report and Other Appendices - Appendix - Board of Management and Supervisory Board Remuneration.

⁵ No shares are owned by members of the SB.

⁶ As a percentage of the total number of ordinary shares issued and outstanding (427,393,592) as of December 31, 2017, which excludes 4,071,113 ordinary shares which have been issued but are held in treasury by ASML. Please note that share ownership percentages reported to the AFM are expressed as a percentage of the total number of

ordinary shares issued (including treasury stock) and that accordingly, percentages reflected in this table may differ from percentages reported to the AFM.

As of December 31, 2017, 73,909,513 ordinary shares were held by 339 registered holders with a registered address in the US. Since certain of our ordinary shares were held by brokers and nominees, the number of record holders in the US may not be representative of the number of beneficial holders or of where the beneficial holders are resident.

Appointment of Board of Management and Supervisory Board

Board of Management

The rules governing the appointment and dismissal of members of the BoM are described in Corporate Governance - Board of Management.

Supervisory Board

The rules governing the appointment and dismissal of members of the SB are described in Corporate Governance - Supervisory Board.

Articles of Association

The General Meeting of Shareholders can resolve to amend our Articles of Association. The (proposed) amendment requires the approval of the SB.

A resolution to amend the Articles of Association is adopted at a General Meeting of Shareholders at which more than one half of the issued share capital is represented and with at least three-fourths of the votes cast. If the required share capital is not represented at a meeting convened for that purpose, a subsequent meeting shall be convened, to be held within 4 weeks of the first meeting, at which, irrespective of the share capital represented, the resolution can be adopted with at least three-fourths of the votes cast. If a resolution to amend the Articles of Association is proposed by the BoM, the resolution will be adopted with an absolute majority of votes cast irrespective of the represented share capital at the General Meeting of Shareholders.

A summary of our Articles of Association is included as Exhibit 99.1 to our form 6-K filed furnished with the SEC on February 8, 2013 (the 'Articles of Association').

Severance payments under agreements with members of Board of Management

Employment agreements, respectively management services agreements, for members of the BoM contain specific provisions regarding severance payments. If ASML gives notice of termination of the employment agreement respectively management services agreements for reasons which are not exclusively or mainly found in acts or omissions of the member of the BoM concerned, a severance payment not exceeding one year's base salary will be paid upon the effective date of termination.

As of July 1, 2013, the relationship between a member of the BoM and a listed company can no longer be treated as an employment contract. Members appointed after July 1, 2013 have entered into a management services agreement. However the employment agreements entered into before July 1, 2013 will remain in effect.

Current contracts contain a provision that a member of the BoM, on their own initiative (when giving notice of termination pursuant to a change of control), will be entitled to a severance amount. Given that such a resignation is specifically linked to a change of control, ASML does not consider this provision a deviation from the Code.

NASDAQ Corporate Governance Standards

NASDAQ rules provide that foreign private issuers may follow home country practice in lieu of the NASDAQ corporate governance standards subject to certain exceptions and except to the extent that such exemptions would be contrary to US federal securities laws. The practices followed by ASML in lieu of NASDAQ rules are described below:

ASML does not follow NASDAQ's quorum requirements applicable to meetings of ordinary shareholders. In accordance with Dutch law and Dutch generally accepted business practice, ASML's Articles of Association provide that there are no quorum requirements generally applicable to General Meetings of Shareholders.

ASML does not follow NASDAQ's requirements regarding the solicitation of proxies and the provision of proxy statements for General Meetings of Shareholders. ASML does furnish proxy statements and solicit proxies for the General Meeting of Shareholders. Dutch corporate law sets a mandatory (participation and voting) record date for Dutch listed companies at the twenty-eighth day prior to the date of the General Meeting of Shareholders.

Shareholders registered at such record date are entitled to attend and exercise their rights as shareholders at the General Meeting of Shareholders, regardless of sale of shares after the record date.

ASML does not follow NASDAQ's requirement regarding distribution to shareholders of copies of an annual report containing audited Financial Statements prior to our AGM. The distribution of our Integrated Reports to shareholders is not required under Dutch corporate law or Dutch securities laws, or by Euronext Amsterdam. Furthermore, it is generally accepted business practice for Dutch companies not to distribute annual reports. In part, this is because the Dutch system of bearer shares has made it impractical to keep a current list of holders of the bearer shares in order to distribute the annual reports. Instead, we make our Integrated Report available at our corporate head office in the Netherlands (and at the offices of our Dutch listing agent as stated in the convening notice for the meeting) no later than 42 days prior to convocation of the AGM. In addition, we post a copy of our Integrated Reports on our Website prior to the AGM.

ASML does not follow NASDAQ's requirement to obtain shareholder approval of stock option or purchase plans or other equity compensation arrangements available to officers, directors or employees. It is not required under Dutch law or generally accepted practice for Dutch companies to obtain shareholder approval of equity compensation

arrangements available to officers, directors or employees. The AGM adopts the Remuneration Policy for the BoM, approves equity compensation arrangements for the BoM and approves the remuneration for the SB. The Remuneration Committee evaluates the achievements of individual members of the BoM with respect to the short and long-term quantitative performance, the full SB evaluates the quantitative performance criteria. Equity compensation arrangements for employees are adopted by the BoM within limits approved by the AGM.

Compliance with the Corporate Governance Code

ASML fully complies with the Code.

The Board of Management and the Supervisory Board,

Veldhoven, February 6, 2018

ASML INTEGRATED REPORT 2017 88

Consolidated Statements of Operations

Notes	Year ended December 31 (in millions, except per share data)	2015	2016	2017
		EUR	EUR	EUR
21	Net system sales ¹	4,310.4	4,672.0	6,373.7
	Net service and field option sales ¹	1,977.0	2,122.8	2,679.1
21	Total net sales	6,287.4	6,794.8	9,052.8
	Cost of system sales ¹	(2,246.0)	(2,468.2)	(3,459.0)
	Cost of service and field option sales ¹	(1,145.7)	(1,282.1)	(1,517.1)
22	Total cost of sales	(3,391.7)	(3,750.3)	(4,976.1)
	Gross profit	2,895.7	3,044.5	4,076.7
28	Other income	83.2	93.8	95.8
22, 23	Research and development costs	(1,068.1)	(1,105.8)	(1,259.7)
22	Selling, general and administrative costs	(345.7)	(374.8)	(416.6)
	Income from operations	1,565.1	1,657.7	2,496.2
24	Interest and other, net	(16.5)	33.7	(50.3)
	Income before income taxes	1,548.6	1,691.4	2,445.9
20	Provision for income taxes	(161.4)	(219.5)	(310.7)
	Income after income taxes	1,387.2	1,471.9	2,135.2
10	Profit (loss) related to equity method investments	—	—	(16.7)
	Net income	1,387.2	1,471.9	2,118.5
1	Basic net income per ordinary share	3.22	3.46	4.93
1	Diluted net income per ordinary share ²	3.21	3.44	4.91

	Number of ordinary shares used in computing per share amounts			
1	Basic	430.6	425.6	429.8
1	Diluted ²	432.6	427.7	431.6

As per January 1, 2017, ASML presents net sales with respect to metrology and inspection systems as part of net system sales instead of net service and field option sales. The comparative numbers have been adjusted to reflect this change in accounting policy.

The calculation of diluted net income per ordinary share assumes the exercise of options issued under our stock option plans and the issuance of shares under our share plans for periods in which exercises or issuances would have a dilutive effect. The calculation of diluted net income per ordinary share does not assume exercise of options when exercise would be anti-dilutive.

Consolidated Statements of Comprehensive Income

Year ended December 31 Notes (in millions)	2015 EUR	2016 EUR	2017 EUR
Net income	1,387.2	1,471.9	2,118.5
Other comprehensive income:			
Proportionate share of other comprehensive income from equity method investments	—	—	(1.0)
Foreign currency translation, net of taxes:			
Gain (loss) on foreign currency translation and effective portion of hedges on net investments	272.5	120.4	(329.0)
Financial instruments, net of taxes:			
4 Gain (loss) on derivative financial instruments	9.9	6.0	(16.6)
4 Transfers to net income	(22.0)	2.4	(3.1)
Other comprehensive income, net of taxes	260.4	128.8	(349.7)
Total comprehensive income, net of taxes	1,647.6	1,600.7	1,768.8
Attributable to equity holders	1,647.6	1,600.7	1,768.8

Consolidated Balance Sheets

	As of December 31	2016	2017
Notes	(in millions, except share and per share data)	EUR	EUR
	Assets		
5	Cash and cash equivalents	2,906.9	2,259.0
5	Short-term investments	1,150.0	1,029.3
6	Accounts receivable, net	700.2	1,772.3
7	Finance receivables, net	447.4	59.1
20	Current tax assets	11.6	61.6
8	Inventories, net	2,780.9	2,958.4
9	Other assets	560.4	867.3
	Total current assets	8,557.4	9,007.0
7	Finance receivables, net	117.2	264.9
20	Deferred tax assets	34.9	31.7
9	Other assets	612.3	602.7
10	Equity method investments	—	982.2
11	Goodwill	4,873.9	4,541.1
12	Other intangible assets, net	1,323.0	1,166.0
13, 21	Property, plant and equipment, net	1,687.2	1,600.8
	Total non-current assets	8,648.5	9,189.4
	Total assets	17,205.9	18,196.4
	Liabilities and shareholders' equity		
	Accounts payable	593.2	837.3
14	Accrued and other liabilities	2,236.0	2,327.4
20	Current tax liabilities	201.9	152.0
15	Current portion of long-term debt	247.7	25.2
	Provisions	1.8	—
	Total current liabilities	3,280.6	3,341.9
15	Long-term debt	3,071.8	3,000.1
20	Deferred and other tax liabilities	396.9	327.9
	Provisions	20.5	21.2
14	Accrued and other liabilities	615.7	829.1
	Total non-current liabilities	4,104.9	4,178.3
	Total liabilities	7,385.5	7,520.2
	Ordinary shares; EUR 0.09 nominal value;		
	699,999,000 shares authorized at December 31, 2017;		
	427,393,592 issued and outstanding at December 31, 2017;		
	699,999,000 shares authorized at December 31, 2016;		
	429,941,232 issued and outstanding at December 31, 2016;		
	Issued and outstanding shares	39.4	38.8
	Share premium	3,693.5	3,732.5

Edgar Filing: ASML HOLDING NV - Form 20-F

	Treasury shares at cost	(796.2)	(557.9)
	Retained earnings	6,282.5	7,211.3
	Accumulated other comprehensive income	601.2	251.5
26	Total shareholders' equity	9,820.4	10,676.2
	Total liabilities and shareholders' equity	17,205.9	18,196.4

Consolidated Statements of Shareholders' Equity

Notes (in millions)	Issued and Outstanding Shares		Share Premium	Treasury Shares at Cost	Retained Earnings	Accumulated OCI ²	Total
	Number ¹	Amount					
	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Balance at January 1, 2015	432.9	39.4	3,002.0	(389.4	)4,648.5	212.0	7,512.5
Components of comprehensive income:							
Net income	—	—	—	—	1,387.2	—	1,387.2
Foreign currency translation and effective portion of hedges on net investments	—	—	—	—	—	272.5	272.5
4 Loss on financial instruments, net of taxes	—	—	—	—	—	(12.1	)(12.1)
Total comprehensive income	—	—	—	—	1,387.2	260.4	1,647.6
CCIP:							
28 Fair value differences ³	—	—	17.9	—	—	—	17.9
27 Purchase of treasury shares	(6.3	)(0.3	)—	(564.6	)—	—	(564.9)
27 Cancellation of treasury shares	—	(0.5	)—	389.3	(388.8)—	—
18, 22 Share-based payments	—	—	59.0	—	—	—	59.0
Issuance of shares	1.4	0.2	(12.3	)87.8	(60.3	)—	15.4
26 Dividend paid	—	—	—	—	(302.3	)—	(302.3)
18, 20 Tax benefit from share-based payments	—	—	3.6	—	—	—	3.6
Balance at December 31, 2015	428.0	38.8	3,070.2	(476.9	)5,284.3	472.4	8,388.8
Components of comprehensive income:							
Net income	—	—	—	—	1,471.9	—	1,471.9
Foreign currency translation and effective portion of hedges on net investments	—	—	—	—	—	120.4	120.4
4 Gain on financial instruments, net of taxes	—	—	—	—	—	8.4	8.4
Total comprehensive income	—	—	—	—	1,471.9	128.8	1,600.7
CCIP:							
28 Fair value differences ³	—	—	27.9	—	—	—	27.9
27 Purchase of treasury shares	(4.8	)—	—	(400.0	)—	—	(400.0)

Edgar Filing: ASML HOLDING NV - Form 20-F

27	Cancellation of treasury shares	—	—	—	—	—	—	—
18, 22	Share-based payments ⁴	—	—	49.2	—	—	—	49.2
	Issuance of shares ⁵	6.7	0.6	545.3	80.7	(27.8)	)—	598.8
26	Dividend paid	—	—	—	—	(445.9)	)—	(445.9)
18, 20	Tax benefit from share-based payments	—	—	0.9	—	—	—	0.9
	Balance at December 31, 2016	429.9	39.4	3,693.5	(796.2)	)6,282.5	601.2	9,820.4
Components of comprehensive income:								
	Net income	—	—	—	—	2,118.5	—	2,118.5
	Proportionate share of other comprehensive income from equity method investments	—	—	—	—	—	(1.0)	)(1.0)
	Foreign currency translation and effective portion of hedges on net investments	—	—	—	—	—	(329.0)	)(329.0)
4	Loss on financial instruments, net of taxes	—	—	—	—	—	(19.7)	)(19.7)
	Total comprehensive income	—	—	—	—	2,118.5	(349.7)	)1,768.8
CCIP:								
28	Fair value differences ³	—	—	28.6	—	—	—	28.6
27	Purchase of treasury shares	(3.5)	)—	—	(500.0)	)—	—	(500.0)
27	Cancellation of treasury shares	—	(0.7)	)—	650.0	(649.3))—	—
18, 22	Share-based payments	—	—	53.1	—	—	—	53.1
	Issuance of shares	1.0	0.1	(42.7)	)88.3	(23.7)	)—	22.0
26	Dividend paid	—	—	—	—	(516.7)	)—	(516.7)
	Balance at December 31, 2017	427.4	38.8	3,732.5	(557.9)	)7,211.3	251.5	10,676.2

As of December 31, 2017, the number of issued shares was 431,464,705. This includes the number of issued and outstanding shares of 427,393,592 and the number of treasury shares of 4,071,113. As of December 31, 2016, the number of issued shares was 439,199,514. This includes the number of issued and outstanding shares of 1. 429,941,232 and the number of treasury shares of 9,258,282. As of December 31, 2015, the number of issued shares was 433,332,573. This includes the number of issued and outstanding shares of 427,986,682 and the number of treasury shares of 5,345,891.

As of December 31, 2017, accumulated OCI, net of taxes, consists of EUR 1.0 million loss relating to our proportionate share of other comprehensive income from equity method investments (2016: no amount; 2015: no 2. amount), EUR 264.1 million relating to foreign currency translation gain (2016: EUR 593.1 million gain; 2015: EUR 472.7 million gain) and EUR 11.6 million relating to unrealized losses on financial instruments (2016: EUR 8.1 million gain; 2015: EUR 0.3 million losses).

In 2017, EUR 28.6 million (2016: EUR 27.9 million; 2015: EUR 17.9 million) is recognized to increase equity to 3. the fair value of the shares issued to the Participating Customers in the CCIP. The portion of the NRE funding allocable to the shares is recognized over the NRE Funding Agreements period (2013-2017).

Share-based payments include an amount of EUR 1.5 million in relation to the fair value compensation of unvested 4. equity awards exchanged as part of the acquisition of HMI.

Issuance of shares includes 5,866,001 ordinary shares issued in relation to the acquisition of HMI for a total fair 5. value of EUR 580.6 million.

Consolidated Statements of Cash Flows

Notes	Year ended December 31 (in millions)	2015 EUR	2016 EUR	2017 EUR
	Cash Flows from Operating Activities			
	Net income	1,387.2	1,471.9	2,118.5
	Adjustments to reconcile net income to net cash flows from operating activities:			
9, 12, 13, 15	Depreciation and amortization ¹	296.9	356.9	417.5
11, 12, 13	Impairment	2.3	3.5	9.0
13	Loss on disposal of property, plant and equipment ²	1.6	5.2	2.8
18, 22	Share-based payments	59.0	47.7	53.1
6	Allowance for doubtful receivables	3.9	3.2	7.8
8	Allowance for obsolete inventory	211.8	73.0	120.1
20	Deferred income taxes	45.3	(0.6)	(7.6)
10	Equity method investments, net of income taxes	—	—	16.7
	Changes in assets and liabilities:			
6	Accounts receivable	243.2	187.4	(1,142.4)
7	Finance receivables	(145.3)	(156.1)	224.8
8	Inventories ^{2,3}	(87.8)	(43.7)	(237.8)
9	Other assets	(146.3)	(152.9)	(389.8)
14	Accrued and other liabilities	235.4	(273.9)	491.2
	Accounts payable	(77.1)	50.9	266.5
20	Current tax assets and liabilities	(4.6)	93.4	(151.8)
	Net cash provided by operating activities	2,025.5	1,665.9	1,798.6
	Cash Flows from Investing Activities			
13	Purchase of property, plant and equipment ³	(371.8)	(316.3)	(338.9) ⁴
12	Purchase of intangible assets	(1.1)	(8.4)	(19.1)
5	Purchase of short-term investments	(950.0)	(2,520.0)	(1,129.3)
5	Maturity of short-term investments	334.9	2,320.0	1,250.0
	Cash from (used for) derivative financial instruments	(171.9)	(15.0)	27.0
	Loans issued and other investments	—	(7.4)	(0.6)
	Repayment on loans	—	—	1.6
10	Acquisition of equity method investments	—	—	(1,019.7)
10	Dividend income from equity method investments	—	—	19.7
2	Acquisition of subsidiaries (net of cash acquired)	—	(2,641.3)	—
	Net cash used in investing activities	(1,159.9)	(3,188.4)	(1,209.3)
	Cash Flows from Financing Activities			
26	Dividend paid	(302.3)	(445.9)	(516.7)
26, 27	Purchase of treasury shares	(564.9)	(400.0)	(500.0)
2	Net proceeds from issuance of shares	33.2	582.7	⁵ 50.6
15	Net proceeds from issuance of notes	—	2,230.6	⁶ —
15	Repayment of debt	(3.6)	(4.7)	(243.0)
18, 20	Tax benefit (deficit) from share-based payments	3.7	0.9	—
	Net cash from (used in) financing activities	(833.9)	1,963.6	(1,209.1)
	Net cash flows	31.7	441.1	(619.8)

Edgar Filing: ASML HOLDING NV - Form 20-F

	Effect of changes in exchange rates on cash	7.5	7.1	(28.1)
	Net increase (decrease) in cash and cash equivalents	39.2	448.2	(647.9)
5	Cash and cash equivalents at beginning of the year	2,419.5	2,458.7	2,906.9
5	Cash and cash equivalents at end of the year	2,458.7	2,906.9	2,259.0
	Supplemental Disclosures of Cash Flow Information:			
	Interest paid	(43.7)	(55.7)	(91.4)
	Income taxes paid	(126.9)	(115.9)	(475.0)

- In 2017, depreciation and amortization includes EUR 308.2 million of depreciation of property, plant and equipment (2016: EUR 290.8 million, 2015: EUR 243.0 million), EUR 105.5 million of amortization of intangible assets
1. (2016: EUR 63.5 million, 2015: EUR 51.2 million) and EUR 3.8 million of amortization of underwriting commissions and discount related to the bonds and credit facility (2016: EUR 2.6 million, 2015: EUR 2.7 million).
 2. In 2017, an amount of EUR 45.8 million (2016: EUR 22.8 million, 2015: EUR 72.7 million) of the disposal of property, plant and equipment relates to non-cash transfers to inventory. Since the transfers between inventory and property, plant and equipment are non-cash events, these are not reflected in these Consolidated Statements of Cash Flows. For further details see Note 13 Property, plant and equipment.
 3. In 2017, an amount of EUR 13.4 million (2016: EUR 21.6 million, 2015: EUR 91.0 million) of the additions in property, plant and equipment relates to non-cash transfers from inventory. Since the transfers between inventory and property, plant and equipment are non-cash events, these are not reflected in these Consolidated Statements of Cash Flows. For further details see Note 13 Property, plant and equipment.
 4. In 2017, an amount of EUR 36.5 million of the purchase of property, plant and equipment relates to funding provided for tooling to our equity method investment. This funding is not reflected as addition in our movement schedule of property, plant and equipment, see Note 13 Property, plant and equipment, but is presented as part of the other assets. For further details regarding our equity method investments see Note 10 Equity method investments.
 5. Net proceeds from issuance of shares include an amount of EUR 536.6 million which is included in the consideration transferred for the acquisition of HMI. See Note 2 Business combinations.
 6. Net proceeds from issuance of notes relate to the total cash proceeds of EUR 2,230.6 million (net of incurred transaction costs) from the issuance of our EUR 500 million 0.625 percent senior notes due 2022, our EUR 1,000 million 1.375 percent senior notes due 2026 and our EUR 750 million 1.625 percent senior notes due 2027.

Notes to the Consolidated Financial Statements

1. General information / summary of significant accounting policies

ASML, with its corporate headquarters in Veldhoven, the Netherlands, is engaged in the development, production, marketing, selling and servicing of advanced semiconductor equipment. ASML's principal operations are in the Netherlands, the US and Asia.

Our shares are listed for trading in the form of registered shares on Euronext Amsterdam and on NASDAQ. The principal trading market of our ordinary shares is Euronext Amsterdam.

Basis of preparation

The accompanying Consolidated Financial Statements are stated in millions of euros unless indicated otherwise.

The accompanying Consolidated Financial Statements have been prepared in conformity with US GAAP. We have reclassified certain prior period amounts to align with the current period presentation.

Use of estimates

The preparation of our Consolidated Financial Statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities on the balance sheet dates, and the reported amounts of net sales and costs during the reported periods. Actual results could differ from those estimates. We evaluate our estimates continuously and we base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates if the assumptions prove incorrect. To the extent there are material differences between actual results and these estimates, our future results could be materially and adversely affected. We believe that the accounting policies described below require us to make significant judgments and estimates in the preparation of our Consolidated Financial Statements. Our most critical accounting estimates include:

Revenue recognition

Business combinations

Inventories

Income taxes

Contingencies and litigation

Evaluation of long-lived assets for impairment

Principles of consolidation

The Consolidated Financial Statements include the Financial Statements of ASML Holding N.V. and all of its subsidiaries and the variable interest entity of which ASML is the primary beneficiary. All intercompany profits, balances and transactions have been eliminated in the consolidation.

Subsidiaries

Subsidiaries are all entities over which ASML has the control to govern financial and operating policies generally accompanying a shareholding of more than 50 percent of the outstanding voting rights. As from the date that these criteria are met, the financial data of the relevant subsidiaries are included in the consolidation.

Business combinations

Acquisitions of subsidiaries are included on the basis of the acquisition method. The cost of acquisition is measured based on the consideration transferred at fair value, the fair value of identifiable assets distributed and the fair value of liabilities incurred or assumed at the acquisition date (i.e., the date which we obtain control). The excess of the costs of an acquired subsidiary over the net of the amounts assigned to identifiable assets acquired and liabilities incurred or assumed, is capitalized as goodwill. Acquisition-related costs are expensed when incurred in the period they arise or the service is received.

Variable interest entities

We assess whether we have a controlling financial interest in any variable interest entity. We consolidate a variable interest entity when we have a variable interest that provides us with a controlling financial interest. We are deemed to have a controlling financial interest in a variable interest entity if both of the following characteristics are met: a) the power to direct the activities of a variable interest entity that most significantly impact the variable interest entity's economic performance and b) the obligation to absorb losses of the variable interest entity that could potentially be

significant to the variable interest entity or the right to receive benefits from the variable interest entity that could potentially be significant to the variable interest entity.

Foreign currency translation

The financial information for subsidiaries outside the euro-zone is generally measured using local currencies as the functional currency. The Financial Statements of those foreign subsidiaries are translated into euros in the preparation of ASML's Consolidated Financial Statements. Assets and liabilities are translated into euros at the exchange rate on the respective balance sheet dates. Income and costs are translated into euros based on the average exchange rate for the corresponding period. The resulting translation adjustments are recorded directly in shareholders' equity.

Derivative financial instruments

We use derivative financial instruments for the management of foreign currency risks and interest rate risks. We measure all derivative financial instruments based on fair values derived from market prices of the instruments. We adopt hedge accounting for hedges that are highly effective in offsetting the identified hedged risks taking into account required effectiveness criteria.

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and subsequently remeasured. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. We designate derivatives as one of the following:

• A hedge of an exposure relating to changes in the fair value of a recognized asset or liability, that is attributable to a particular risk (fair value hedge).

• A hedge of an exposure relating to the variability in the cash flows of a recognized asset or liability, or of a forecasted transaction, that is attributable to a particular risk (cash flow hedge).

• A hedge of the foreign currency exposure relating to a net investment in a foreign operation (net investment hedge).

We document at the inception of the transaction the relationship between hedging instruments and hedged items, as well as our risk management objectives and strategy for undertaking various hedging transactions. We also document, both at hedge inception and on an ongoing basis, whether derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Fair value hedge

Changes in the fair value of a derivative financial instrument, that is designated and qualified as a fair value hedge, along with the gain or loss on the hedged asset or liability that is attributable to the hedged risk, are recorded in the Consolidated Statements of Operations.

Hedge accounting is discontinued when we revoke the hedging relationship, the hedging instrument expires or is sold, terminated or exercised, or no longer qualifies for hedge accounting. The adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized to the Consolidated Statements of Operations from that date. Interest rate swaps that are being used to hedge the fair value of fixed loan coupons payable are designated as fair value hedges. The change in fair value is intended to offset the change in the fair value of the underlying fixed loan coupons, which is recorded accordingly. The gain or loss relating to the ineffective portion of interest rate swaps hedging fixed loan coupons payable is recognized in the Consolidated Statements of Operations as interest and other, net.

Cash flow hedge

Changes in the fair value of a derivative that is designated and qualified as a cash flow hedge are recorded in OCI, net of taxes, until the underlying hedged transaction is recognized in the Consolidated Statements of Operations. In the event that the underlying hedge transaction will not occur within the specified time period, the gain or loss on the related cash flow hedge is released from OCI and included in the Consolidated Statements of Operations, unless extenuating circumstances exist that are related to the nature of the forecasted transaction and are outside our control or influence and which cause the forecasted transaction to be probable of occurring on a date that is beyond the specified time period.

Foreign currency hedging instruments that are being used to hedge cash flows related to forecasted sales or purchase transactions in non-functional currencies are designated as cash flow hedges. The gain or loss relating to the ineffective portion of the foreign currency hedging instruments is recognized in the Consolidated Statements of Operations in net sales or cost of sales.

Interest rate swaps that are being used to hedge changes in the variability of future interest cash flows to certain of our operating lease obligations are designated as cash flow hedges. The changes in fair value of the derivatives are intended to offset changes in future interest cash flows of such operating lease obligations. The gain or loss relating to the ineffective portion of interest rate swaps hedging the variability of future interest cash flows is recognized in the Consolidated Statements of Operations as interest and other, net.

Net investment hedge

Foreign currency hedging instruments that are being used to hedge changes in the value of a net investment are designated as net investment hedges. Changes in the fair value of a derivative that is designated and qualifies as a net

investment hedge are recorded in other comprehensive income. The gain or loss relating to the ineffective portion is recognized in the Consolidated Statements of Operations as interest and other, net. Gains and losses accumulated in other comprehensive income are recognized in the Consolidated Statements of Operations when the foreign operation is (partially) disposed or sold.

Cash and cash equivalents

Cash and cash equivalents consist primarily of highly liquid investments, such as bank deposits, money market funds and interest-bearing bank accounts with insignificant interest rate risk and remaining maturities of 3 months or less at the date of acquisition.

Short-term investments

Investments with remaining maturities longer than 3 months and less than 1 year at the date of acquisition are presented as short-term investments. Gains and losses other than impairments, interest income and foreign exchange results, are recognized in OCI until the short-term investments are derecognized. Upon derecognition, the cumulative gain or loss recognized in OCI, is recognized in the Consolidated Statements of Operations.

Accounts receivable

Accounts receivable are measured at fair value and are subsequently measured at amortized cost using the effective interest rate method, less allowance for doubtful debts.

Inventories

Inventories are stated at the lower of cost (applying the first-in, first-out method) or net realizable value. Cost includes net prices paid for materials purchased, charges for freight and customs duties, production labor cost and factory overhead. Allowances are made for slow-moving, obsolete or unsellable inventory.

Allowances for inventory are determined based on the expected demand which is derived from sales forecasts, technical obsolescence as well as the expected net realizable value of the inventory.

Equity method investments

Equity investments, through which we are able to exercise significant influence but do not control, are accounted for using the equity method and presented on our Consolidated Balance Sheets within equity method investments. The difference between the cost of our investment and our proportionate share of the carrying value of the equity method investments' underlying net assets as of the acquisition date is the basis difference. The basis difference is allocated to the identifiable assets and liabilities based on their fair value as of the acquisition date (i.e., the date which we obtain significant influence), with the excess costs of the investment over our proportional fair value of the identifiable assets and liabilities being equity method goodwill.

Under the equity method, after initial recognition at cost, our equity method investments are adjusted for our proportionate share of the profit or loss and other comprehensive income of the equity method investments, recognized on a one-quarter time lag and presented within Profit (loss) related to equity method investments. Our proportionate share of the profit or loss of the equity method investments is adjusted for any differences in accounting principles and policies, basis difference adjustments and intra-entity profits. Receipt of dividends reduces the equity method investments.

Goodwill

Goodwill represents the excess of the costs of an acquisition over the fair value of the amounts assigned to assets acquired and liabilities incurred or assumed of the acquired subsidiary at the date of acquisition. Goodwill on acquisition of subsidiaries is allocated to reporting units for the purpose of impairment testing. The allocation is made to those reporting units that are expected to benefit from the business combination in which the goodwill arose. Goodwill is tested for impairment annually at the start of the fourth quarter and whenever events or changes in circumstances indicate that the carrying amount of the goodwill may not be recoverable. Goodwill is stated at cost less accumulated impairment losses.

Other intangible assets

Other intangible assets include brands, intellectual property, developed technology, customer relationships, and other intangible assets. Other intangible assets are stated at cost, less accumulated amortization and accumulated impairment losses (for the amount exceeding goodwill). Amortization is calculated using the straight-line method based on the estimated useful lives of the assets. The following table presents the estimated useful lives of our finite-lived other intangible assets:

Category	Estimated useful life
Brands	20 years
Intellectual property	3 - 10 years
Developed technology	6 - 15 years
Customer relationships	8 - 18 years

Other 2 - 6 years

Property, plant and equipment

Property, plant and equipment are stated at cost, less accumulated depreciation and accumulated impairment losses. Costs of assets manufactured by ASML include direct manufacturing costs, production overhead and interest costs incurred for qualifying assets during the construction period. Depreciation is calculated using the straight-line method based on the estimated useful lives of the related assets. In the case of leasehold improvements, the estimated useful lives of the related assets do not exceed the remaining term of the corresponding lease.

The following table presents the estimated useful lives of our property, plant and equipment:

Category	Estimated useful life
Buildings and constructions	5 - 45 years
Machinery and equipment	1 - 5 years
Leasehold improvements	1 - 10 years
Furniture, fixtures and other equipment	3 - 5 years

Land is not depreciated.

Evaluation of long-lived assets for impairment

Long-lived assets include equity method investments, goodwill, other intangible assets and property, plant and equipment.

Our equity method investments are tested for impairment whenever events or changes in circumstances indicate that the carrying amount of the equity method investments may not be recoverable. We remeasure our equity method investments at fair value when they are deemed to be other-than-temporarily impaired.

Goodwill is tested for impairment triggers annually at the start of the fourth quarter and whenever events or changes in circumstances indicate that the carrying amount of the goodwill may not be recoverable. These events or circumstances could include a significant change in the business climate, legal factors, operating performance indicators, competition, or sale or disposition of a significant portion of a reporting unit. This test is based on a two-step approach for each reporting unit (being an operating segment or one level below an operating segment) in which goodwill has been recorded. To determine whether it is necessary to perform this two-step approach we may first assess qualitative factors. If we determine that it is more likely than not (a likelihood of more than 50 percent) that the fair value of a reporting unit is less than its carrying amount (including goodwill), the two-step impairment test is performed. In the first step, the recoverability of goodwill is tested by comparing the carrying amount of the reporting unit including goodwill with the fair value of the reporting unit. If the carrying amount of the reporting unit is higher than the fair value of the reporting unit, the second step should be performed. Goodwill impairment is measured as the excess of the carrying amount of the goodwill or its implied fair value. The implied fair value of goodwill is determined by calculating the fair value of the various assets and liabilities included in the reporting unit in the same manner as goodwill is determined in a business combination. Any excess of the carrying amount over the implied fair value is recognized as an impairment loss.

Finite-lived other intangible assets and property, plant and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of those assets may not be recoverable. An impairment loss is recognized only if the carrying amount of finite-lived other intangible assets or property, plant and equipment is not recoverable and exceeds its fair value. The carrying amount is not recoverable if it exceeds the sum of the (un)discounted forecasted cash flows resulting from the use and eventual disposition of such asset. An impairment loss is measured as the amount by which the carrying amount exceeds its fair value.

In determining the fair value of long-lived assets, we make estimates about future cash flows. These estimates are based on our strategic plan updated with the latest available projections of the semiconductor industry and our income and cost expectations, which are consistent with the plans and estimates that we use to manage our business. We also make estimates and assumptions concerning our WACC. It is possible that actual results may differ from our plans, estimates and assumptions. Future adverse changes in market conditions may also require impairment of certain long-lived assets, which could have a material adverse effect on our financial condition and results of operations.

High-NA agreement

On November 3, 2016 we agreed with Carl Zeiss SMT GmbH to support their R&D costs, capital expenditures and other supply chain investments, in respect of High-NA, for an amount of EUR 760.0 million over 6 years, beginning in 2016. During 2017, we agreed to fund an additional EUR 325.0 million. In 2017 we paid an amount of EUR 147.5 million, of which EUR 55.8 million related to R&D costs and EUR 2.6 million related to supply chain support costs (2016: EUR 12.0 million, of which EUR 7.3 million related to R&D costs and no amount related to supply chain

support costs). As of December 31, 2017 our estimated remaining commitment to Carl Zeiss SMT GmbH amounts to EUR 925.5 million (2016: EUR 748.0 million).

R&D and supply chain support costs are capitalized for the 24.9 percent because it directly benefits us through our investment in Carl Zeiss SMT Holding GmbH & Co. KG. The amount capitalized is presented within equity method investments. The remainder of this support relating to supply chain support costs is charged to the cost of sales as incurred, the part related to R&D costs is charged to the operating expenses as incurred.

The support provided related to capital expenditures consists of tooling and facilities. Funding provided for facilities is accounted for in property, plant & equipment as we are considered the accounting owner during the construction period. The support provided for tooling is determined to be a capital lease. Support provided for tooling prior to the asset being put into use is recorded in other assets and transferred into property, plant & equipment when put into use.

Revenue recognition

ASML recognizes revenue when all four revenue recognition criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; seller's price to buyer is fixed or determinable; and collectability is reasonably assured. At ASML this policy generally results in revenue recognition from the sale of a system upon shipment. The revenue from the installation of a system is generally recognized upon completion of that installation at the customer site. Prior to shipment, systems undergo a Factory Acceptance Test in our cleanroom facilities, effectively replicating the operating conditions that will be present on the customer's site, in order to verify whether the system will meet its standard specifications and any additional technical and performance criteria agreed with the customer. A system is shipped, and revenue is recognized, only after all contractual specifications are met or discrepancies from agreed-upon specifications are waived and customer sign-off is received for acceptance. In case not all specifications are met and the remaining performance obligation is not essential to the functionality of the system but is substantive rather than inconsequential or perfunctory, a portion of the sales price is deferred. When the remaining obligation is essential to the functionality of the delivered system, all revenue is deferred. Although each system's performance is re-tested upon installation at the customer's site, we have never failed to successfully complete installation of a system at a customer's premises.

In connection with the introduction of new technology, we initially defer revenue recognition until acceptance of the new technology based system or field option and completion of installation at the customer's premises. As our systems are based largely on two product platforms that permit incremental, modular upgrades, the introduction of genuinely "new" technology occurs infrequently, and in the past 17 years, has occurred on only two occasions: 2000 (TWINSCAN) and 2010 (EUV).

We have no significant repurchase commitments in our general sales terms and conditions. From time to time we repurchase systems that we have manufactured and sold and, following refurbishment, we resell those systems to other customers. This repurchase decision is mainly driven by market demand expressed by other customers and less frequently by explicit or implicit contractual arrangements relating to the initial sale. We consider reasonable offers from any vendor, including customers, to repurchase used systems so that we can refurbish, resell, and install these systems as part of our normal business operations. Once repurchased, the repurchase price of the used system is recorded in work-in-process inventory during the period it is being refurbished, following which the refurbished system is reflected in finished products inventory until it is sold to the customer. As of December 31, 2017 and 2016, ASML had no repurchase commitments.

We offer customers discounts in the normal course of sales negotiations. These discounts are directly deducted from the gross sales price at the moment of revenue recognition. From time to time, we offer free or discounted products or services (award credits) to our customers as part of a volume purchase agreement. In some instances these volume discounts can be used to purchase field options (system enhancements) and services. The related amount is recorded as a reduction in net sales at time of system shipment. The sales transaction that gives rise to these award credits is accounted for as a multiple element sales transaction as the agreements involve the delivery of multiple products. The consideration received from the sales transaction is allocated between the award credits and the other elements of the sales transaction. The consideration allocated to the award credits is recognized as deferred revenue until award credits are delivered to the customer and earned. The amount allocable to a delivered item is limited to the amount that is not contingent upon the delivery of additional items or meeting other specified performance conditions (the non-contingent amount).

Net sales are recognized excluding the taxes levied on sales (net basis).

For certain contracts and constructive obligations on which a loss is evident, we recognize the anticipated loss to the extent the costs of completing these contracts and constructive obligations exceed the amount of the contract price. When we satisfy these obligations, we utilize the related liability.

Multiple-element arrangements

The main portion of our net sales is derived from contractual arrangements with our customers that have multiple deliverables (elements), which mainly include the sale of our systems, installation and training services and extended and enhanced (optic) warranty contracts. The requirements for establishing separate units of accounting in a multiple element arrangement require that the allocation of arrangement consideration to each deliverable is based on the

relative selling price of the deliverable.

Each element in the arrangement is accounted for as a separate unit of accounting provided the following criteria are met: i) the delivered products or services have value to the customer on a standalone basis; and ii) for an arrangement that includes a general right of return relative to the delivered products or services, delivery or performance of the undelivered product or service is considered probable and is substantially controlled by us. We consider a deliverable to have stand-alone value if the product or service is sold separately by us or another vendor or could be resold by the customer. Further, our sales arrangements do not include a general right of return relative to the delivered products. Where the aforementioned criteria for a separate unit of accounting are not met, the deliverable is combined with the undelivered element(s) and treated as a single unit of accounting for the purposes of allocation of the arrangement consideration and revenue recognition.

The hierarchy of evidence to determine a selling price in ASC 605-25 is as follows:

- Vendor-specific objective evidence – The price at which we sell the element in a separate stand-alone transaction;
- Third-party evidence – Evidence from us or other companies of the value of a largely interchangeable element in a transaction;
- Best estimate of selling price – Our best estimate of the selling price of an element in the transaction.

To determine the selling price in multiple element arrangements, we establish vendor-specific objective evidence of the selling price for installation, training services and extended and enhanced (optic) warranty contracts.

Vendor-specific objective evidence for installation is determined based on the costs we have to incur for the installation increased by the average margin that we realize on billable labor and materials consumed in comparable services (such as relocating a system to another customer site). Vendor-specific objective evidence for extended and enhanced (optic) warranty contracts is determined on the basis of equivalent products we sell on a standalone basis, such as full service contracts and billable lens swaps, and which are subject to normal price negotiations. Revenue from installation and training services is recognized when the services are completed. Revenue from extended and enhanced (optic) warranty contracts is recognized over the term of the contract. When we are unable to establish the selling price using vendor-specific objective evidence or third-party evidence, we use the best estimate of selling price. The objective of using best estimated selling price-based methodology is to determine the price at which we would transact a sale if the product or service were sold on a stand-alone basis. Accordingly, we determine the best estimate of selling price considering several internal and external factors including, but not limited to, pricing practices, gross margin objectives, market conditions, competitive environment, internal costs and geographies. For our NXE:3300B, NXE:3350B and NXE:3400B systems, we are unable to determine vendor-specific objective evidence for installation, extended and enhanced (optic) warranty contracts. We determined for NXE:3300B, NXE:3350B and NXE:3400B systems that the best estimate of selling price is the appropriate reference in the fair value hierarchy for installation, extended and enhanced (optic) warranty contracts. We review selling prices periodically and maintain internal controls over the establishment and updates of these elements.

Lease arrangements

A lease is classified as a sales-type lease if any of the following lease classification criteria is met at its inception:

1. The lease transfers ownership of the property to the lessee by the end of the lease term.
2. The lease contains a bargain purchase option.
3. The lease term is equal to 75 percent or more of the estimated economic life of the leased property.

The present value at the beginning of the lease term of the minimum lease payments, excluding that portion of the payments representing executory costs such as insurance, maintenance, and taxes to be paid by the lessor, including

4. any profit thereon, equals or exceeds 90 percent of the excess of the fair value of the leased property to the lessee at lease inception over any related investment tax credit retained by the lessor and expected to be realized by the lessor.

Revenue is recognized at commencement of the lease term of a sales-type lease if the collectability of the minimum lease payments is reasonably predictable and there are no uncertainties surrounding unreimbursable costs. The present value of the lease payments is recognized as a finance receivable. The difference between the gross receivable and the present value of the receivable is recognized as unearned interest in the Consolidated Statements of Operations.

A lease is classified as an operating lease if the lease classification criteria (as described above) are not met. If ASML has offered its customers an operating lease arrangement, the contract consideration is recognized in the Consolidated Statements of Operations on a straight-line basis over the period of the lease.

Warranty

We provide standard warranty coverage on our systems for 12 months and on certain optic parts for 60 months, providing labor and parts necessary to repair systems during the warranty period. The estimated warranty costs are accounted for by accruing these costs for each system upon recognition of the system sale. The estimated warranty costs are based on historical product performance and service records. We calculate the charge of average service hours and parts per system to determine the estimated warranty costs. On an annual basis, we assess, and update if necessary, our accounting estimates used to calculate the costs of the standard warranty coverage.

The extended and enhanced (optic) warranty on our systems is accounted for as a separate element of multiple element revenue recognition transactions.

Customer Co-Investment Program

In connection with the CCIP, we entered into investment agreements, shareholders agreements, NRE Funding Agreements and a commercial agreement with Participating Customers.

The investment agreements, shareholder agreements, NRE Funding Agreements and commercial agreement are accounted for as a multiple-element arrangement with each of the Participating Customers. Based upon ASC 605-25 Multiple-Element Arrangements guidance, the following two separate elements are identified: (1) the share issuance (governed by the investment agreements and the shareholder agreements) and (2) the NRE funding and commercial discounts and credits (governed by the NRE Funding Agreements and the commercial agreement with Intel).

The shares issued to the Participating Customers were recorded at fair value based on quoted share prices (EUR 3,977.4 million) with the remaining aggregate arrangement consideration allocated to the NRE funding and commercial discounts and credits. The difference between the fair value of the shares at the time of issuance and the subscription price of the shares (EUR 39.91) was recorded as a deduction from shareholders' equity upon issuance of the shares (EUR 123.4 million). Shareholders' equity is increased to the fair value of the shares as the portion of the NRE funding allocable to the shares is received over the NRE funding period (2013-2017).

A significant related party relationship existed between ASML and Intel as a result of the equity investment made by Intel as part of the CCIP. Based on the commercial discounts and credits (governed by the commercial agreement with Intel) and the significant related party relationship that existed during the period covered by these financial statements, all NRE funding from Intel was deferred and recognized in the Consolidated Statements of Operations only when the commercial discounts and credits are earned.

Accounting for shipping and handling fees and costs

ASML bills the customer for, and recognizes as net sales, any charges for shipping and handling costs. The related costs are recognized as cost of sales.

Cost of sales

Cost of system sales and field option sales comprise direct product costs such as materials, labor, cost of warranty, depreciation, amortization, shipping and handling costs and related overhead costs.

Costs of service sales comprise direct service costs such as materials, labor, depreciation and overhead costs.

Other income

The portion of the NRE funding from TSMC and Samsung not allocable to the shares issued to those Participating Customers under the CCIP was recognized in other income when the R&D costs relating to lithography projects were recognized over the NRE funding period (2013-2017).

Research and development costs and credits

Costs relating to R&D are charged to operating expenses as incurred. ASML receives subsidies and other grants from several Dutch and international (inter-)governmental institutes ('government grants'). These government grants that cover R&D costs relating to approved projects are recorded as R&D credits in the R&D costs in the Consolidated Statements of Operations.

Government grants are not recognized until there is reasonable assurance that ASML will comply with the conditions and that the grants will be received.

Government grants that are received as compensation for expenses or losses already incurred, or for the purpose of giving immediate financial support to ASML with no future related costs are recognized in the Consolidated Statements of Operations in the period in which they become receivable.

Share-based payments

Compensation expenses in relation to share-based payments are recognized based upon the grant-date fair value of stock options and shares. The grant-date fair value of stock options is estimated using a Black-Scholes option valuation model. This Black-Scholes model requires the use of assumptions, including expected share price volatility, the estimated life of each award and the estimated dividend yield. The risk-free interest rate used in the model is determined, based on an index populated with euro-denominated European government agency bond with high credit ratings and with a life equal to the expected life of the equity-settled share-based payments. The grant-date fair value of shares is determined based on the closing price of our shares listed at Euronext Amsterdam on the grant-date.

The grant-date fair value of the equity-settled share-based payments is, based on the terms and conditions, expensed over the vesting period, based on our estimate of equity instruments that will eventually vest. At each balance sheet date, we revise our estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognized in the Consolidated Statements of Operations in the period in which the revision is determined, with a corresponding adjustment to shareholders' equity.

Income taxes

The asset and liability method is used in accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the tax effect of incurred net operating losses and for tax consequences attributable to differences between the balance sheet carrying amounts of existing assets and liabilities and their respective tax bases.

If it is more likely than not that the carrying amounts of deferred tax assets will not be realized, a valuation allowance is recorded for the differences. Tax expense includes current taxes on profit as well as actual or potential withholding taxes on current and expected income from group companies.

Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the Consolidated Statements of Operations in the period that includes the enactment date.

We recognize liabilities for uncertain tax positions based on a two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50 percent likely of being realized upon settlement. While we believe we have appropriate support for the positions taken on our tax returns, we regularly assess the potential outcomes of examinations by tax authorities in determining the adequacy of our provision for income taxes, and adjust the income tax provision, income taxes payable and deferred taxes in the period in which the facts that give rise to a revision become known.

Contingencies and litigation

In connection with proceedings and claims, our management evaluates, based on the relevant facts and legal principles, the likelihood of an unfavorable outcome and whether the amount of the loss can be reasonably estimated. In most cases, management determined that either a loss was not probable or was not reasonably estimable. Significant subjective judgments were required in these evaluations, including judgments regarding the validity of asserted claims and the likely outcome of legal and administrative proceedings. The outcome of these proceedings, however, is subject to a number of factors beyond our control, most notably the uncertainty associated with predicting decisions by courts and administrative agencies. In addition, estimates of the potential costs associated with legal and administrative proceedings frequently cannot be subjected to any sensitivity analysis, as damage estimates or settlement offers by claimants may bear little or no relation to the eventual outcome. Finally, in any particular proceeding, we may agree to settle or to terminate a claim or proceeding in which we believe that it would ultimately prevail where we believe that doing so, when taken together with other relevant commercial considerations, is more cost-effective than engaging in an expensive and protracted litigation, the outcome of which is uncertain.

We accrue for legal costs related to litigation in our Consolidated Statements of Operations at the time when the related legal services are actually provided.

Net income per ordinary share

Basic net income per ordinary share is calculated by dividing net income by the weighted average number of ordinary shares outstanding for that period. The dilutive effect is calculated using the treasury stock method. Excluded from the diluted weighted average number of shares outstanding calculation are cumulative preference shares contingently issuable to the preference share foundation, since they represent a different class of stock than the ordinary shares. The basic and diluted net income per ordinary share has been calculated as follows:

Year ended December 31 (in millions, except per share data)	2015 EUR	2016 EUR	2017 EUR
Net income	1,387.2	1,471.9	2,118.5
Weighted average number of shares outstanding	430.6	425.6	429.8
Basic net income per ordinary share	3.22	3.46	4.93
Weighted average number of shares outstanding	430.6	425.6	429.8
Plus shares applicable to Options and conditional shares	2.0	2.1	1.8
Dilutive potential ordinary shares	2.0	2.1	1.8
Diluted weighted average number of shares ¹	432.6	427.7	431.6
Diluted net income per ordinary share ¹	3.21	3.44	4.91

The calculation of diluted net income per ordinary share assumes the exercise of options issued under our stock option plans and the issuance of shares under our share plans for periods in which exercises or issuances would have a dilutive effect. The calculation of diluted net income per ordinary share does not assume exercise of options when exercise would be anti-dilutive.

Comprehensive income

Comprehensive income consists of net income and OCI.

OCI refers to gains and losses that are not included in net income (loss), but recorded directly in shareholders' equity. For the years ended December 31, 2017, 2016 and 2015 comprehensive income consists of net income, unrealized gains and losses on financial instruments, being derivative financial instruments designated for cash flow hedge accounting, net of taxes, and unrealized gains and losses on foreign currency translation and effective portion of hedges on net investments, net of taxes. In 2017 the OCI also contains gains and losses that are not included in net income (loss) related to the proportionate share of other comprehensive income from equity method investments.

New US GAAP accounting pronouncements

For the below mentioned ASUs, issued up to the date of this report but not yet adopted by us, the impact on our Financial Statements needs to be assessed:

In March 2014 the FASB issued ASU No. 2014-9 "Revenue From Contracts With Customers (Topic 606)". In August 2015 the FASB amended ASU No. 2014-9 to defer the effective date by one year to annual reporting periods beginning after December 15, 2017 (ASU No. 2015-14 "Revenue From Contracts With Customers (Topic 606): Deferral of the Effective Date"). In March 2016, the FASB released ASU No. 2016-08 "Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)" which clarifies the implementation guidance on principal versus agent considerations. In April 2016, the FASB issued ASU No. 2016-10 "Revenue from Contracts with Customers (Topic 606)" which clarifies guidance related to identifying performance obligations and licensing implementation guidance contained in the new revenue recognition standard. In May 2016 ASU No. 2016-12 "Revenue from Contracts with Customers (Topic 606) - Narrow-Scope Improvements and Practical Expedients" was issued by the FASB which affects entities with transactions included within the scope of Topic 606. The scope of that Topic includes entities that enter into contracts with customers to transfer goods or services (that are an output of the entity's ordinary activities) in exchange for consideration. ASU No. 2016-20 "Technical corrections and improvements to Topic 606, revenue from contracts with customers" covers a variety of topics related to the new revenue recognition standard. The amendments in this Update represent minor corrections and improvements to the Codification that are not expected to have a significant effect on current accounting practice or create a significant administrative cost to most entities. In ASU No. 2017-03 "Accounting Changes and Error Corrections (Topic 250) and Investments - Equity Method and Joint Ventures (Topic 323): Amendments to SEC Paragraphs Pursuant to Staff Announcements at the September 22, 2016 and November 17, 2016 EITF Meetings" the standard is amended to include the SEC Staff announcement on September 22, 2016. It requires a registrant to include appropriate financial statement disclosures about the potential material effects of ASUs, which have not yet been adopted.

The new standard is effective for interim and annual periods beginning after December 15, 2017 and allows for either full retrospective adoption or modified retrospective adoption. We selected full retrospective adoption and will therefore restate 2017 and 2016 presented in our 2018 Consolidated Financial Statements upon adoption.

We are finalizing our impact assessment of the new revenue recognition standard on our accounting policies and our contracts affecting our 2016 results. At this time, we cannot reasonably estimate the exact financial impact of implementing this new standard. However, for 2016 we expect an increase of our total net sales between 0 and 5 percent and an increase of our net income between 2 and 10 percent due to a shift in timing of revenue recognition. Based on our assessment of the impact of ASU No. 2014-9 on the Consolidated Balance Sheets we expect a significant decrease in our net contract assets and contract liabilities as of December 31, 2016.

We have assessed the new accounting standard against our accounting policies and determined the expected impact. The most significant changes in our accounting policies as a consequence of adopting ASU No. 2014-09 are expected to be:

- Certain upgrades and services change from point in time revenue recognition upon completion of the performance obligation to over time revenue recognition throughout the upgrade and service period.

- Options to buy additional goods or services provided within our contracts, offered at a discount incremental to our stand-alone selling price, are now considered performance obligations and therefore consideration is allocated from the contract. Revenue is recognized for these material rights when the future goods or services are transferred or the option to buy expires.

- For bill-and-hold transactions there is no longer a required fixed schedule of delivery and when a customer requests for the bill-and-hold transaction there is assumed to be a substantial reason. We will follow the requirements under Topic 606 in order to recognize revenue.

- A change from allocating the consideration of a contract to the elements of the contract using relative selling price determined through vendor-specific objective evidence or the best estimate of selling price to allocating the consideration of a contract based on stand-alone selling prices determined using the adjusted market approach in accordance with Topic 606.

In February 2016, FASB issued ASU No. 2016-2 "Leases (Topic 842)". The objective of this topic is to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the Consolidated Balance Sheets and disclosing key information about leasing arrangements by lessees. The new Standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years and supersede the leases requirements in Topic 840, Leases. Early application is permitted as of the beginning of an interim or annual reporting period. The most significant change in our accounting policies as a consequence of adopting ASU No. 2016-2 is expected to be the recognition of right-of-use assets and lease liabilities for our operating leases. We are adopting this standard as per January 1, 2018. The amendments are required to be applied using a modified retrospective approach. We completed our retrospectively adjusting financial information and expect adoption of the Standard will result in recognition of additional right-of-use assets and lease liabilities for operating leases of approximately EUR 130 million as of December 31, 2016 and EUR 115 million as of December 31, 2017. The Standard does not have an impact on our net income in 2016 and 2017.

ASU No. 2016-13 "Financial Instruments - Credit Losses (Topic 326)" was issued by the FASB in June 2016 and will provide financial statement users with more information about the expected credit losses on financial instruments and other commitments to extend credit held by an entity at each reporting date. The Update is effective for fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. Early adoption is permitted for periods after December 15, 2018. The Standard will be applied using a modified retrospective approach, which requires a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the Standard is effective. We will therefore not restate prior years presented in our Consolidated Financial Statements upon adoption. We are currently in the process of determining the impact of implementing this Standard on our Consolidated (Condensed Interim) Financial Statements.

In October 2016, ASU No. 2016-16 "Income Taxes (Topic 740) Intra-Entity Transfers of Assets Other Than Inventory" was issued by the FASB. The purpose of this Update is to improve the accounting for the income tax consequences of intra-entity transfers of assets other than inventory. The prepaid taxes under US GAAP were calculated based on the tax rate applicable in the seller's rather than the purchaser's tax jurisdiction. Based on this Update as of January 1, 2018 prepaid taxes as calculated using the purchaser's rather than the seller's tax jurisdiction (except for prepaid taxes arising from Intra-Entity Transfers of Inventory). The Update is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. This change in accounting will be adjusted based on a modified retrospective basis with a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption. The impact of implementing this standard on our Consolidated Financial Statements mainly relates to a so-called bi-lateral advanced pricing agreement between the US and the Dutch tax authorities on a inter group transfer of intellectual property rights. We expect that this new Standard will have an impact of approximately EUR 95 million on retained earnings and other assets in the Consolidated Balance Sheets. We believe that the impact of all other recently issued ASUs, not yet adopted by us, are not expected to be material.

2. Business combinations

On November 22, 2016, we concluded the acquisition of HMI and obtained control through acquiring 100 percent of the issued share capital of HMI, for a total consideration of EUR 3.0 billion. There were no contingent consideration arrangements. The total consideration was allocated to other intangible assets of EUR 606.7 million, other net assets of EUR 259.2 million and goodwill of EUR 2,115.0 million.

HMI is the world's leading provider of e-beam inspection tools and solutions for defect control and yield management in the advanced semiconductor manufacturing process for R&D and high-volume production. HMI is headquartered in Hsinchu, Taiwan, where the business operations are primarily carried out. Other sites where HMI is located are in Tainan, Taiwan (manufacturing), Beijing, China (R&D and manufacturing), San Jose, US (R&D and technical support), Kyungki-do, South-Korea (sales and technical support) and Tokyo, Japan (sales and technical support). With the acquisition of HMI, we entered into two new markets, being wafer inspection as well as mask inspection for EUV lithography. In addition, we expand our efforts in the process control market. The combination of ASML and HMI allows us to further enhance our product offering at an accelerated pace. The metrology technologies are complementary (in short, HMI provides hardware and ASML's computational lithography division ASML Brion provides software) and when combined, they offer the chance to significantly improve process control, and hence yields, for customers. As such, the acquisition further enables us to provide Holistic Lithography and process control. The majority of the goodwill arising on the acquisition of HMI is attributable to buyer specific synergies, net sales and profits assigned to future multi-beam technology, net sales and profits assigned to next generation single-beam technology and HMI workforce. Synergies relate to the unique combination of HMI's inspection tools and our defect prediction/pattern fidelity control software.

In the period between the date of acquisition and December 31, 2016 HMI contributed EUR 25.7 million to net sales and a loss of EUR 5.4 million to net income (including a charge of EUR 13.7 million related to the purchase price allocation adjustments).

In 2016, we incurred EUR 18.7 million transaction costs relating to the acquisition of HMI. These costs are included in SG&A.

3. Fair value measurements

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement hierarchy prioritizes the inputs to valuation techniques used to measure fair value as follows:

Level 1: Valuations based on inputs such as quoted prices for identical assets or liabilities in active markets that the entity has the ability to access.

Level 2: Valuations based on inputs other than level 1 inputs such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable data for substantially the full term of the assets or liabilities.

Level 3: Valuations based on inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). A financial instrument's fair value classification is based on the lowest level of any input that is significant in the fair value measurement hierarchy.

Financial assets and financial liabilities measured at fair value on a recurring basis

Investments in money market funds (as part of our cash and cash equivalents) have fair value measurements which are all based on quoted prices for identical assets or liabilities.

Our short-term investments consist of deposits with an original maturity beyond three months with financial institutions that have investment grade credit ratings. The fair value of the deposits is determined with reference to quoted market prices in an active market for similar assets or discounted cash flow analysis.

The principal market in which we execute our derivative contracts is the institutional market in an over-the-counter environment with a high level of price transparency. The market participants usually are large commercial banks. The valuation inputs for our derivative contracts are based on quoted prices and quoting pricing intervals from public data sources; they do not involve management judgment.

The valuation technique used to determine the fair value of forward foreign exchange contracts (used for hedging purposes) approximates the net present value technique which is the estimated amount that a bank would receive or pay to terminate the forward foreign exchange contracts at the reporting date, taking into account current interest rates and current exchange rates.

The valuation technique used to determine the fair value of interest rate swaps (used for hedging purposes) is the net present value technique, which is the estimated amount that a bank would receive or pay to terminate the swap agreements at the reporting date, taking into account current interest rates.

Our Eurobonds serve as hedged items in fair value hedge relationships in which we hedge the variability of changes in the fair value of our Eurobonds due to changes in market interest rates with interest rate swaps. The fair value changes of these interest rate swaps are recorded on the Consolidated Balance Sheets under derivative financial instruments (within other current and non-current assets and other current and non-current liabilities) and the carrying amounts of the Eurobonds are adjusted for the effective portion of these fair value changes only. For the actual aggregate carrying amount and the fair value of our Eurobonds, see Note 15 Long-term debt.

The following table presents our financial assets and financial liabilities that are measured at fair value on a recurring basis:

As of December 31, 2017 (in millions)	Level 1 EUR	Level 2 EUR	Level 3 EUR	Total EUR
Assets measured at fair value				
Derivative financial instruments ¹	—	115.7	—	115.7
Money market funds ²	1,329.4	—	—	1,329.4
Short-term investments ³	—	1,029.3	—	1,029.3
Total	1,329.4	1,145.0	—	2,474.4
Liabilities measured at fair value				
Derivative financial instruments ¹	—	67.3	—	67.3
Assets and Liabilities for which fair values are disclosed				
Long-term debt ⁴	3,193.2	—	—	3,193.2

¹ Derivative financial instruments consist of forward foreign exchange contracts and interest rate swaps. See Note 4

¹ Financial risk management.

2.

Money market funds are part of our cash and cash equivalents. See Note 5 Cash and cash equivalents and short-term investments.

3. Short-term investments consist of deposits with an original maturity longer than three months, but less than one year at the date of acquisition. See Note 5 Cash and cash equivalents and short-term investments.

4. Long-term debt relates to Eurobonds. See Note 15 Long-term debt.

As of December 31, 2016 (in millions)	Level 1 EUR	Level 2 EUR	Level 3 EUR	Total EUR
Assets measured at fair value				
Derivative financial instruments ¹	—	134.0	—	134.0
Money market funds ²	2,152.0	—	—	2,152.0
Short-term investments ³	—	1,150.0	—	1,150.0
Total	2,152.0	1,284.0	—	3,436.0
Liabilities measured at fair value				
Derivative financial instruments ¹	—	113.9	—	113.9
Assets and Liabilities for which fair values are disclosed				
Long-term debt ⁴	3,386.2	—	—	3,386.2

¹ Derivative financial instruments consist of forward foreign exchange contracts and interest rate swaps. See Note 4 Financial risk management.

² Money market funds are part of our cash and cash equivalents. See Note 5 Cash and cash equivalents and short-term investments.

³ Short-term investments consist of deposits with an original maturity longer than three months, but less than one year at the date of acquisition. See Note 5 Cash and cash equivalents and short-term investments.

⁴ Long-term debt relates to Eurobonds. See Note 15 Long-term debt.

There were no transfers between levels during the years ended December 31, 2017 and December 31, 2016.

Assets and liabilities measured at fair value on a non-recurring basis

In 2016 and 2017, we had no significant fair value measurements on a non-recurring basis. We did not recognize any significant impairment charges for goodwill and other intangible assets during 2016 and 2017. See Note 11 Goodwill and Note 12 Other intangible assets for more information.

4. Financial risk management

We are exposed to certain financial risks such as market risk (including foreign currency risk and interest rate risk), credit risk, liquidity risk and capital risk. Our overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potentially adverse effects on our financial performance. We use derivative financial instruments to hedge certain risk exposures. None of our transactions are entered into for trading or speculative purposes. We believe that market information is the most reliable and transparent measure for our derivative financial instruments that are measured at fair value. To mitigate the risk that any of our counterparties in hedging transactions are unable to meet their obligations, we only enter into transactions with a limited number of major financial institutions that have investment grade credit ratings. Also, we closely monitor the creditworthiness of our counterparties. Concentration risk is mitigated by limiting the exposure to each of the individual counterparties. Our risk management program focuses appropriately on the current environment of uncertainty in the financial markets.

Foreign currency risk management

Our sales are predominately denominated in euros. Exceptions may occur on a customer by customer basis. Our cost of sales and other costs are mainly denominated in euros, to a certain extent in US dollars, Taiwanese dollars and Japanese yen and to a limited extent in other currencies. Therefore, we are exposed to foreign currency exchange risk. It is our policy to hedge material transaction exposures, such as forecasted sales and purchase transactions, and material net remeasurement exposures, such as accounts receivable and payable. We hedge these exposures through the use of foreign exchange contracts.

As of December 31, 2017, accumulated OCI includes EUR 12.5 million representing the total anticipated loss to be charged to cost of sales (2016: gain EUR 10.4 million and 2015: gain EUR 2.0 million) (net of taxes: 2017: EUR 11.2 million; 2016: EUR 9.3 million; 2015: EUR 1.8 million), which will offset the EUR equivalent of foreign currency denominated forecasted purchase transactions. All amounts are expected to be released over the next 12 months. As of December 31, 2017, accumulated OCI includes no amount (2016: EUR 0.2 million; 2015: no amount), representing the total anticipated gain to be released to sales. The effectiveness of all contracts for which we apply hedge accounting is monitored on a quarterly basis throughout the life of the hedges. During 2017, 2016 and 2015, no ineffective hedge relationships were recognized.

As of December 31, 2017 13.9 million gain (2016: EUR 2.8 million gain) representing the effective portion of hedges on net investments was recognized in accumulated OCI.

Interest rate risk management

We have interest-bearing assets and liabilities that expose us to fluctuations in market interest rates. We use interest rate swaps to align the interest-typical terms of interest-bearing liabilities with the interest-typical terms of interest-bearing assets. There may be residual interest rate risk to the extent the asset and liability positions do not fully offset.

As part of our hedging policy, we use interest rate swaps to hedge changes in fair value of our Eurobonds due to changes in market interest rates, thereby offsetting the variability of future interest receipts on part of our cash and cash equivalents. During 2017, these hedges were highly effective in hedging the fair value exposure to interest rate movements. The changes in fair value of the Eurobonds were included in the Consolidated Statements of Operations in the same period as the changes in the fair value of the interest rate swaps.

Furthermore, as part of our hedging policy, we use interest rate swaps to hedge the variability of future interest cash flows relating to certain of our operating lease obligations. During 2017, these hedges were highly effective in hedging the cash flow exposure to interest rate movements.

Financial instruments

We use foreign exchange contracts to manage our foreign currency risk and interest rate swaps to manage our interest rate risk. The following table summarizes the notional amounts and estimated fair values of our derivative financial instruments:

As of December 31 (in millions)	2016		2017	
	Notional amount EUR	Fair Value EUR	Notional amount EUR	Fair Value EUR
Forward foreign exchange contracts	1,311.6	(63.6	)1,146.2	18.1
Interest rate swaps	3,263.1	83.7	3,024.9	30.3

The following table summarizes our derivative financial instruments per category:

As of December 31 (in millions)	2016		2017	
	Assets EUR	Liabilities EUR	Assets EUR	Liabilities EUR
Interest rate swaps — cash flow hedges	—	1.7	—	0.6
Interest rate swaps — fair value hedges	120.0	34.6	93.6	62.7
Forward foreign exchange contracts — cash flow hedges	10.7	0.4	0.7	2.6
Forward foreign exchange contracts — net investment hedge	2.8	—	1.2	1.2
Forward foreign exchange contracts — no hedge accounting	0.5	77.2	20.2	0.2
Total	134.0	113.9	115.7	67.3
Less non-current portion:				
Interest rate swaps — cash flow hedges	—	0.6	—	—
Interest rate swaps — fair value hedges	89.5	37.5	65.2	62.7
Total non-current portion	89.5	38.1	65.2	62.7
Total current portion	44.5	75.8	50.5	4.6

The fair value part of a hedging derivative financial instrument that has a remaining term of 12 months or less after balance sheet date is classified as current asset or liability. When the fair value part of a hedging derivative has a term of more than 12 months after balance sheet date, it is classified as non-current asset or liability. The current portion of derivative financial instruments is included in other current assets and current accrued and other liabilities in the Consolidated Balance Sheets. The non-current portion of derivative financial instruments is included in other non-current assets and non-current accrued and other liabilities in the Consolidated Balance Sheets.

For further information regarding our derivative financial instruments, see Note 3 Fair value measurement.

Foreign exchange contracts

The notional principal amounts of the outstanding forward foreign exchange contracts in the main currencies US dollar, Japanese yen and Taiwanese dollar at December 31, 2017 are USD 796.3 million, JPY 7.4 billion and TWD 16.6 billion (2016: USD 965.0 million, JPY 1.5 billion and TWD 14.6 billion).

The hedged highly probable forecasted transactions denominated in foreign currency are expected to occur at various dates during the coming 12 months. Gains and losses recognized in OCI on forward foreign exchange contracts included in a hedge relationship will be recognized in the Consolidated Statements of Operations in the period during which the hedged forecasted transactions affect the Consolidated Statements of Operations.

In 2017, we recognized a net amount of EUR 3.1 million gain (2016: EUR 2.4 million loss; 2015: EUR 22.0 million gain) in the Consolidated Statements of Operations resulting from effective cash flow hedges for forecasted sales and purchase transactions that occurred in the year. Furthermore, we recognized a net amount of EUR 126.4 million gain in the Consolidated Statements of Operations resulting from derivative financial instruments measured at fair value through profit or loss (2016: EUR 81.2 million loss; 2015: EUR 129.9 million loss), which is almost fully offset by the revaluation of the hedged monetary items.

Interest rate swaps

The notional principal amount of the outstanding interest rate swap contracts as of December 31, 2017 was EUR 3,024.9 million (2016: EUR 3,263.1 million).

Sensitivity analysis financial instruments

Foreign currency sensitivity

We are mainly exposed to fluctuations in exchange rates between the euro and the US dollar, the euro and Taiwanese dollar and the euro and the Japanese yen. The following table details our sensitivity to a 10.0 percent strengthening of foreign currencies against the euro. The sensitivity analysis includes foreign currency denominated monetary items outstanding and adjusts their translation at the period end for a 10.0 percent strengthening in foreign currency rates. A positive amount indicates an increase in net income or equity, as shown.

(in millions)	2016		2017	
	Impact on net income EUR	Impact on equity EUR	Impact on net income EUR	Impact on equity EUR
US dollar	(15.8	) 17.5	(6.5	) 15.6
Japanese yen	1.6	(0.4	) (1.8	) 0.9
Taiwanese dollar	(7.0	) (23.4	) (5.3	) (22.3
Other currencies	(1.9	) —	(3.4) —
Total	(23.1	) (6.3	) (17.0	) (5.8

It is our policy to limit the effects of currency exchange rate fluctuations on our Consolidated Statements of Operations. The decreased effect on net income in 2017 compared with 2016 reflects our lower net exposure to currencies other than the euro at year end 2017. The negative effect on net income as presented in the table above for 2017 is mainly attributable to timing differences between the arising and hedging of exposures.

The effects of the fair value movements of cash flow hedges, entered into for US dollar and Japanese yen transactions are recognized in equity. The US dollar and Japanese yen effect on equity in 2017 compared with 2016 is the result of an decrease in outstanding purchase hedges and decrease in outstanding sales hedges.

The effects of the fair value movements of net investment hedges, entered into for Taiwanese dollar transactions are recognized in equity. This effect is offset by the translation adjustment on the net investment also recorded in equity. This offset is not included in the table above.

For a 10.0 percent weakening of the foreign currencies against the euro, there would be approximately an equal but opposite effect on net income and equity.

Interest rate sensitivity

The sensitivity analysis below has been determined based on the exposure to interest rates for both derivative financial and non-derivative financial instruments at the balance sheet date with the stipulated change taking place at the beginning of the financial year and held constant throughout the reporting period. The table below shows the effect of a 1.0 percentage point increase in interest rates on our net income and equity. A positive amount indicates an increase in net income and equity.

(in millions)	2016		2017	
	Impact on net income EUR	Impact on equity EUR	Impact on net income EUR	Impact on equity EUR
Effect of a 1.0 percent point increase in interest rates	7.5	0.3	2.6	0.1

The positive effect on net income mainly relates to our cash and cash equivalents and short-term investments. The positive effect on equity, is mainly attributable to the fair value movements of the interest rate swaps designated as cash flow hedges.

For a 1.0 percentage point decrease in interest rates there would be approximately an equal but opposite effect on net income and equity.

Credit risk management

Financial instruments that potentially subject us to significant concentration of credit risk consist principally of cash and cash equivalents, short-term investments, derivative financial instruments used for hedging activities, accounts receivable and finance receivables.

Cash and cash equivalents, short-term investments and derivative financial instruments contain an element of risk of the counterparties being unable to meet their obligations. Our risk management program focuses appropriately on the current environment of uncertainty in the financial markets. We invest our cash and cash equivalents and short-term investments in short-term deposits with financial institutions that have investment grade credit ratings and in money market funds that invest in highly-rated short-term debt securities of financial institutions and governments. To mitigate the risk that our counterparties in hedging transactions are unable to meet their obligations, we enter into transactions with a limited number of major financial institutions that have investment grade credit ratings and closely monitor their creditworthiness. Concentration risk is mitigated by limiting the exposure to each of the individual counterparties.

Our customers consist of IC manufacturers located throughout the world. We perform ongoing credit evaluations of our customers' financial condition. We mitigate credit risk through additional measures, including the use of down payments, letters of credit, and contractual ownership retention provisions. Retention of ownership enables us to recover the systems in the event a customer defaults on payment.

Capital risk management

We manage our capital availability risk by maintaining a conservative financial policy that focuses on liquidity and financial stability throughout industry cycles. This is pursued by maintaining a capital structure that supports a solid investment grade credit rating.

5. Cash and cash equivalents and short-term investments

Cash and cash equivalents at December 31, 2017 include deposits with financial institutions that have investment grade credit ratings of EUR 42.1 million (2016: EUR 100.0 million), investments in money market funds that invest in debt securities of financial institutions that have investment grade credit ratings and governments of EUR 1,329.4 million (2016: EUR 2,152.0 million) and interest-bearing bank accounts of EUR 887.5 million (2016: EUR 654.9 million). Our cash and cash equivalents are predominantly denominated in euros and partly in US dollars and Taiwanese dollars.

Cash and cash equivalents have insignificant interest rate risk and remaining maturities of three months or less at the date of acquisition. At December 31, 2017 no restrictions on usage of cash and cash equivalents exist (2016: EUR 5.4 million subject to restrictions). The carrying amount of these assets approximates their fair value.

Short-term investments have insignificant interest rate risk and remaining maturities longer than three months but less than one year at the date of acquisition.

Short-term investments consist of the following:

As of December 31, 2017

(in millions)	Cost basis	Unrealized Gains	Unrealized Losses	Recorded Basis
Deposits	1,029.3	—	—	1,029.3
Total	1,029.3	—	—	1,029.3

As of December 31, 2016

(in millions)	Cost basis	Unrealized Gains	Unrealized Losses	Recorded Basis
Deposits	1,150.0	—	—	1,150.0
Total	1,150.0	—	—	1,150.0

6. Accounts receivable

Accounts receivable consist of the following:

As of December 31 (in millions)	2016 EUR	2017 EUR
Accounts receivable, gross	702.4	1,776.9
Allowance for doubtful receivables	(2.2)	(4.6)
Accounts receivable, net	700.2	1,772.3

The increase in accounts receivable as of December 31, 2017 compared to December 31, 2016 was mainly caused by relatively high payments received from customers prior to year-end 2016 as well as significantly higher sales in the last quarter of 2017 (including 5 EUV systems) compared to previous year.

The carrying amount of the accounts receivable approximates the fair value. We perform ongoing credit evaluations on our customers' financial condition. We periodically review whether an allowance for credit losses is needed by considering factors such as historical payment experience, credit quality, aging of the accounts receivable balances, and current economic conditions that may affect a customer's ability to pay.

Movements of the allowance for doubtful receivables are as follows:

Year ended December 31 (in millions)	2016 EUR	2017 EUR
Balance at beginning of year	(5.6)	(2.2)
Addition for the year ¹	(3.2)	(7.8)
Effect of changes in exchange rates	—	0.1
Utilization of the provision	6.6	5.3
Balance at end of year	(2.2)	(4.6)

1. The addition for the year is recorded in cost of sales.

7. Finance receivables

Finance receivables consist of receivables in relation to sales-type leases and non-current accounts receivable. The following table lists the components of the finance receivables as of December 31, 2017 and 2016:

As of December 31 (in millions)	2016 EUR	2017 EUR
Finance receivables, gross	569.7	330.6
Unearned interest	(5.1)	(6.6)
Finance receivables, net	564.6	324.0
Current portion of finance receivables, gross	450.7	62.1
Current portion of unearned interest	(3.3)	(3.0)
Non-current portion of finance receivables, net	117.2	264.9

The decrease in finance receivables as of December 31, 2017 compared to December 31, 2016 was mainly caused by fewer sales-type leases (including shorter durations) compared to prior year as well as a transfer of non-current accounts receivable to current assets in 2017.

At December 31, 2017, finance receivables, gross due for payment in each of the next 5 years and thereafter are as follows:

(in millions)	EUR
2018	62.1
2019	141.0
2020	116.7
2021	10.8
2022	—
Thereafter	—
Finance receivables, gross	330.6

We perform ongoing credit evaluations on our customers' financial condition. We periodically review whether an allowance for credit losses is needed by considering factors such as historical payment experience, credit quality, the aging of the finance receivables balances, and current economic conditions that may affect a customer's ability to pay. In 2017, 2016 and 2015 we did not record any expected credit losses from finance receivables. As of December 31, 2017, the finance receivables were neither past due nor impaired.

8. Inventories

Inventories consist of the following:

As of December 31 (in millions)	2016 EUR	2017 EUR
Raw materials	674.7	826.8
Work-in-process	1,415.5	1,430.7
Finished products	1,073.4	1,050.8
Inventories, gross	3,163.6	3,308.3
Allowance for obsolescence and / or lower net realizable value	(382.7)	(349.9)
Inventories, net	2,780.9	2,958.4

The increase in inventory in 2017 compared to 2016 reflects the growing (EUV) business.

A summary of activity in the allowance for obsolescence and / or lower net realizable value is as follows:

Year ended December 31 (in millions)	2016 EUR	2017 EUR
Balance at beginning of year	(415.0)	(382.7)
Addition for the year	(73.0)	(120.1)
Effect of changes in exchange rates	(5.3)	7.9
Utilization of the provision	110.6	145.0
Balance at end of year	(382.7)	(349.9)

In 2017, the addition for the year is recorded in cost of sales EUR 101.3 million and in R&D costs EUR 18.8 million (2016: cost of sales EUR 69.2 million and R&D costs EUR 3.8 million, 2015: cost of sales EUR 206.7 million and R&D costs EUR 5.1 million). The 2017 addition for the year mainly relates to inventory items which became obsolete due to technological developments and design changes.

Utilization of the provision mainly relates to the scrapping of obsolete inventories.

9. Other assets

Other current assets consist of the following:

As of December 31 (in millions)	2016 EUR	2017 EUR
Advance payments to Carl Zeiss SMT GmbH	71.9	111.3
Prepaid expenses	192.0	198.4
Operations to be invoiced	101.3	366.9
Derivative financial instruments	44.5	50.5
VAT	61.6	67.3
Subordinated loan granted to lessor in respect of Veldhoven headquarters ¹	—	5.4
Other assets	89.1	67.5
Other current assets	560.4	867.3

1. For further details on the loan granted to the lessor in respect of the Veldhoven headquarters see Note 13 Property, plant and equipment.

ASML owns an indirect interest of 24.9 percent in Carl Zeiss SMT GmbH, who is our single supplier of optical columns and, from time to time, ASML makes non-interest bearing advance payments to Carl Zeiss SMT GmbH supporting their work-in-process, thereby securing lens and optical column deliveries to us. Amounts included in these advance payments are settled through future lens or optical column deliveries.

Prepaid expenses mainly include prepaid income taxes on intercompany profit not realized by the ASML group of EUR 99.7 million as of December 31, 2017 (2016: EUR 74.3 million).

Operations to be invoiced increased EUR 265.6 million to EUR 366.9 million as of December 31, 2017 (2016: EUR 101.3 million) primarily due to increasing shipments for which invoices still need to be sent, as well as a transfer of non-current accounts receivable to current assets in 2017.

Equity method goodwill	362.7
Other intangible assets	560.7
In-process research and development	50.7
Inventories	73.7
Pensions	19.9
Deferred tax liabilities	(88.4)
Basis differences	979.3

We amortize the basis difference related to the other intangible assets over the estimated remaining useful lives of these assets that gave rise to this difference. The weighted-average life of the finite-lived intangible assets acquired is 19.4 years and will be amortized using a straight-line method. In-process R&D is initially capitalized at fair value as an intangible asset with an indefinite life. When the R&D project is complete, it is reclassified as an amortizable purchased intangible asset and is amortized over its estimated useful life. If the project is abandoned, we will record the full basis difference charge for the value of the related intangible asset in our Consolidated Statements of Operations in the period of abandonment. Equity method goodwill is not amortized or tested for impairment; instead the investment in Carl Zeiss SMT Holding GmbH & Co. KG is tested for impairment whenever events or changes in circumstances indicate that the carrying value of the investment may not be recoverable. The basis difference related to inventories will be recorded as part of profit (loss) related to equity method investments.

For the year ended December 31, 2017, we recorded a loss from equity method investments of EUR 16.7 million in our Consolidated Statements of Operations. This loss mainly includes the following components:

- Profit of EUR 19.0 million related to our share of Carl Zeiss SMT Holding GmbH & Co. KG's net income after accounting policy alignment.

- Cost of EUR 27.3 million related to inventory step-up release.

- Cost of EUR 6.7 million basis difference amortization related to intangible assets.

- Intercompany profit elimination of EUR 1.7 million.

We record the results using a one-quarter time lag as these results are not available in time to record them in our concurrent period. Given the acquisition date and the one-quarter time lag, our results for the year ended include approximately 3 months of equity method loss. The loss was reflected as a decrease of the carrying amount of our equity method investments in our Consolidated Balance Sheets as of December 31, 2017.

We received dividends amounting to EUR 19.7 million from Carl Zeiss SMT Holding GmbH & Co. KG in the year ended December 31, 2017.

Carl Zeiss SMT Holding GmbH & Co. KG is a privately held company; therefore, quoted market prices for their stock are not available.

The following summarizes the total assets and liabilities related to our variable interest in Carl Zeiss SMT Holding GmbH & Co. KG

as reflected in our Consolidated Balance Sheets, as well as our maximum exposure to losses as of December 31, 2017.

Our maximum exposure to loss is limited to our equity method investment in Carl Zeiss SMT Holding GmbH & Co. KG and prepayments provided to the equity method investment.

As of December 31 (in millions)	2017	2017	Maximum exposure to loss
	Assets	Liabilities	
EUV Agreements ¹	368.7	—	368.7
DUV Agreements ¹	22.3	—	22.3
High-NA Agreement ¹	106.5	—	106.5
Investment agreement for 24.9 percent equity	982.2	—	982.2

Amounts are included in advanced payments to Carl Zeiss SMT GmbH within other current assets and other 1. non-current assets except for an amount of EUR 54.7 million which is included in property, plant and equipment as assets under construction. See Note 9 Other assets and Note 13 Property, plant and equipment.

EUV and DUV Agreements

Carl Zeiss SMT GmbH is our single supplier of optical columns and, from time to time, receives non-interest bearing advance payments from us that support their work in-process, thereby securing lens and optical module deliveries to us. Amounts owed under these advance payments are settled through future lens, DUV or EUV optical component deliveries. Our maximum exposure related to this agreement is limited to the assets not settled as of the balance sheet date. See also Note 9 Other assets.

High-NA Agreement

On November 3, 2016 we agreed with Carl Zeiss SMT GmbH to support their R&D costs, capital expenditures and other supply chain investments, in respect of High-NA, for an amount of EUR 760.0 million over 6 years, beginning in 2016. During 2017, we agreed to fund an additional EUR 325.0 million. In 2017 we paid an amount of EUR 147.5 million, of which EUR 55.8 million related to R&D costs and EUR 2.6 million related to supply chain support costs (2016: EUR 12.0 million, of which EUR 7.3 million related to R&D costs and no amount related to supply chain support costs). As of December 31, 2017 our estimated remaining commitment to Carl Zeiss SMT GmbH amounts to EUR 925.5 million (2016: EUR 748.0 million). Our maximum exposure related to this agreement is limited to the amount reimbursable from Carl Zeiss SMT GmbH as of the balance sheet date.

11. Goodwill

Changes in goodwill are summarized as follows:

Year ended December 31 (in millions)	2016 EUR	2017 EUR
Cost		
Balance at beginning of year	2,624.64,873.9	
Acquisition through business combinations	2,115.1—	
Effect of changes in exchange rates	134.2	(332.8)
Balance at end of year		4,873.94,541.1

For more information with respect to business combinations, see Note 2 Business combinations.

Goodwill is tested for impairment annually at the start of the fourth quarter and whenever events or changes in circumstances indicate that the carrying amount of the goodwill may not be recoverable.

Goodwill mainly results from the acquisitions of Cymer and HMI. Within ASML we have identified two reporting units, which are Reporting Unit ASML and Reporting Unit Cymer Light Sources.

As of December 31, 2017 the goodwill allocated to Reporting Unit ASML amounts to EUR 4,078.8 million (2016: EUR 4,348.0 million) and for Reporting Unit Cymer Light Sources this amounts to EUR 462.3 million (2016: EUR 525.9 million).

For 2017 and 2016, the fair value calculations of the reporting units were performed by discounting the future cash flows generated from the continuing use of the reporting units. Cash flows beyond the forecasted period of 5 years have been extrapolated using a 0 percent growth rate.

The pre-tax WACC used to determine the expected discounted future cash flows is 10.2 percent for Reporting Unit ASML and 12.7 percent for Reporting Unit Cymer Light Sources.

Based on the recoverability testing during the annual goodwill impairment test, we believe that the fair values of the reporting units significantly exceed their carrying amounts, and therefore goodwill was not impaired as of December 31, 2017.

12. Other intangible assets

As of December 31, 2017 other intangible assets consist of finite-lived other intangible assets. Brands, developed technology, customer relationships and other were mainly obtained from the acquisitions of HMI (2016), Cymer (2013) and Brion (2007).

Finite-lived other intangible assets consist of the following:

(in millions)	Brands EUR	Intellectual property EUR	Developed technology EUR	Customer relationships EUR	Other EUR	Total EUR
Cost						
Balance at January 1, 2016	15.8	63.0	557.5	202.5	2.2	841.0
Acquisitions through business combinations	23.6	—	541.7	40.8	0.6	606.7
Additions	—	0.3	—	—	14.6	14.9
Transfer from indefinite-lived other intangible assets	—	—	139.4	—	—	139.4
Disposals	—	(1.9	)—	—	—	(1.9)
Effect of changes in exchange rates	0.8	—	26.1	9.9	—	36.8
Balance at December 31, 2016	40.2	61.4	1,264.7	253.2	17.4	1,636.9
Acquisitions through business combinations	—	—	—	—	—	—
Additions	—	0.5	—	—	14.9	15.4
Transfer from indefinite-lived other intangible assets	—	—	—	—	—	—
Disposals	—	—	—	—	—	—
Effect of changes in exchange rates	(2.0	)—	(64.8	)(24.6	)(0.1	)(91.5)
Balance at December 31, 2017	38.2	61.9	1,199.9	228.6	32.2	1,560.8
Accumulated amortization						
Balance at January 1, 2016	2.0	56.0	145.3	36.7	2.2	242.2
Amortization	1.0	3.1	46.7	11.2	1.5	63.5
Disposals	—	(1.2	)—	—	—	(1.2)
Effect of changes in exchange rates	0.2	—	7.1	2.1	—	9.4
Balance at December 31, 2016	3.2	57.9	199.1	50.0	3.7	313.9
Amortization	2.0	2.1	84.1	13.4	3.9	105.5
Impairment charges	—	—	—	—	0.1	0.1
Disposals	—	—	—	—	—	—
Effect of changes in exchange rates	(0.4	)—	(19.0	)(5.6	)(0.3	(24.7)
Balance at December 31, 2017	4.8	60.0	264.2	57.8	8.0	394.8
Carrying amount						
December 31, 2016	37.0	3.5	1,065.6	203.2	13.7	1,323.0
December 31, 2017	33.4	1.9	935.7	170.8	24.2	1,166.0

As of September 1, 2016, we commenced amortization of our in-process R&D relating to the Cymer acquisition in 2013 and transferred the full amount to developed technology. We determined the amortization period to be 12 years. During 2017, we recorded amortization charges of EUR 105.5 million (2016: EUR 63.5 million; 2015: EUR 51.2 million) which were recorded in cost of sales for EUR 99.7 million (2016: EUR 59.5 million; 2015: EUR 49.1 million), in R&D costs for EUR 2.1 million (2016: EUR 2.5 million and 2015: EUR 2.1 million) and in SG&A costs for EUR 3.7 million (2016: EUR 1.5 million and 2015: EUR 0.0 million).

As of December 31, 2017, the other intangible assets not yet available for use amount to EUR 6.0 million (2016: EUR 0.0 million) and are allocated to Reporting Unit ASML.

Indefinite-lived other intangible assets consist of the following:

(in millions)	In-process R&D EUR
Carrying amount as of January 1, 2016	139.4
Additions	—
Transfer to finite-lived other intangible assets	(139.4)
Carrying amount as of December 31, 2016	—
Additions	—
Transfer to finite-lived other intangible assets	—
Carrying amount as of December 31, 2017	—

During 2017 we recorded impairment charges of EUR 0.1 million (2016: EUR 0.0 million; 2015: EUR 0.0 million). As of December 31, 2017, the estimated amortization expenses for other intangible assets, for the next 5 years and thereafter, are as follows:

(in millions)	EUR
2018	102.0
2019	102.0
2020	101.0
2021	100.0
2022	97.0
Thereafter	664.0
Amortization expenses	1,166.0

13. Property, plant and equipment

Property, plant and equipment consist of the following:

(in millions)	Land and buildings EUR	Machinery and equipment EUR	Leasehold improvements EUR	Furniture, fixtures and other equipment EUR	Total EUR
Cost					
Balance at January 1, 2016	1,450.1	964.0	245.5	348.5	3,008.1
Acquisitions through business combinations	23.9	26.0	1.3	0.9	52.1
Additions	75.3	203.8	6.7	30.4	316.2
Disposals	(3.2)	(82.3)	(0.9)	(26.6)	(113.0)
Effect of changes in exchange rates	10.5	21.6	1.6	5.8	39.5
Balance at December 31, 2016	1,556.6	1,133.1	254.2	359.0	3,302.9
Acquisitions through business combinations	—	—	—	—	—
Additions	115.2	173.3	6.9	24.9	320.3
Disposals	(0.4)	(105.3)	(0.1)	(3.5)	(109.3)
Effect of changes in exchange rates	(29.6)	(41.2)	(4.4)	(4.8)	(80.0)
Balance at December 31, 2017	1,641.8	1,159.9	256.6	375.6	3,433.9
Accumulated depreciation and impairment					
Balance at January 1, 2016	382.5	529.3	208.5	267.1	1,387.4
Depreciation	88.4	155.7	15.7	31.0	290.8
Impairment charges	1.7	0.7	0.2	0.9	3.5
Disposals	(2.5)	(55.6)	(0.3)	(26.5)	(84.9)
Effect of changes in exchange rates	4.5	12.8	0.7	0.9	18.9
Balance at December 31, 2016	474.6	642.9	224.8	273.4	1,615.7
Depreciation	87.9	172.3	21.5	26.5	308.2
Impairment charges	0.2	8.7	—	—	8.9
Disposals	(0.2)	(57.1)	(0.1)	(3.3)	(60.7)
Effect of changes in exchange rates	(9.8)	(24.4)	(1.7)	(3.1)	(39.0)
Balance at December 31, 2017	552.7	742.4	244.5	293.5	1,833.1
Carrying amount					
December 31, 2016	1,082.0	490.2	29.4	85.6	1,687.2
December 31, 2017	1,089.1	417.5	12.1	82.1	1,600.8

Property, plant and equipment include amounts recorded as a result of the acquisition of HMI in 2016. For more information with respect to business combinations, see Note 2 Business combinations.

As of December 31, 2017, the carrying amount includes assets under construction for land and buildings of EUR 94.6 million (2016: EUR 32.7 million), machinery and equipment of EUR 29.3 million (2016: EUR 30.0 million), leasehold improvements of EUR 2.3 million (2016: EUR 1.7 million) and furniture, fixtures and other equipment of EUR 7.0 million (2016: EUR 6.2 million). The assets under construction for land and buildings also include support for a facility (as part of the High-NA agreement signed November 3, 2016) for Carl Zeiss SMT GmbH of EUR 54.7 million as of December 31, 2017 (2016: EUR 0.0 million).

For more details in relation to our 24.9 percent interest in Carl Zeiss SMT Holding GmbH & Co. KG see Note 10 Equity method investments

As of December 31, 2017, the carrying amount of land amounts to EUR 94.0 million (2016: EUR 96.3 million).

As of December 31, 2017, the carrying amount of machinery and equipment includes an amount of EUR 8.1 million with respect to evaluation and operating lease systems (2016: EUR 17.0 million). The majority of the additions in 2017 in property, plant and equipment relates to the expansion and upgrades of facilities, prototypes and training systems.

The majority of additions in 2017 in machinery and equipment relates to upgrade and expansion of production tooling and investment in prototypes, evaluation and training systems which are similar to those that ASML sells in its ordinary course of business. These systems are capitalized under property, plant and equipment because these are held for own use, for operating lease and for evaluation purposes. These are recorded at cost and depreciated over their expected useful life taking into consideration their residual value. From the time that these assets are no longer held for own use but intended for sale in the ordinary course of business, they are reclassified from property, plant and equipment to inventory at their carrying value.

An amount of EUR 13.4 million (2016: EUR 21.6 million) of the additions in property, plant and equipment relates to non-cash transfers from inventory. Since the transfers between inventory and property, plant and equipment are non-cash events, these are not reflected in the Consolidated Statements of Cash Flows.

An amount of EUR 45.8 million (2016: EUR 22.8 million) of the disposal of property, plant and equipment relates to non-cash transfers to inventory. When sold, the proceeds and cost of these systems are recorded as net sales and cost of sales, respectively, identical to the treatment of other sales transactions. The cost of sales for these systems includes the inventory value and the additional costs of refurbishing (materials and labor). Since the transfers between inventory and property, plant and equipment are non-cash events, these are not reflected in the Consolidated Statements of Cash Flows.

During 2017, we recorded depreciation charges of EUR 308.2 million (2016: EUR 290.8 million; 2015: EUR 243.0 million) of which we recorded EUR 195.7 million (2016: EUR 187.9 million; 2015: EUR 191.7 million) in cost of sales, EUR 101.7 million (2016: EUR 76.8 million; 2015: EUR 19.7 million) in R&D costs and EUR 10.8 million (2016: EUR 26.1 million; 2015: EUR 31.6 million) in SG&A costs.

Variable interest entity

The carrying amount of land and buildings includes an amount of EUR 25.2 million (2016: EUR 26.6 million) relating to our headquarters in Veldhoven, the Netherlands, which is ultimately owned by Koppelenweg I B.V., a "variable interest entity".

As of 2003, we are leasing the Veldhoven headquarters for a period of 15 years from an entity ("lessor") that was incorporated by the variable interest entity shareholders. The lessor's shareholders' equity amounts to EUR 2.2 million and has not significantly changed since 2003.

The variable interest entity shareholders each granted a loan of EUR 11.6 million and a fourth bank granted a loan of EUR 12.3 million (EUR 47.1 million in total) to the parent of the lessor. ASML provided the parent of the lessor with a subordinated loan of EUR 5.4 million and has a purchase option that is exercisable either at the end of the lease in 2018, at a price of EUR 24.5 million, or during the lease at a price equal to the book value of the assets. The total assets of the lessor entity amounted to EUR 54.5 million at inception of the lease. ASML exercised the purchase option and will buy the asset at the end of the term in June 2018. The entity is determined to be a variable interest entity because the equity investors do not have sufficient equity at risk for the legal entity to finance its activities without sufficient additional subordinated support.

The primary purpose for which the variable interest entity was created was to provide ASML with use of the building for 15 years, where ASML does not retain substantially all the risks and rewards from changes in value of the building. The main activities of the entity are to rent, re-market and ultimately sell the building that is owned by the variable interest entity. The economic performance of the variable interest entity is most significantly impacted by the ability of the lessee (ASML) to exercise the purchase option at any time during the lease term, and thus we could potentially benefit from increases in the fair value of the building.

While the debt holders have an interest, and may absorb losses, and the equity holders have an interest and may receive benefits, they do not have the power to direct activities that most significantly impact the entity's economic performance and therefore, cannot be the primary beneficiary. Through the pre-determined price of the call option ASML has the power over the variable interest entity, therefore only ASML meets both the power and losses/benefit criterion and consolidates the variable interest entity.

For more information with respect to our variable interest entity, Carl Zeiss SMT Holding GmbH & Co. KG, see Note 10 Equity method investments.

14. Accrued and other liabilities

Accrued and other liabilities consist of the following:

As of December 31 (in millions)	2016 EUR	2017 EUR
Deferred revenue	1,703.0	2,033.0
Costs to be paid	197.5	208.7
Down payments from customers	363.2	353.7
Personnel related items	401.8	427.6
Derivative financial instruments	113.9	67.3
Standard warranty reserve	36.5	59.7
Other	35.8	6.5
Accrued and other liabilities	2,851.7	3,156.5
Less: non-current portion of accrued and other liabilities ¹	615.7	829.1
Current portion of accrued and other liabilities	2,236.0	2,327.4

At December 31, 2016 and at December 31, 2017, the main part of the non-current portion of accrued and other liabilities relates to down payments received from customers regarding future shipments of EUV systems and deferred revenue for services to be performed, EUV systems and upgrades.

The increase in accrued and other liabilities was mainly caused by an increase in deferred revenue, which is partly offset by a decrease in derivative financial instruments.

Deferred revenue as of December 31, 2017 mainly consists of deferred revenue for system shipments and credits regarding free or discounted products or services as part of volume purchase agreements amounting to EUR 1,626.2 million (2016: EUR 1,349.8 million) and extended and enhanced (optics) warranty contracts amounting to EUR 349.6 million (2016: EUR 312.1 million). Both include deferred revenue with respect to our EUV systems: NXE:3300B, NXE:3350B and NXE:3400B.

Costs to be paid as of December 31, 2017 include anticipated losses on constructive obligations to upgrade EUV sources in the field of EUR 84.5 million (2016: EUR 88.8 million). In addition, costs to be paid include accrued costs for unbilled services provided by suppliers including contracted labor, outsourced services and consultancy.

Down payments from customers relate to amounts received from customers for systems that will be shipped in future periods.

Personnel related items mainly consist of accrued profit sharing, accrued management bonuses, accrued vacation days, accrued pension premiums, accrued wage tax and accrued vacation allowance. The increase in accrued personnel related items as of December 31, 2017 compared to December 31, 2016 is mainly the result of the increase in our number of FTEs.

Derivative financial instruments consist of the aggregate fair value of interest rate swaps which includes accrued interest. The interest rate swaps decreased in value as a result of increased interest rates, see Note 4 Financial risk management.

Changes in standard warranty reserve for the years 2017 and 2016 are as follows:

Year ended December 31 (in millions)	2016 EUR	2017 EUR
Balance at beginning of year	18.8	36.5
Acquisitions through business combinations	1.7	—
Additions for the year	51.1	74.3
Utilization of the reserve	(32.5)	(35.4)
Release of the reserve	(4.2)	(14.3)

Effect of exchange rates	1.6	(1.4)
Balance at end of year	36.5	59.7

The increase in the standard warranty reserve is mainly explained by more high-end technology systems, including EUV systems, sold in 2017. For more information with respect to business combinations, see Note 2 Business combinations .

15. Long-term debt

Long-term debt consists of the following:

As of December 31 (in millions)	2016 EUR	2017 EUR
EUR 600 million 5.75 percent senior notes due 2017, carrying amount	243.3	—
EUR 500 million 0.625 percent senior notes due 2022, carrying amount	489.5	487.8
EUR 750 million 3.375 percent senior notes due 2023, carrying amount	842.3	820.6
EUR 1,000 million 1.375 percent senior notes due 2026, carrying amount	956.3	947.8
EUR 750 million 1.625 percent senior notes due 2027, carrying amount	746.3	732.1
Loan headquarter building ¹	26.6	25.2
Other	15.2	11.8
Long-term debt	3,319.5	3,025.3
Less: current portion of long-term debt	247.7	25.2
Non-current portion of long-term debt	3,071.8	3,000.1

1. This loan relates to our variable interest entity, see Note 13 Property, plant and equipment.

Our obligations to make principal repayments under our Eurobonds and other borrowing arrangements excluding interest expense as of December 31, 2017:

(in millions)	EUR
2018	28.0
2019	1.8
2020	1.8
2021	1.8
2022	501.8
Thereafter	2,500.4
Long-term debt	3,035.6
Less: current portion of long-term debt	28.0
Non-current portion of long-term debt	3,007.6

For the years 2018-2021 the obligations relate to lease payments. The years thereafter mainly relate to repayments under our Eurobonds.

Eurobonds

The following table summarizes the carrying amount of our outstanding Eurobonds, including the fair value of interest rate swaps used to hedge the change in the fair value of the Eurobonds:

As of December 31 (in millions)	2016 EUR	2017 EUR
Amortized cost amount	3,212.5	2,976.6
Fair value interest rate swaps ¹	65.1	11.7
Carrying amount	3,277.6	2,988.3

1. The fair value of the interest rate swaps excludes accrued interest.

In June 2007, we completed an offering of our EUR 600 million 5.75 percent senior notes due 2017, with interest payable annually on June 13. The notes were redeemed at 100 percent of their principal amount by the final payment

of EUR 238.3 million on June 13, 2017.

In September 2013, we completed an offering of our EUR 750 million 3.375 percent senior notes due 2023, with interest payable annually on September 19. The notes are redeemable at the option of ASML, in whole or in part, at any time by paying a make whole premium, and unless previously redeemed, will be redeemed at 100 percent of their principal amount on September 19, 2023.

In July 2016, we completed an offering of our EUR 500 million 0.625 percent senior notes due 2022, with interest payable annually on July 7. The notes are redeemable at the option of ASML, in whole or in part, at any time by paying a make whole premium, and unless previously redeemed, will be redeemed at 100 percent of their principal amount on July 7, 2022.

In July 2016, we completed an offering of our EUR 1,000 million 1.375 percent senior notes due 2026, with interest payable annually on July 7. The notes are redeemable at the option of ASML, in whole or in part, at any time by paying a make whole premium, and unless previously redeemed, will be redeemed at 100 percent of their principal amount on July 7, 2026.

In November 2016, we completed an offering of our EUR 750 million 1.625 percent senior notes due 2027, with interest payable annually on May 28. The notes are redeemable at the option of ASML, in whole or in part, at any time by paying a make whole premium, and unless previously redeemed, will be redeemed at 100 percent of their principal amount on May 28, 2027.

The Eurobonds serve as hedged items in fair value hedge relationships in which we hedge the variability of changes in the fair value of our Eurobonds due to changes in market interest rates with interest rate swaps. The fair value changes of these interest rate swaps are recorded on the Consolidated Balance Sheets under derivative financial instruments (within other current assets, other non-current assets, current accrued and other liabilities and non-current accrued and or liabilities) and the carrying amount of the Eurobonds is adjusted for these fair value changes only. Following the redemption of the final part, EUR 238.3 million, of our EUR 600 million 5.75 percent senior notes due 2017, the corresponding part of interest rate swaps was simultaneously terminated in 2017.

The following table summarizes the estimated fair value of our Eurobonds:

As of December 31	2016	2017
(in millions)	EUR	EUR
Principal amount	3,238.23,000.0	
Carrying amount	3,277.62,988.3	
Fair value ¹	3,386.23,193.2	

1. Source: Bloomberg Finance LP.

The fair value of our Eurobonds is estimated based on quoted market prices as of December 31, 2017. Due to changes in market interest rates and credit spreads since the issue of our Eurobonds which carry a fixed coupon interest rate, the fair value deviates from the principal amount.

16. Lines of credit

Our available credit facilities amount to EUR 700.0 million as of December 31, 2017 and as of December 31, 2016. No amounts were outstanding under these credit facilities at the end of 2017 and 2016. The amounts available at December 31, 2017 and 2016 consisted of EUR 700.0 million committed revolving credit facility with a group of banks. In 2015, the terms and conditions of the facility were amended by, among other things, removing the financial covenant and by extending the maturity until 2020. In 2017, we exercised our extension option, extending the maturity date to 2022. Outstanding amounts under this credit facility will bear interest at EURIBOR or LIBOR plus a margin that depends on our credit rating.

17. Commitments, contingencies and guarantees

We have various contractual obligations, some of which are required to be recorded as liabilities in our Financial Statements, including long- and short-term debt. Other contractual obligations, namely operating lease commitments, purchase obligations and guarantees, are generally not required to be recognized as liabilities on our Consolidated Balance Sheets but are required to be disclosed.

Our contractual obligations as of December 31, 2017 can be summarized as follows:

Payments due by period	Total	1 year	2 year	3 year	4 year	5 year	After 5 years
(in millions)	EUR	EUR	EUR	EUR	EUR	EUR	EUR
Long-Term Debt Obligations, including interest expense ¹	3,439.784.1	56.9	57.5	56.9	555.0	2,629.3	
Operating Lease Obligations	102.1	34.4	23.6	19.6	12.8	8.1	3.6
Purchase Obligations	3,335.02,754.1	453.4	92.2	12.5	11.2	11.6	
Carl Zeiss SMT GmbH High-NA Funding Commitment	925.5	489.0	192.2	129.8	86.0	28.5	—

Total Contractual Obligations ² 7,802.33,361.6726.1 299.1 168.2 602.8 2,644.5

1. See Note 15 Long-term debt for the amounts excluding interest expense.

2. We have excluded unrecognized tax benefits for an amount of EUR 148.8 million as the amounts that will be settled in cash are not known and the timing of any payments is uncertain.

Long-term debt obligations mainly relate to interest payments and principal amounts of our Eurobonds. See Note 15 Long-term debt.

Operating lease obligations include leases of equipment and facilities. Lease payments recognized as an expense were EUR 48.6 million, EUR 45.2 million and EUR 45.1 million for the years ended December 31, 2017, 2016 and 2015, respectively.

We have purchase commitments towards suppliers in the ordinary course of business. ASML expects that it will honor these purchase obligations to fulfill future sales, in line with the timing of those future sales. The general terms and conditions of the agreements relating to the major part of our purchase commitments as of December 31, 2017 contain clauses that enable us to delay or cancel delivery of ordered goods and services up to the dates specified in the corresponding purchase contracts. These terms and conditions that we typically agree with our supply chain partners give us additional flexibility to adapt our purchase obligations to our requirements in light of the cyclicity and technological developments inherent in the industry in which we operate. We establish a provision for cancellation costs when the liability has been incurred and the amount of cancellation fees is reasonably estimable.

On November 3, 2016 we agreed with Carl Zeiss SMT GmbH to support their R&D costs, capital expenditures and other supply chain investments, in respect of High-NA, for an amount of EUR 760.0 million over 6 years, beginning in 2016. During 2017, we agreed to fund an additional EUR 325.0 million. In 2017 we paid an amount of EUR 147.5 million (2016: EUR 12.0 million). As of December 31, 2017 our estimated remaining commitment to Carl Zeiss SMT GmbH amounts to EUR 925.5 million (2016: EUR 748.0 million).

We have a non-committed guarantee facility of EUR 85.0 million under which guarantees in the ordinary course of business can be provided to third parties.

18. Employee benefits

We have a performance related bonus plan (STI) for our senior management. Under this plan, the amounts depend on actual performance against corporate and personal targets. Within ASML (excluding Cymer), the STI for members of senior management (excluding BoM) can range between 0.0 percent and 75.0 percent of their annual base salaries.

Within Cymer, bonuses can range between 0.0 percent and 112.5 percent of their annual base salary. The performance targets are set for a whole year. The STI over 2017 are accrued for in the Consolidated Balance Sheets as of December 31, 2017 and are expected to be paid in the first quarter of 2018.

Our STI expenses for the BoM, and other senior management were as follows:

Year ended December 31 (in millions)	2015	2016	2017
	EUR	EUR	EUR
Board of Management ¹	3.4	3.5	3.8
Other senior management	44.6	48.5	51.7
Bonus expenses	48.0	52.0	55.5

1. Bonus expenses in relation to the STI cash bonus for our BoM.

Profit-sharing plan

We have a profit-sharing plan covering all European and US non-sales employees who are not members of the BoM or other senior management. Under the plan, eligible employees receive an annual profit-sharing, based on a percentage of net income relative to total net sales ranging from 0.0 to 20.0 percent of their annual salary. The profit sharing for the years 2017, 2016 and 2015 was EUR 126.0 million, EUR 93.3 million and EUR 95.1 million, respectively. Our profit is also one of the criteria for the variable pay programs for employees in Asia. Expenses in relation to these plans amount to EUR 40.3 million for 2017, EUR 33.8 million for 2016 and EUR 32.0 million for 2015.

Share-based compensation

In the past we have adopted various share and option plans for our employees. Starting January 1, 2014 the Employee Umbrella Share Plan has become effective, covering all grants made as of that date for our employees. The AGM approves each year the maximum number of shares that can be used by ASML to execute share-based incentives. Within this limit, the SB determines the maximum number of shares that is granted to the BoM in line with the Remuneration Policy and the BoM determines the total maximum of shares that can be granted in that year for eligible employees in line with existing policies. Our current share-based compensation plans do not provide for cash settlement of options and shares.

The total gross amount of recognized compensation expenses (excluding excess tax benefits) associated with share-based payments (including share-based payments to the BoM) was EUR 53.1 million in 2017, EUR 47.7 million in 2016 and EUR 59.0 million in 2015. The tax benefit recognized related to the recognized share-based compensation costs in the US amounted to EUR 8.7 million in 2017, EUR 10.0 million in 2016 and EUR 13.8 million in 2015. Total compensation costs to be recognized in future periods amount to EUR 78.5 million as of December 31, 2017 (2016: EUR 83.2 million; 2015: EUR 65.4 million). The weighted average period over which these costs are expected to be recognized is calculated at 1.8 years (2016: 1.9 years; 2015: 1.7 years).

Employee Umbrella Share Plan

The Employee Umbrella Share Plan, effective as of January 1, 2014 covers all employees. Within this plan, we distinguish between performance and incentive shares. Within the incentive category, prior to October 3, 2016 employees could choose, at inception, to convert the shares into options. As of October 3, 2016 this option no longer exists. All grants under the Employee Umbrella Share Plan typically have a three-year vesting period.

Share plans

Our current share plans typically include a three-year service period and some plans have vesting conditions which are based on performance. The fair value of shares is determined on the closing trading price of our shares listed at Euronext Amsterdam on the grant date.

Details with respect to shares granted and vested during the year are set out in the following table:

Year ended December 31	EUR-denominated			USD-denominated		
	2015	2016	2017	2015	2016	2017
Total fair value at vesting date of shares vested during the year (in millions)	52.0	25.5	49.9	47.7	31.3	53.3
Weighted average fair value of shares granted	88.83	87.21	125.16	102.42	96.00	130.77

A summary of the status of conditionally outstanding shares as of December 31, 2017, and changes during the year ended December 31, 2017, is presented below:

	EUR-denominated		USD-denominated	
	Number of shares	Weighted average fair value at grant date (EUR)	Number of shares	Weighted average fair value at grant date (USD)
Conditional shares outstanding at January 1, 2017	884,204	79.33	954,608	95.81
Granted	342,120	125.16	326,804	130.77
Vested	(388,127)	81.13	(387,779)	99.35
Forfeited	(56,107)	70.76	(57,079)	98.97
Conditional shares outstanding at December 31, 2017	782,090	99.10	836,554	107.61

Option plans

Our current option plans typically vest over a 3 year service period with any unexercised stock options expiring 10 years after the grant date. Options granted have fixed exercise prices equal to the closing price of our shares listed at Euronext Amsterdam on grant date. The fair value of stock options is determined using a Black-Scholes option valuation model. As of 2017 we no longer grant options to our employees.

The Black-Scholes option valuation of our stock options granted during the year is based on the following assumptions:

Year ended December 31	2015	2016	2017
Weighted average share price (in EUR)	88.1	88.3	—
Volatility (in percentage)	28.7	27.2	—
Expected life (in years)	5.6	5.7	—
Risk free interest rate	—	—	—
Expected dividend yield (in EUR)	2.52	2.94	—
Forfeiture rate ¹	—	—	—

1. For the years ending December 31, 2016 and 2015, forfeitures are estimated to be nil. When establishing the expected life assumption we annually took into account the contractual terms of the stock options as well as historical employee exercise behavior.

Details with respect to stock options are set out in the following table:

Year ended December 31	EUR-denominated			USD-denominated		
	2015	2016	2017	2015	2016	2017
Weighted average fair value of stock options granted	21.69	20.34	—	23.56	22.69	—
Weighted average share price at the exercise date of stock options	91.30	98.08	132.67	103.88	100.68	148.48
Aggregate intrinsic value of stock options exercised (in millions)	12.9	11.5	12.5	6.2	4.1	4.8
Weighted average remaining contractual term of currently exercisable options	3.24	3.69	3.80	4.74	4.71	4.49
Aggregate intrinsic value of exercisable stock options (in millions)	24.3	22.3	21.0	8.5	8.9	13.1
Aggregate intrinsic value of outstanding stock options (in millions)	24.6	22.7	21.2	8.7	8.9	13.2

The number and weighted average exercise prices of stock options as of December 31, 2017, and changes during the year then ended are presented below:

	EUR-denominated		USD-denominated	
	Number of options	Weighted average exercise price per ordinary share (EUR)	Number of options	Weighted average exercise price per ordinary share (USD)
Outstanding, January 1, 2017	323,801	36.61	165,597	58.18
Granted	—	—	—	—
Exercised	(115,606)	25.11	(46,938)	47.11
Forfeited	(399)	55.11	—	—
Expired	—	—	—	—
Outstanding, December 31, 2017	207,796	42.97	118,659	62.56
Exercisable, December 31, 2017	203,866	42.30	117,429	62.29

Details with respect to the stock options outstanding are set out in the following table:

EUR-denominated			USD-denominated		
Range of exercise prices (EUR)	Number of outstanding options at December 31, 2017	Weighted average remaining contractual life of outstanding options (years)	Range of exercise prices (USD)	Number of outstanding options at December 31, 2017	Weighted average remaining contractual life of outstanding options (years)
0 - 10	—	—	0 - 10	—	—
10 - 15	76,282	0.70	10 - 15	—	—
15 - 20	10,526	1.79	15 - 20	3,611	0.80
20 - 25	13,582	2.80	20 - 25	32,213	0.91
25 - 40	10,900	3.76	25 - 40	13,839	2.83
40 - 50	12,472	4.79	40 - 50	959	3.62
50 - 60	9,077	5.95	50 - 60	3,979	4.66
60 - 70	19,436	5.93	60 - 70	729	5.06
70 - 80	18,376	7.36	70 - 80	1,603	5.30

Edgar Filing: ASML HOLDING NV - Form 20-F

80 - 90	18,505	7.85	80 - 90	17,616	6.77
90 - 100	11,871	7.27	90 - 100	35,402	7.01
100 - 110	6,769	8.56	100 - 110	8,708	7.31
Total	207,796	3.88	Total	118,659	4.52

Employee purchase plan

Every quarter, we offer our worldwide payroll employees the opportunity to buy our shares against fair value using their net salary. The BoM is excluded from participation in this plan. The fair value for shares is based on the closing price of our shares listed at Euronext Amsterdam on grant date. The maximum net amount for which employees can participate in the plan amounts to 10.0 percent of their annual gross base salary. When employees retain the shares for a minimum of 12 months, we will pay out a 20.0 percent cash bonus on the initial participation amount.

Deferred compensation plans

In July 2002, we adopted a non-qualified deferred compensation plan for our US employees that allows a select group of management or highly compensated employees to defer a portion of their salary, bonus, and commissions. The plan allows us to credit additional amounts to the participants' account balances. The participants divide their funds among the investments available in the plan. Participants elect to receive their funds in future periods after the earlier of their employment termination or their withdrawal election, at least 3 years after deferral. There were minor expenses relating to this plan in 2017, 2016 and 2015. Cymer has a similar non-qualified deferred compensation plan for a selected group of management level employees in the US in which the employee may elect to defer receipt of current compensation in order to provide retirement and other benefits on behalf of such employee backed by Cymer owned life insurance policies.

As of December 31, 2017, our liability under deferred compensation plans was EUR 43.6 million (2016: EUR 40.6 million).

Pension plans

We maintain various pension plans covering substantially all of our employees. There are 7,908 eligible employees in the Netherlands. These employees participate in a multi-employer union plan (PME) determined in accordance with the collective bargaining agreements effective for the industry in which we operate. This collective bargaining agreement has no expiration date. This multi-employer union plan, accounted for as a defined-contribution plan, covers approximately 1,350 companies and approximately 150,000 contributing members. Our contribution to the multi-employer union plan was 7.4 percent of the total contribution to the plan as per the Annual Report for the year ended December 31, 2016. The plan monitors its risks on a global basis, not by participating company or employee, and is subject to regulation by Dutch governmental authorities. By law (the Dutch Pension Act), a multi-employer union plan must be monitored against specific criteria, including the coverage ratio of the plan's assets to its obligations. As of January 1, 2015 new pension legislation has been enacted. This legislation results in among others, an increase of legally required coverage levels. The coverage percentage is calculated by dividing the funds capital by the total sum of pension liabilities and is based on actual market interest rates. The coverage ratio as per December 31, 2017 of 100.1 percent (December 31, 2016: 91.8 percent) is calculated giving consideration to the new pension legislation and is below the legally required level. We have however no obligation whatsoever to pay off any deficits the pension fund may incur, nor have we any claim to any potential surpluses.

Every company participating in the PME contributes a premium calculated as a percentage of its total pensionable salaries, with each company subject to the same contribution rate. Although the premium can fluctuate yearly based on the coverage ratio of the multi-employer union plan, for the 5-year period 2015-2019 the contribution percentage has been fixed at 23.6 percent (2014: 24.1 percent). The pension rights of each employee are based upon the employee's average salary during employment.

Our net periodic pension cost for this multi-employer union plan for any period is the amount of the required employer contribution for that period.

We also participate in several other defined contribution pension plans (outside the Netherlands), with our expenses for these plans equaling the employer contributions made in the relevant period.

Our pension and retirement expenses for all employees for the years ended December 31, 2017, 2016 and 2015 were:

Year ended December 31 (in millions)	2015	2016	2017
	EUR	EUR	EUR
Pension plan based on multi-employer union plan	50.8	54.9	62.4
Pension plans based on defined contribution	28.9	30.8	38.4
Pension and retirement expenses	79.7	85.7	100.8

19. Legal contingencies

ASML is party to various legal proceedings generally incidental to our business. ASML also faces exposures from other actual or potential claims and legal proceedings. In addition, ASML's customers may be subject to claims of

infringement from third parties alleging that the ASML equipment used by those customers in the manufacture of semiconductor products, and / or the methods relating to use of the ASML equipment, infringes one or more patents issued to those third parties. If these claims were successful, ASML could be required to indemnify such customers for some or all of the losses incurred or damages assessed against them as a result of that infringement.

We accrue for legal costs related to litigation and legal proceedings in our Consolidated Statements of Operations at the time when the related legal services are actually provided to us.

In 2017, no losses were recorded as a charge to our Consolidated Statements of Operations (2016: EUR 8.4 million and 2015: EUR 0.1 million).

From late 2001 through 2004, ASML was a party to a series of civil litigation and administrative proceedings in which Nikon alleged ASML's infringement of Nikon patents generally relating to lithography. ASML in turn filed claims against Nikon. Pursuant to agreements executed on December 10, 2004, ASML and Nikon agreed to settle all pending worldwide patent litigation between the companies. The settlement included an exchange of releases, a patent cross-license agreement related to lithography equipment used to manufacture semiconductor devices, and payments to Nikon by ASML. Under the Nikon Cross-License Agreement, ASML and Nikon granted to each other a non-exclusive license for use in the manufacture, sale, and use of lithography equipment, under their respective patents. The license granted relating to many of the patents of each party was perpetual, but the license relating to certain other of the patents expired at the end of 2009. Each party had the right to select a limited number of the other party's patents where the license for such patents expired in 2009 to be subject to a permanent covenant not to sue in respect of patent infringement claims. In October 2016, the Patent Selection was completed.

In addition, the Nikon Cross-License Agreement provided that following the termination of some of the licenses granted in the Nikon Cross-License Agreement on December 31, 2009, there would be a standstill period during which the parties agreed not to bring patent infringement suits against each other. This standstill period ran from January 1, 2010 through December 31, 2014. Damages resulting from claims for patent infringement occurring during the Cross-License Transition Period are limited to three percent of the net sales price of applicable licensed products including optical components.

In April 2017, Nikon sued ASML in both the Netherlands and Japan, alleging that the manufacture, sale, and / or use by ASML of certain equipment infringes asserted Nikon patents, and requesting both damages and injunctive relief prohibiting the sale or manufacture of such equipment. Nikon also sued in Germany, Carl Zeiss SMT GmbH, a supplier to ASML of components that ASML sells with or as part of certain lithography equipment. Nikon alleges that the manufacture, sale, and / or use of certain of these Carl Zeiss SMT GmbH components infringe asserted Nikon patents, and also seeks damages and an injunction prohibiting Carl Zeiss SMT GmbH from manufacturing or exporting certain components. Certain of these proceedings may result in court judgments during early 2018. Nikon has also initiated proceedings in the United States District Court for the District of Arizona in which Nikon has requested that the court order ASML to provide certain information to Nikon.

In response to Nikon's actions, ASML, in some cases jointly with Carl Zeiss SMT GmbH and / or its affiliates, filed several lawsuits against Nikon both in Japan and in a number of venues in the US, alleging patent infringement of certain patents owned by ASML and / or Carl Zeiss SMT GmbH and / or its affiliates.

We may incur substantial legal fees and costs in connection with these lawsuits, and we may not prevail. Patent litigation is complex and may extend for a protracted period of time, giving rise to the potential for both substantial costs and diverting the attention of key management and technical personnel. Potential adverse outcomes from this or any other patent litigation may include, without limitation, payment of significant monetary damages, injunctive relief prohibiting our sale of products, and / or settlement involving significant costs to be paid by us, any of which may have a material adverse effect on our business, financial condition and / or results of operations. We are unable to predict at this time what its outcome might be, or whether any other patent suit, by Nikon or another third party, may arise.

If Nikon is successful in obtaining injunctive relief prohibiting ASML or Carl Zeiss SMT GmbH from manufacturing, exporting or selling systems or components, this could effectively prohibit ASML from selling some of its systems, and, if Nikon is successful in obtaining a damages award such damages could be significant and could have a material adverse effect on our business, financial condition and results of operations.

20. Income taxes

The components of the provision for income taxes are as follows:

Year ended December 31 (in millions)	2015 EUR	2016 EUR	2017 EUR
Netherlands	1,028.1	1,176.2	2,133.1
Foreign	520.5	515.2	312.8
Income before taxes	1,548.6	1,691.4	2,445.9
Provision for income taxes current	(73.7)	(66.5)	(343.0)
Provision for income taxes deferred	(5.9)	(70.6)	51.0
Provision for income taxes Netherlands	(79.6)	(137.1)	(292.0)
Provision for income taxes current	(42.4)	(91.4)	(24.1)
Provision for income taxes deferred	(39.4)	9.0	5.4
Provision for income taxes Foreign	(81.8)	(82.4)	(18.7)
Total provision for income taxes current	(116.1)	(157.9)	(367.1)
Total provision for income taxes deferred	(45.3)	(61.6)	56.4
Provision for income taxes	(161.4)	(219.5)	(310.7)

The Dutch statutory tax rate was 25.0 percent in 2017, 2016 and 2015. Tax amounts in other jurisdictions are calculated at the rates prevailing in the relevant jurisdictions.

The reconciliation of the provision for income taxes is as follows:

Year ended December 31 (in millions)	2015 EUR	% ¹	2016 EUR	% ¹	2017 EUR	% ¹
Income before income taxes	1,548.6	100.0 %	1,691.4	100.0 %	2,445.9	100.0 %
Income tax provision based on ASML's domestic rate	(387.2)	25.0 %	(422.9)	25.0 %	(611.5)	25.0 %
Effects of tax rates in foreign jurisdictions	5.4	(0.3)%	(2.7)	0.2 %	21.0	(0.9)%
Adjustments in respect of tax exempt income	31.3	(2.0)%	31.3	(1.9)%	24.0	(1.0)%
Adjustments in respect of tax incentives	205.6	(13.3)%	178.3	(10.5)%	272.5	(11.1)%
Adjustments in respect of prior years' current taxes	(13.6)	0.9 %	(4.7)	0.3 %	(38.3)	1.6 %
Adjustments in respect of prior years' deferred taxes	6.0	(0.4)%	(6.6)	0.4 %	40.9	(1.7)%
Movements in the liability for unrecognized tax benefits	(10.6)	0.7 %	4.0	(0.2)%	(17.4)	0.7 %
Tax effects in respect of acquisition related items	—	— %	8.8	(0.5)%	—	— %
Other credits and non tax deductible items	1.7	(0.1)%	(5.0)	0.3 %	(1.9)	0.1 %
Provision for income taxes	(161.4)	10.4 %	(219.5)	13.0 %	(310.7)	12.7 %

1. As a percentage of income before income taxes.

Income tax provision based on ASML's domestic rate

The provision for income taxes based on ASML's domestic rate is based on the Dutch statutory income tax rate. It reflects the provision for income taxes that would have been applicable assuming that all of our income is taxable against the Dutch statutory tax rate and there were no permanent differences between taxable base and financial results and no Dutch tax incentives were applied.

Effects of tax rates in foreign jurisdictions

A portion of our results is realized in countries other than the Netherlands where different tax rates are applicable. The beneficial effect in 2017 compared to 2016 is due to the full year inclusion of the result of HMI (Taiwan based) with a lower statutory tax rate than The Netherlands.

Adjustments in respect of tax exempt income

In certain jurisdictions part of the income generated is tax exempted.

Adjustments in respect of tax incentives

Adjustments in respect of tax incentives relate to reduced tax rates in several jurisdictions, mainly consisting of the Dutch Innovation Box and the Dutch RDA. The Innovation box is a facility under Dutch corporate tax law pursuant to which qualified income associated with R&D is subject to an effective tax rate of 5 percent (the rate will be increased to 7 percent as of 2018). The RDA is a tax incentive providing for an additional tax deduction for qualified (non-labor) cost incurred for R&D activities performed

in the Netherlands. As of 2016, the RDA is converted from a corporate income tax credit into a wage tax credit reducing R&D costs. See Note 23 Research and development costs.

Adjustments in respect of prior years' current taxes

The movements in the adjustments in respect of prior years' current taxes for the years 2015, and 2016 are considered to be limited. In 2017 we agreed with the Dutch tax authorities to depreciate certain IP over time instead of at once. This explains the majority of the amount displayed and is mirrored in the adjustment in respect of prior years' deferred taxes.

Adjustments in respect of prior years' deferred taxes

The movements in the adjustments in respect of prior years' deferred taxes for the years 2015, and 2016 are considered to be limited. In 2017 we agreed with the Dutch tax authorities to depreciate certain IP over time instead of at once. This explains the majority of the amount displayed and is mirrored in the adjustment in respect of prior years' current taxes.

Movements in the liability for unrecognized tax benefits

In 2017, similar to prior years 2016 and 2015, the effective tax rate was impacted by movements in the liability for unrecognized tax benefits.

Tax effects in respect of acquisition related items

In 2016, the tax effects mainly relate to the acquisition of HMI.

Other credits and non tax deductible items

Other credits and non tax deductible items reflect the impact on our statutory rates of permanent non tax deductible items such as non-deductible interest expense, and non-deductible meals and entertainment expenses, as well as the impact of various tax credits on our provision for income taxes. The total anticipated net impact of the US tax reform legislation has been included in other credits and non tax deductible items.

Income taxes recognized directly in shareholders' equity

Income taxes recognized directly in shareholders' equity (including OCI) are as follows:

Income tax recognized in shareholders' equity (in millions)	2015	2016	2017
	EUR	EUR	EUR
Current tax			
OCI (financial instruments)	(1.3)	1.2	(2.3)
Tax benefit from share-based payments ¹	(3.7)	(0.9)	—
Total income tax recognized in shareholders' equity	(5.0)	0.3	(2.3)

ASU No. 2016-09 is effective as per January 1, 2017. This requires all of the tax effects related to share based 1. payments to be recorded through the Consolidated Statements of Operations. The comparative numbers have not been adjusted to reflect this change.

Liability for unrecognized tax benefits and deferred taxes

The liability for unrecognized tax benefits and total deferred tax position recorded on the Consolidated Balance Sheets is as follows:

As of December 31 (in millions)	2016	2017
	EUR	EUR
Liability for unrecognized tax benefits	(136.4)	(148.8)
Deferred tax position	(225.5)	(147.4)
Deferred and other tax assets (liabilities)	(361.9)	(296.2)

Liability for unrecognized tax benefits

We have operations in multiple jurisdictions, where we are subject to the application of complex tax laws. Application of these complex tax laws may lead to uncertainties on tax positions. We aim to resolve these uncertainties in

discussions with the tax authorities. We reserve for uncertain tax positions in line with the requirements of ASC 740, which requires us to estimate the potential outcome of any uncertain tax position when disputed by the tax authorities. Our estimate for the potential outcome of any uncertain tax position is highly judgmental. We conclude that we have adequately provided for uncertain tax positions. However, settlement of these uncertain tax positions in a manner inconsistent with our expectations could have a material impact on our Consolidated Financial Statements.

Consistent with the requirements of ASC 740, as of December 31, 2017, the liability for unrecognized tax benefits amounts to EUR 148.8 million (2016: EUR 136.4 million) which is classified as Non-current Deferred and other tax liabilities. If recognized, these tax benefits would affect our effective tax rate for approximately the equal amounts. Expected interest and penalties related to income tax liabilities have been accrued for and are included in the liability for unrecognized tax benefits and in the provision for income taxes. The balance of accrued interest and penalties recorded in the Consolidated Balance Sheets as of December 31, 2017 amounted to EUR 34.9 million (2016: EUR 30.9 million). Accrued interest and penalties recorded in the Consolidated Statements of Operations of 2017 amounted to a tax charge of EUR 4.2 million (2016: EUR 5.8 million; 2015: EUR 0.2 million).

A reconciliation of the beginning and ending balance of the liability for unrecognized tax benefits is as follows:

As of December 31 (in millions)	2016 EUR	2017 EUR
Balance, January 1	(71.5)	(105.5)
Gross increases – tax positions in prior period	—	(1.3)
Gross decreases – tax positions in prior period	3.1	3.4
Gross increases – tax positions in current period	(7.8)	(19.8)
Acquisitions through business combinations	(42.4)	—
Settlements	—	2.1
Lapse of statute of limitations	14.6	2.4
Effect of changes in exchange rates	(1.5)	4.8
Total liability for unrecognized tax benefits	(105.5)	(113.9)

We conclude our allowances for tax contingencies to be appropriate. Based on the information currently available, we estimate that the liability for unrecognized tax benefits will decrease by EUR 10.1 million within the next 12 months, mainly as a result of expiration of statute of limitations.

We file income tax returns with the Dutch tax authority, the U.S. federal government, various U.S. states, and various foreign jurisdictions throughout the world. The Dutch tax return is open to examination for the years 2012 to 2017. In addition our U.S. federal and state tax returns remain open to examination for the years 2013 through 2017.

Additionally, in relation to the tax credits in the US, the years 2008 through 2012 are open to examination. We believe that adequate amounts of taxes and related interest and penalties have been provided for, and any adjustments as a result of examinations are not expected to have a material adverse affect on our business, results of operations, or financial condition.

Deferred taxes

The composition of total deferred tax assets and liabilities reconciled to the classification in the Consolidated Balance Sheets is as follows:

Deferred taxes	January 1, 2017	Consolidated Statements of Operations	Effect of changes in exchange rates	December 31, 2017
(in millions)	EUR	EUR	EUR	EUR
Deferred tax assets:				
Capitalized R&D expenditures	9.5	(5.1	)(1.2	)3.2
R&D credits	35.8	12.6	(4.3	)44.1
Inventories	80.6	(24.0	)(10.1	)46.5
Deferred revenue	47.4	(20.6	)(5.8	)21.0
Accrued and other liabilities	59.3	(9.5	)(7.1	)42.7
Installation and warranty reserve	15.7	(2.7	)(1.9	)11.1
Tax effect carry-forward losses	8.5	(3.1	)0.3	5.7
Property, plant and equipment	11.0	(1.3	)(0.5	)9.2
Restructuring and impairment	0.7	(0.6	)(0.1)—
Alternative minimum tax credits	5.1	—	(0.6	)4.5
Share-based payments	13.9	(4.5	)(1.7	)7.7
Other temporary differences	26.0	(8.9	)3.0	20.1
Total deferred tax assets, gross	313.5	(67.7	)(30.0	)215.8
Valuation allowance ¹	(42.4	)(11.9	)4.8	(49.5
Total deferred tax assets, net	271.1	(79.6	)(25.2	)166.3
Deferred tax liabilities:				
Intangible fixed assets	(432.4	)140.9	26.4	(265.1
Property, plant and equipment	(44.7	)1.4	5.4	(37.9
Borrowing costs	(1.8	)0.1	—	(1.7
Other temporary differences	(17.7	)11.0	(2.3	)(9.0
Total deferred tax liabilities	(496.6	)153.4	29.5	(313.7
Net deferred tax assets (liabilities)	(225.5	)73.8	4.3	(147.4
Classified as:				
Deferred tax assets – non-current	34.9			31.7
Deferred tax liabilities – non-current	(260.4	)		(179.1
Net deferred tax assets (liabilities)	(225.5	)		(147.4

¹ The valuation allowance disclosed above relates to R&D credits and Tax effect carry-forward losses that may not be realized.

Deferred taxes	January 1, 2016	Acquisitions through business combinations	Consolidated Statements of Operations	Effect of changes in exchange rates	December 31, 2016
(in millions)	EUR	EUR	EUR	EUR	EUR
Deferred tax assets:					
Capitalized R&D expenditures	12.6	—	(3.5	)0.4	9.5
R&D credits	46.1	—	(11.7	)1.4	35.8
Inventories	75.5	—	1.4	3.7	80.6
Deferred revenue	35.4	—	10.6	1.4	47.4
Accrued and other liabilities	47.3	—	9.4	2.6	59.3
Installation and warranty reserve	11.0	—	3.9	0.8	15.7
Tax effect carry-forward losses	21.1	—	(12.9	)0.3	8.5
Property, plant and equipment	7.2	—	3.4	0.4	11.0
Restructuring and impairment	1.9	—	(1.2	)—	0.7
Alternative minimum tax credits	6.1	—	(1.3	)0.3	5.1
Share-based payments	12.5	—	0.8	0.6	13.9
Other temporary differences	24.5	2.0	(1.2	)0.7	26.0
Total deferred tax assets, gross	301.2	2.0	(2.3	)12.6	313.5
Valuation allowance ¹	(29.9	)—	(10.7	)1.8	(42.4
Total deferred tax assets, net	271.3	2.0	(13.0	)10.8	271.1
Deferred tax liabilities:					
Intangible fixed assets	(225.5	)(144.5	)(52.3	)(10.1	)(432.4
Property, plant and equipment	(40.3	)—	(2.2	)(2.2	)(44.7
Borrowing costs	(1.9	)—	0.1	—	(1.8
Other temporary differences	(4.1	)(15.5	)1.8	0.1	(17.7
Total deferred tax liabilities	(271.8	)(160.0	)(52.6	)(12.2	)(496.6
Net deferred tax assets (liabilities)	(0.5	)(158.0	)(65.7	)(1.3	)(225.5
Classified as:					
Deferred tax assets – current	133.2				—

Deferred tax assets – non-current	29.0		34.9	
Deferred tax liabilities – current	(2.4)	—	
Deferred tax liabilities – non-current	(160.3	)	(260.4)
Net deferred tax assets (liabilities)	(0.5	)	(225.5)

The valuation allowance disclosed above relates to R&D credits and Tax effect carry-forward losses that may not be realized.

Tax effect carry-forward losses

The deferred tax assets from carry-forward losses recognized as per December 31, 2017 are fully reserved for. Notional interest deduction stock in Belgium can generally be offset against future profits realized in the 7 years following the year in which the notional interest deduction stock occurs. There is no longer a taxable base (2016: EUR 6.5 million) of notional interest deduction and consequently no (2016: EUR 2.2 million) tax effect.

21. Segment disclosure

ASML has one reportable segment, for the development, production, marketing, sale and servicing of advanced semiconductor equipment exclusively consisting of lithography related systems. Its operating results are regularly reviewed by the Chief Operating Decision Makers in order to make decisions about resource allocation and assess performance.

Management reporting includes net system sales figures of new and used systems.

Net system sales for new and used systems were as follows:

Year ended December 31	2015	2016	2017
(in millions)	EUR	EUR	EUR
New systems ¹	4,182.7	4,600.2	6,266.7
Used systems	127.7	71.8	107.0
Net system sales ¹	4,310.4	4,672.0	6,373.7

As per January 1, 2017, ASML presents net sales with respect to metrology and inspection systems as part of net 1. system sales instead of net service and field option sales. The comparative numbers have been adjusted to reflect this change in accounting policy.

Net system sales per technology were as follows:

Year ended December 31	Net system sales in units ¹	Net system sales in EUR millions ¹
2017		
EUV	11	1,101.5
ArFi	76	4,017.4
ArF	14	210.3
KrF	71	683.3
i-line	26	84.7
Metrology & Inspection	95	276.5
Total	293	6,373.7
2016		
EUV	4	324.9
ArFi	70	3,518.7
ArF	6	116.9
KrF	57	532.7
i-line	20	78.0
Metrology & Inspection	55	100.8
Total	212	4,672.0
2015		
EUV	1	70.5
ArFi	67	3,238.5
ArF	9	107.5
KrF	74	747.7
i-line	18	73.0
Metrology & Inspection	45	73.2
Total	214	4,310.4

As per January 1, 2017, ASML presents net sales with respect to metrology and inspection systems as part of net 1. system sales instead of net service and field option sales. The comparative numbers have been adjusted to reflect this change in accounting policy.

The increase in net system sales of EUR 1,701.7 million, or 36.4 percent, to EUR 6,373.7 million in 2017 from EUR 4,672.0 million in 2016 (2015: EUR 4,310.4 million) is mainly due to:

- An increase from 4 EUV systems recognized in net system sales in 2016 to 11 EUV systems recognized in 2017.
 - An increase from 153 DUV systems recognized in net system sales in 2016 to 187 DUV systems recognized in 2017.
 - The inclusion of 12 months HMI net system sales in 2017, whereas 2016 only included 2 months.
- For geographical reporting, total net sales are attributed to the geographic location in which the customers' facilities are located. Long-lived assets are attributed to the geographic location in which these assets are located.

Total net sales and long-lived assets (consisting of property, plant and equipment) by geographic region were as follows:

Year ended December 31 (in millions)	Total net sales EUR	Long-lived assets EUR
2017		
Japan	390.5	3.4
Korea	3,068.3	23.2
Singapore	159.2	0.8
Taiwan	2,145.3	88.1
China	920.6	4.1
Rest of Asia	3.3	3.0
Netherlands	3.9	1,186.0
EMEA	850.8	5.0
United States	1,510.9	287.2
Total	9,052.8	1,600.8
2016		
Japan	404.3	4.3
Korea	1,579.9	17.3
Singapore	245.8	0.8
Taiwan	2,084.7	125.4
China	779.5	3.2
Rest of Asia	19.8	2.8
Netherlands	1.5	1,201.4
EMEA	551.3	4.1
United States	1,128.0	327.9
Total	6,794.8	1,687.2
2015		
Japan	668.4	3.2
Korea	1,971.7	11.6
Singapore	121.4	0.4
Taiwan	1,551.5	60.1
China	541.9	1.4
Rest of Asia	2.1	2.1
Netherlands	3.5	1,229.8
EMEA	211.0	1.3
United States	1,215.9	310.8
Total	6,287.4	1,620.7

In 2017, total net sales to the largest customer accounted for EUR 2,480.8 million, or 27.4 percent, of total net sales (2016: EUR 1,646.2 million, or 24.2 percent, of total net sales; 2015: EUR 1,633.6 million, or 26.0 percent, of total net sales). Our three largest customers (based on total net sales) accounted for EUR 1,356.7 million, or 64.7 percent, of accounts receivable and finance receivables at December 31, 2017, compared with EUR 655.3 million, or 51.8 percent, at December 31, 2016.

Substantially all of our sales were export sales in 2017, 2016 and 2015.

22. Selected operating expenses and additional information

Personnel expenses for all payroll employees were:

Year ended December 31 (in millions)	2015 EUR	2016 EUR	2017 EUR
Wages and salaries	1,165.4	1,279.6	1,492.8
Social security expenses	92.9	103.8	119.6
Pension and retirement expenses	79.7	85.7	100.8
Share-based payments	59.0	47.7	53.1
Personnel expenses	1,397.0	1,516.8	1,766.3

The average number of payroll employees in FTEs during 2017, 2016 and 2015 was 15,136, 12,852 and 11,824, respectively.

The average number of payroll employees in FTEs in our operations in the Netherlands during 2017, 2016 and 2015 was 7,211, 6,567 and 6,113, respectively. Both increases in 2017 compared to 2016 and in 2016 compared to 2015 in payroll employees (in FTEs) were in line with our business growth.

The total number of payroll and temporary employees as of December 31 in FTEs per sector was:

As of December 31 (in FTE)	2015	2016	2017
Customer Support	3,607	4,210	5,051
SG&A	1,380	1,561	1,701
Manufacturing & Logistics	3,833	4,443	5,112
R&D	5,861	6,433	7,352
Total	14,681	16,647	19,216
Less: Temporary employees	2,513	2,656	2,997
Payroll employees	12,168	13,991	16,219

23. Research and development costs

R&D costs (net of credits and excluding contributions under the NRE Funding Agreements from Participating Customers in the CCIP) increased by EUR 153.9 million, or 13.9 percent, to EUR 1,259.7 million in 2017 from EUR 1,105.8 million in 2016. R&D costs for both 2017 and 2016 were primarily focused on programs supporting EUV, DUV immersion, and Holistic Lithography. In 2017, R&D activities mainly related to:

• **EUV** - Further improving availability and productivity focused on the final stages of development related to our NXE:3400B system, of which we shipped our first systems in 2017. In addition, we are extending our road map by including High-NA to support our customers with 3 nm logic.

• **DUV immersion** - Mainly dedicated to the development of our next generation Immersion system NXT:2000i.

• **Holistic Lithography** - HMI expansion and further development of YieldStar and process window control solutions.

R&D costs (net of credits and excluding contributions under the NRE Funding Agreements from Participating Customers in the CCIP) increased by EUR 37.7 million, or 3.5 percent, to EUR 1,105.8 million in 2016, from EUR 1,068.1 million in 2015. R&D costs for both 2016 and 2015 were primarily focused on programs supporting EUV, DUV immersion, and Holistic Lithography. In 2016, R&D activities mainly related to:

• **EUV** - Further improving productivity, and supporting the design and industrialization of our NXE:3400B system including pellicle development.

• **DUV immersion** - Focused on development of our next generation immersion platform, the NXT:2000i, as well as maturing the product introduction in the field of our NXT:1980 system.

• **Holistic Lithography** - Further development of YieldStar, process window control and enlargement solutions.

Due to changes in tax regulations in the Netherlands effectuated in 2016, the R&D programs formerly defined as corporate income tax benefits (RDA), are now defined as wage tax benefits and therefore included as a credit in the R&D costs.

24. Interest and other, net

Interest and other income of EUR 7.2 million (2016: EUR 71.7 million and 2015: EUR 10.9 million) relates to interest income on deposits, short-term investments, money market funds, bank accounts and on finance receivables. In addition, in 2016 we recognized EUR 55.2 million on foreign currency revaluations of transactions and balances relating to the HMI acquisition in interest and other, net.

Interest and other costs of EUR 57.5 million (2016: EUR 38.0 million and 2015: EUR 27.4 million) mainly consist of net interest expense on our Eurobonds and related interest rate swaps, hedges, interest on finance lease obligations and amortized financing costs. The increase of the interest and other costs mainly relates to the full year impact of the Eurobond issued in 2016.

25. Vulnerability due to certain concentrations

We rely on outside vendors for components and subassemblies used in our systems including the design thereof, each of which is obtained from a single supplier or a limited number of suppliers. Our reliance on a limited group of suppliers involves several risks, including a potential inability to obtain an adequate supply of required components, reduced control over pricing and the risk of untimely delivery of these components and subassemblies.

Carl Zeiss SMT GmbH, in which ASML owns an indirect interest of 24.9 percent, is our single supplier, and we are their single customer, of Optical Columns for lithography systems. Carl Zeiss SMT GmbH is capable of developing and producing these items only in limited numbers and only through the use of manufacturing and testing facilities in Oberkochen and Wetzlar, Germany.

In 2017, 26.6 percent of our aggregate cost of system sales was purchased from Carl Zeiss SMT GmbH (2016: 27.6 percent; 2015: 26.2 percent).

Our relationship with Carl Zeiss AG is structured as a strategic alliance pursuant to several agreements executed in 1997 and subsequent years. These agreements define a framework in all areas of our business relationship. The partnership between ASML and Carl Zeiss AG is run under the principle of ‘two companies, one business’ and is focused on continuous improvement of operational excellence. Pursuant to these agreements, ASML and Carl Zeiss AG have agreed to continue their strategic alliance until either party provides at least three years notice of its intent to terminate.

A constraint in the production could result in limited availability of Optical Columns. During 2017, our production was not limited by the deliveries from Carl Zeiss SMT GmbH.

For further information on the relationship between ASML and Carl Zeiss SMT GmbH reference is made to Note 10 Equity method investments and Note 29 Related party transactions.

26. Shareholders' equity

Share capital

ASML's authorized share capital amounts to EUR 126.0 million and is divided into:

700,000,000 Cumulative Preference Shares with a nominal value of EUR 0.09 each.

699,999,000 Ordinary Shares with a nominal value of EUR 0.09 each.

9,000 Ordinary Shares B with a nominal value of EUR 0.01 each.

As of December 31, 2017, 431,464,705 ordinary shares with a nominal value of EUR 0.09 each were issued and fully paid up; this includes 4,071,113 treasury shares. No ordinary shares B and no cumulative preference shares have been issued.

Our BoM has the power to issue ordinary shares and cumulative preference shares insofar as the BoM has been authorized to do so by the General Meeting of Shareholders. The BoM requires approval of the SB for such an issue. The authorization by the General Meeting of Shareholders can only be granted for a certain period not exceeding 5 years and may be extended for no longer than 5 years on each occasion. If the General Meeting of Shareholders has not authorized the BoM to issue shares, the General Meeting of Shareholders will be authorized to issue shares on the BoM's proposal, provided that the SB has approved such proposal.

Shares issued as a result of the acquisition of HMI

ASML and HMI completed the merger pursuant to which ASML acquired HMI on November 22, 2016. As part of the transaction, Hermes-Epitek Corporation and certain HMI officers have also agreed to (re)invest in ASML part of the proceeds from selling their HMI shares in the transaction, underscoring their belief in the strategic rationale for the

transaction and their commitment to the combined businesses going forward. Accordingly, ASML issued a total number of 5,866,001 ordinary shares for an aggregate amount of EUR 580.6 million.

Shares issued in relation to share-based compensation

We have adopted various share and option plans for our employees. Whenever ordinary shares have to be delivered pursuant to these plans, we typically deliver treasury shares that we purchase in share buy-back programs for this purpose. When treasury shares are no longer available, we issue new ordinary shares to meet our delivery obligations under the plans. In 2017, we issued no new ordinary shares in relation to our ESOPs (aggregate value 2016: EUR 0.0 million; 2015: EUR 36.9 million). Fair value is determined on the closing price of our ordinary shares at Amsterdam Euronext at the date of respective issuance.

Ordinary shares

An ordinary share entitles the holder thereof to cast 9 votes at the General Meeting of Shareholders. Each ordinary share consists of 900 fractional shares. Fractional shares entitle the holder thereof to a fractional dividend, but do not entitle the holder thereof to voting rights. Only those persons who hold shares directly in the share register in the Netherlands, held by us at our address at 5504 DR Veldhoven, de Run 6501, the Netherlands, or in the New York share register, held by JP Morgan Chase Bank, N.A., P.O. Box 64506, St. Paul, MN 55164-0506, United States, can hold fractional shares. Those who hold ordinary shares through the deposit system under the Dutch Securities Bank Giro Transactions Act ('Wet giraal effectenverkeer'; the Giro Act) maintained by the Dutch central securities depository Euroclear Nederland or through the Depository Trust Company cannot hold fractional shares. At our 2017 AGM, the BoM was authorized from April 26, 2017 through October 26, 2018, subject to the approval of the SB, to issue shares and / or rights thereto representing up to a maximum of 5.0 percent of our issued share capital at April 26, 2017, plus an additional 5.0 percent of our issued share capital at April 26, 2017 that may be issued in connection with mergers, acquisitions and / or (strategic) alliances. At our 2018 AGM, our shareholders will be asked to extend this authority through October 25, 2019.

Holders of ASML's ordinary shares have a preemptive right, in proportion to the aggregate nominal amount of the ordinary shares held by them. This preemptive right may be restricted or excluded. Holders of ordinary shares do not have preemptive right with respect to any ordinary shares issued for consideration other than cash or ordinary shares issued to employees. If authorized for this purpose by the General Meeting of Shareholders, the BoM has the power, subject to approval of the SB, to restrict or exclude the preemptive rights of holders of ordinary shares. At our 2017 AGM, our shareholders authorized the BoM through October 26, 2018, subject to approval of the SB, to restrict or exclude preemptive rights of holders of ordinary shares up to a maximum of 10.0 percent of our issued share capital. At our 2018 AGM, our shareholders will be asked to extend this authority through October 25, 2019.

We may repurchase our issued ordinary shares at any time, subject to compliance with the requirements of Dutch law and our Articles of Association. Any such repurchases are and remain subject to the approval of the SB and the authorization by the General Meeting of Shareholders, which authorization may not be for more than 18 months. At the 2017 AGM, the BoM has been authorized, subject to SB approval, to repurchase through October 26, 2018, up to a maximum of 2 times 10.0 percent of our issued share capital at April 26, 2017, at a price between the nominal value of the ordinary shares purchased and 110.0 percent of the market price of these securities on Euronext Amsterdam or NASDAQ. At our 2018 AGM, our shareholders will be asked to extend this authority through October 25, 2019.

Ordinary shares B

Our Articles of Association provide for 9,000 ordinary shares B with a nominal value of EUR 0.01. Each ordinary share B entitles the holder thereof to cast one vote at the General Meeting of Shareholders. Holders of fractional shares had the opportunity, until July 31, 2013, to convert fractional shares into ordinary shares B to obtain voting rights with respect to those fractional shares. No ordinary shares B have been issued.

Cumulative preference shares

In 1998, we granted the Preference Share Option to the Foundation. This option was amended and extended in 2003 and 2007. A third amendment to the option agreement between the Foundation and ASML became effective on January 1, 2009, to clarify the procedure for the repurchase and cancellation of the preference shares when issued. The nominal value of the cumulative preference shares amounts to EUR 0.09 and the number of cumulative preference shares included in the authorized share capital is 700,000,000. A cumulative preference share entitles the holder thereof to cast nine votes in the General Meeting of Shareholders.

The Foundation may exercise the Preference Share Option in situations where, in the opinion of the Board of Directors of the Foundation, ASML's interests, ASML's business or the interests of ASML's stakeholders are at stake. This may be the case if a public bid for ASML's shares has been announced or has been made, or the justified expectation exists that such a bid will be made without any agreement having been reached in relation to such a bid with ASML. The same may apply if one shareholder, or more shareholders acting in concert, hold a substantial percentage of ASML's issued ordinary shares without making an offer or if, in the opinion of the Board of Directors of the Foundation, the (attempted) exercise of the voting rights by one shareholder or more shareholders, acting in concert, is materially in conflict with ASML's interests, ASML's business or ASML's stakeholders.

The objectives of the Foundation are to look after the interests of ASML and of the enterprises maintained by ASML and of the companies which are affiliated in a group with ASML, in such a way that the interests of ASML, of those enterprises and of all parties concerned are safeguarded in the best possible way, and influences in conflict with these interests which might affect the independence or the identity of ASML and those companies are deterred to the best of the Foundation's ability, and everything related to the above or possibly conducive thereto. The Foundation seeks to realize its objects by the acquiring and holding of cumulative preference shares in the capital of ASML and by exercising the rights attached to these shares, particularly the voting rights attached to these shares.

The Preference Share Option gives the Foundation the right to acquire a number of cumulative preference shares as the Foundation will require, provided that the aggregate nominal value of such number of cumulative preference shares shall not exceed the aggregate nominal value of the ordinary shares that have been issued at the time of exercise of the Preference Share Option for a subscription price equal to their nominal value. Only one-fourth of the subscription price would be payable at the time of initial issuance of the cumulative preference shares, with the other three-fourths of the nominal value only being payable when we call up this amount. Exercise of the Preference Share Option could effectively dilute the voting power of the outstanding ordinary shares by one-half.

Cancellation and repayment of the issued cumulative preference shares by ASML requires the authorization by the General Meeting of Shareholders of a proposal to do so by the BoM approved by the SB. If the Preference Share Option is exercised and as a result cumulative preference shares are issued, ASML, at the request of the Foundation, will initiate the repurchase or cancellation of all cumulative preference shares held by the Foundation. In that case ASML is obliged to effect the repurchase and cancellation respectively as soon as possible. A cancellation will have as a result a repayment of the amount paid and exemption from the obligation to pay up on the cumulative preference shares. A repurchase of the cumulative preference shares can only take place when such shares are fully paid up. If the Foundation does not request ASML to repurchase or cancel all cumulative preference shares held by the Foundation within 20 months after issuance of these shares, we will be obliged to convene a General Meeting of Shareholders in order to decide on a repurchase or cancellation of these shares.

The Foundation is independent of ASML. The Board of Directors of the Foundation comprises four independent members from the Netherlands' business and academic communities. In 2017, the members of the Foundation's Board of Directors were: Mr. H. Bodt, Mr. M.W. den Boogert, Mr. J.M. de Jong and Mr. A.H. Lundqvist. On January 1, 2018 Mr. M.W. den Boogert retired as a member of the Foundation's Board of Directors and was succeeded by Mr. S. Perrick.

Dividend policy

As part of our financing policy, we aim to pay an annual dividend that will be stable or growing over time. Annually, the BoM will, upon prior approval from the SB, submit a proposal to the AGM with respect to the amount of dividend to be declared with respect to the prior year. The dividend proposal in any given year will be subject to the availability of distributable profits or retained earnings and may be affected by, among other factors, the BoM's views on our potential future liquidity requirements, including for investments in production capacity, the funding of our R&D programs and for acquisition opportunities that may arise from time to time; and by future changes in applicable income tax and corporate laws. Accordingly, it may be decided to propose not to pay a dividend or to pay a lower dividend with respect to any particular year in the future.

For 2017, a proposal to declare a dividend of EUR 1.40 per ordinary share of EUR 0.09 nominal value will be submitted to the 2018 AGM.

27. Purchases of equity securities by the issuer and affiliated purchasers

In addition to dividend payments, we intend to return cash to our shareholders on a regular basis through share buybacks or capital repayment, subject to our actual and anticipated level of liquidity requirements and other relevant factors.

On January 20, 2016 we announced our intention to repurchase approximately EUR 1.5 billion of our own shares within the 2016-2017 timeframe. This program included an amount of approximately EUR 500.0 million remaining from the prior share repurchase program, announced January 21, 2015. During the period from January 21, 2016 up to December 22, 2017, we purchased 8,232,115 shares for a total consideration of EUR 900.0 million for cancellation. In light of the acquisition of HMI and the indirect investment in Carl Zeiss SMT GmbH, the share buyback program was paused, and as a result, the 2016-2017 program was not completed for the full amount. Furthermore, 7,736,154 shares were canceled in 2017, of which 2,972,776 shares were repurchased under the 2015 program and 4,763,378 shares were repurchased under the current program. The remainder of the shares bought back under the 2016-2017 program are intended to be canceled in 2018.

The following table provides a summary of shares repurchased by ASML in 2017:

Period	Total number of shares purchased	Average price paid per Share (EUR)	Total number of shares purchased as part of publicly announced plans or programs	Maximum value of shares that may yet be purchased under the program (EUR millions)
January 1 - 31, 2017	—	—	—	1,100.0
February 1 - 28, 2017	—	—	—	1,100.0
March 1 - 31, 2017	—	—	—	1,100.0
April 1 - 30, 2017	—	—	—	1,100.0
May 1 - 31, 2017	—	—	—	1,100.0
June 1 - 30, 2017	—	—	—	1,100.0
July 1 - 19, 2017	—	—	—	1,100.0
July 20 - 31, 2017	237,000	130.80	237,000	1,069.0
August 1 - 31, 2017	460,259	129.06	697,259	1,009.6
September 1 - 30, 2017	573,620	136.15	1,270,879	931.5
October 1 - 31, 2017	497,878	148.83	1,768,757	857.4
November 1 - 30, 2017	1,147,280	153.84	2,916,037	680.9
December 1 - 22, 2017	552,700	146.37	3,468,737	600.0
Total	3,468,737	144.14		

28. Customer Co-Investment Program

On July 9, 2012, we announced our CCIP to accelerate our development of EUV technology beyond the current generation and our development of future 450mm silicon wafer technology. The Participating Customers collectively agreed to fund EUR 1.38 billion of our R&D projects from 2013 through 2017. This program created risk sharing with some of our largest customers while the results of our development programs will be available to every semiconductor manufacturer with no restrictions. The funding under this program is now complete, with the total amount funded by the end of 2017. In addition to the funding commitments, Participating Customers invested an aggregated EUR 3.85 billion for 96,566,077 of our ordinary shares, the proceeds of which were returned to our shareholders (other than Participating Customers).

29. Related party transactions

In connection with our CCIP, one of the Participating Customers, Intel, acquired ordinary shares equal to 15.0 percent of our issued share capital (calculated giving effect to our synthetic share buyback in November 2012). Due to the equity investment, Intel was considered a related party of ASML as of July 9, 2012. As of December 31, 2017, Intel

has reduced its shareholding in ASML to 5.0 percent and is no longer considered a related party. The total net sales and the net outstanding liability to Intel (and its affiliates) were as follows:

Year ended December 31	2015	2016	2017
(in millions)	EUR	EUR	EUR
Total net sales to Intel	618.1	1,402.0	1,734.0
Net outstanding liability to Intel	700.2	379.8	166.1

On June 29, 2017, we completed the acquisition of a 24.9 percent interest in Carl Zeiss SMT Holding GmbH & Co. KG, which owns 100 percent of the shares in Carl Zeiss SMT GmbH, to strengthen the long-standing and successful partnership and to facilitate the development of the future generation of EUV lithography systems. Based on the 24.9 percent investment and our relationship with Carl Zeiss SMT GmbH being our single supplier of optical columns essential to our chip-making systems, Carl Zeiss SMT Holding GmbH & Co. KG and its subsidiaries are considered related parties of ASML as of June 29, 2017.

On November 3, 2016 we agreed with Carl Zeiss SMT GmbH to support their R&D costs, capital expenditures and other supply chain investments, in respect of High-NA, for an amount of EUR 760.0 million over 6 years, beginning in 2016. During 2017, we agreed to fund an additional EUR 325.0 million. In 2017 we paid an amount of EUR 147.5 million (2016: EUR 12.0 million). As of December 31, 2017 our estimated remaining commitment to Carl Zeiss SMT GmbH amounts to EUR 925.5 million (2016: EUR 748.0 million).

From time to time, ASML makes non-interest bearing advance payments to Carl Zeiss SMT GmbH supporting their work-in-process, thereby securing lens and optical column deliveries to us. Amounts included in these advance payments are settled through future lens or optical column deliveries.

The total purchases, sales and outstanding balances to and from Carl Zeiss SMT Holding GmbH & Co. KG and its subsidiaries were as follows:

Year ended December 31 (in millions)	2015	2016	2017
	EUR	EUR	EUR
Total purchases from Carl Zeiss SMT Holding GmbH & Co. KG	896.3	967.7	1,141.6

As of December 31 (in millions)	2016	2017
	EUR	EUR
Advance payments to Carl Zeiss SMT Holding GmbH & Co. KG	383.3	497.5
Net trade payables to Carl Zeiss SMT Holding GmbH & Co. KG	40.2	143.2

For more details in relation to our 24.9 percent interest in Carl Zeiss SMT Holding GmbH & Co. KG see Note 10 Equity method investments.

There have been no transactions during our most recent fiscal year, and there are currently no transactions, between ASML or any of its subsidiaries, and any other significant shareholder, and any director or officer or any relative or spouse thereof other than ordinary course (compensation) arrangements. During our most recent fiscal year, there has been no, and at present there is no, outstanding indebtedness to ASML owed by or owing to any director or officer of ASML or any associate thereof, other than the virtual financing arrangement with respect to shares described under Note 18 Employee benefits. Furthermore, ASML has not granted any personal loans, guarantees, or the like to members of the BoM or SB.

30. Subsequent events

Subsequent events were evaluated up to February 6, 2018, which is the date the Financial Statements included in this Integrated Report were approved. On January 17, 2018, we announced that the SB intends to appoint Roger Dassen as Executive Vice President and CFO to the BoM, effective June 1, 2018, subject to notification of the 2018 AGM.

There are no other events to report.

Veldhoven, the Netherlands

February 6, 2018

/s/ Peter T.F.M. Wennink

Peter T.F.M. Wennink

President, CEO and member of the Board of Management

/s/ Wolfgang U. Nickl

Wolfgang U. Nickl

Executive Vice President, CFO and member of the Board of Management

Report of Independent Registered Public Accounting Firm

To the Supervisory Board and Shareholders

ASML Holding N.V.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of ASML Holding N.V. and subsidiaries (the “Company”) as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income, shareholders’ equity, and cash flows for each of the years in the two-year period ended December 31, 2017, and the related notes (collectively, the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinion

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s consolidated financial statements and an opinion on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have

a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG Accountants N.V.

We have served as the Company's auditor since 2015.

Rotterdam, the Netherlands

February 6, 2018

Report of Independent Registered Public Accounting Firm

To: the Supervisory Board and Shareholders of ASML Holding N.V.

We have audited the accompanying consolidated statement of operations, statement of shareholders' equity and statement of comprehensive income, and statement of cash flows for the year ended December 31, 2015 of ASML Holding N.V. and subsidiaries (collectively, the "Company"). The Company's management is responsible for these financial statements. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. Our audit of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the results of operations and cash flows for the year ended December 31, 2015 of ASML Holding N.V. and its subsidiaries, in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte Accountants B.V.
Eindhoven, The Netherlands
February 4, 2016

About the Non-financial Information

Introduction

ASML's aim is to provide a balanced, concise and comprehensive view of its material operations and performance. In 2017, we published our first Integrated Report as part of our 2016 Annual Reports. The 2016 Integrated Report was published separately from the Annual Report on Form 20-F and the Statutory Annual Report. Therefore, the 2016 Integrated Report did not contain the complete information on ASML's financial performance. In 2017, we took additional steps to become more integrated and now publish an integrated report which combines our financial performance and performance in the area of corporate responsibility. Therefore, we are proud to present our first Integrated Report¹ that contains all information that is material towards our stakeholders and ASML.

Reporting scope

The content disclosed in this report is based on the material topics identified for both ASML and our stakeholders by the materiality assessment conducted in 2016. As part of the materiality assessment, we asked internal and external stakeholders to identify where in the value chain the theme has an impact (see table below where we include the boundaries as required by GRI G4 guidelines). In general, all the information about our strategy, policies, procedures and initiatives and about the associated indicators is relevant to our own organization. In some cases the impact extends to the value chain.

Themes	Area of the value chain where the theme has an impact		
Material themes	Supply chain	ASML internal	Product use

Innovation

Knowledge management

Sustainable relationship with our people

Talent management

Sustainable relationship with customers

Sustainable relationship with suppliers

Financial performance

Operational excellence

Employee safety

Business risk & continuity

Business ethics & compliance

Responsible business behavior themes

Product stewardship

Product safety & compliance

Fair remuneration

Labor relations

Human rights

Diversity & inclusion

Community involvement

Responsible supply chain

Environmental efficiency own operations

Financing and capital return policy

Tax strategy and transparency

For more information on the materiality assessment process, see Management Board Report - Materiality Assessment. This Integrated Report generally covers the performance of ASML from January 1, 2017 to December 31, 2017.

Please see Management Board Report - Our Company - A short company history for significant changes regarding the size, structure, or ownership of the organization or its supply chain.

The Reporting scope table clarifies the scope of the data reported per theme and explains where the scope of the data provided differs from the scope of the report's content.

The financial performance information in this report is prepared in accordance with US GAAP. The reporting basis for the information in this report on our performance in the area of corporate responsibility is prepared in accordance with the GRI G4 Sustainability Reporting Guidelines and is presented in accordance with the 'core' option. This has not changed since our last corporate responsibility report, which was published on February 8, 2017. Details of our compliance with G4 (GRI content index) can be found in a separate Reporting Supplement available on the Website.

We have also included disclosures required as part of the EU Directive on disclosure of non-financial information and diversity information, which has been implemented in 2017 and is decreed as part of the Dutch Civil Code.

1. We publish two versions of the Integrated Report: one version containing Financial Statements based on US GAAP and one version containing Financial Statements based on IFRS-EU.

Reporting indicators

The Consolidated Financial Statements included in this report are audited. Please see Consolidated Financial Statements - Report of Independent Registered Public Accounting Firm.

The non-financial data disclosed in this report is derived from various sources. The nature of certain data and the differing maturity levels of data processes within our operating subsidiaries, means that some data is subject to a degree of uncertainty caused by limitations in measuring and estimating data. We continue to work on improving our corporate responsibility control environment and data collection processes.

Reported data scope	Applicable to a subset of the reporting scope (where relevant) or where indicators do not fit the reporting scope	Exceptions
---------------------	---	------------

ASML world-wide	ASML world-wide excluding HMI	ASML worldwide excluding Cymer Light Sources & HMI	ASML manufacturing locations	ASML D&E	ASML products
-----------------	-------------------------------	--	------------------------------	----------	---------------

Governance
Business ethics and compliance

Products and technology
Innovation
Knowledge management
Product stewardship
Product safety and compliance

People

Talent management

The indicators ‘Attrition rate high performers’, ‘Promotion rate high performers’ and ‘Number of non-product related training hours’ do not include Cymer and HMI. The ‘Number of scholarships’ is ASML Netherlands only. The indicators ‘% of Development Action Plan completion’, ‘% of People Performance Management process completion’ and ‘Nomination courses’ exclude HMI.

Sustainable relationship with our people	The indicator 'Absenteeism' is excluding Cymer and HMI. The indicator 'Average engagement score me@ASML survey' excludes HMI.
Community involvement	The scope is ASML The Netherlands for all, except for Time investment of volunteers (in hours) - Community Involvement, which is ASML worldwide excluding Cymer and HMI.
Diversity and inclusion	The indicator 'Male/female in managerial positions' does not include Cymer and HMI.
Labor relations and fair remuneration	The indicator 'Ratio of base salary and total cash of women to men' excludes Cymer and HMI.
Partners	
Sustainable relationship with customers	The survey scope is largest and most strategic customers (and industry customers (only for VLSI)).
Sustainable relationship with suppliers	The indicator 'Supplier Relationship Satisfaction Survey' is for largest and most strategic suppliers.
Operations Employee health and safety Environmental efficiency own operations	Pyeongtaek manufacturing location not included.
Financial performance indicators	

Scope covers all indicators - Scope contains exceptions for some indicators

We acquired HMI in late 2016, so it is not yet included in all non-financial indicators. HMI is only included in the calculation of some of the non-financial indicators, as can be seen in the previous table. We acquired Cymer in May 2013, and, as in previous years, full integration of Cymer in the non-financial data is still ongoing.

Reporting adjustments

Adjustments have been made to some information provided in previous reports. These adjustments are summarized below:

- The number of technical training hours per FTE categorized to male and female has been restated for 2016 because the numbers for male and female were reported in the wrong category in error (switched around).

- The number of questions in the 2017 Supplier Relationship Satisfaction Survey was reduced from 44 to 26. We adjusted the Supplier Relationship Satisfaction Survey scores from 2015 and 2016 to match the 2017 structure, so that the results could be compared.

Compared to the 2016 Integrated Report, the following scope changes have also been made:

- The definition of the Number of technical training hours per FTE has changed. As of 2017, temporary staff is excluded from the calculation. This scope change has no significant impact on the number calculated.

- The definition of Time investment of volunteers (in hours) - Community Involvement has changed. As from 2017, this indicator is worldwide excluding HMI and Cymer.

People performance indicators also include HMI in 2017, see the exceptions in the previous table.

Reporting process

Each theme has an owner who is responsible for the theme ambition, strategy and relevant performance indicators, as well as the timely delivery of content and relevant data for reporting and monitoring the execution of the strategy.

Corporate Risk Management coordinates the delivery of the qualitative non-financial content in line with business objectives and stakeholder requirements. The data is reviewed and consolidated by Finance. Finance is also responsible for the reporting and planning process for the Integrated Report. Both departments report to the CFO.

Verification of this report

Given that we want to have our non-financial information independently reviewed, this report is subject to external assurance. As requested by our BoM, our external auditor (KPMG) was asked to provide this assurance. KPMG's assurance report, including details of the work they carried out, see Non-Financial Statements - Assurance Report of the Independent Auditor.

Non-financial Indicators

Governance

Theme	Description	2015	2016	2017	Comments
Business ethics and compliance	Total number of Speak Up messages	198	196	230	The increase in Speak up messages compared to 2016 can be explained by the better internal promotion of our Speak Up policy and the world-wide growth in number of employees.
	Anti-corruption & bribery Speak Up messages ¹	n/a	n/a	5	Forms part of 'We operate with integrity' business principle. This is a new indicator for 2017.
	Human rights Speak Up messages	n/a	n/a	36	Forms part of 'We respect people and planet' business principle. This is a new indicator for 2017.
Business ethics and compliance	Number of claims of violation of anti-trust and monopoly legislation	—	—	—	

1. None of the Speak Up messages lead to any indication of violation of anti-corruption laws.

Products and technology

Theme	Description	2015	2016	2017	Comments
Knowledge Management	Number of technical training hours per FTE	14.4	15.9	18.2	This increase is the result of the inclusion of Brion employees in the D&E training courses in 2017 in addition to increased training in Wilton, Connecticut, and San Diego, California, both in the US, due to better registration of trainings in the new MyLearning system.
Knowledge Management	Number of technical training hours per FTE - Male	14.4	15.6	17.6	Please note that the number for 2016 is restated. The numbers for male and female were reported in the wrong category (switched around) in 2016.
Knowledge Management	Number of technical training hours per FTE - Female	15.1	18.9	22.8	See comment above.
Product Stewardship	Throughput	NXT: 1980Di 275	n/a	NXT: 2000i 275	No new NXT system was introduced in 2016, therefore there is no measurement in 2016.
Product Stewardship	Measured energy efficiency (kWh / waferpass) ¹	0.51	n/a	0.51	See comment above.
Product safety & compliance	Percentage of product types shipped that have a SEMI S2 Safety Guidelines compliance report	100	% 100	% 100	%
		—	—	—	

Product safety & compliance Number of (significant) fines and monetary value of significant fines for non-compliance with product design related laws and regulations

1. Machine energy efficiency is measured according to the new SEMI S23 standard, and scaled to 100 percent availability of our systems.

Edgar Filing: ASML HOLDING NV - Form 20-F

People Theme	Description	Total ASML			Asia			Europe			US			
	Number of FTEs (payroll and temporary)	2015	2016 ²	2017 ³	2015	2016	2017	2015	2016	2017	2015	2016	2017	
Talent Management	Payroll employees (in FTE)	12,168	13,288	16,219	2,518	2,878	4,291	6,574	7,046	7,872	3,076	3,364	4,056	
	Female (in %)	13	13	14	12	12	15	13	13	14	13	14	15	
	Male (in %)	87	87	86	88	88	85	87	87	86	87	86	85	
	Temporary employees (in FTE) ¹	2,513	2,622	2,997	30	57	40	2,249	2,328	2,665	234	237	292	
	Female (in %)	14	14	15	83	54	48	13	13	14	13	14	18	
	Male (in %)	86	86	85	17	46	52	87	87	86	87	86	82	
	Total ⁴	14,681	15,910	19,216	2,548	2,935	4,331	8,823	9,374	10,537	3,310	3,601	4,348	
	Talent Management	Number of payroll FTEs (split in full-time and part-time)	Total ASML			Asia			Europe			US		
		Full-time employees (in FTE)	11,349	12,368	15,173	2,517	2,875	4,288	5,762	6,134	6,834	3,070	3,359	4,051
		Female (in %)	11	12	13	12	12	15	9	10	10	13	14	15
Male (in %)		89	88	87	88	88	85	91	90	90	87	86	85	
Part-time employees (in FTE)		819	920	1,046	1	3	3	812	912	1,038	6	5	5	
Female (in %)		35	35	36	—	29	—	35	35	36	47	37	57	
Male (in %)		65	65	64	100	71	100	65	65	64	53	63	43	
Total		12,168	13,288	16,219	2,518	2,878	4,291	6,574	7,046	7,872	3,076	3,364	4,056	
Sustainable relationship with our people		Employee attrition (in FTE)	Total ASML			Asia			Europe			US		
		Number of involuntary employee attrition	140	151	179	18	18	46	63	76	70	59	57	63
	Number of voluntary employee attrition	319	342	472	99	99	157	79	99	112	141	144	203	
	Total	459	493	651	117	117	203	142	175	182	200	201	266	
	Gender	Total ASML			Asia			Europe			US			
	Female	89	86	129	24	23	40	28	24	39	37	39	50	
	Male	370	407	522	93	94	163	114	151	143	163	162	216	
	Total	459	493	651	117	117	203	142	175	182	200	201	266	
	Age group													

Edgar Filing: ASML HOLDING NV - Form 20-F

< 30	79	80	121	28	32	59	21	19	20	30	29	42
30 - 50	268	302	383	85	77	138	87	120	112	96	105	133
> 50	112	111	147	4	8	6	34	36	50	74	67	91
Total	459	493	651	117	117	203	142	175	182	200	201	266

1. For US 2016, 111 gender unknown and for US 2017, 36 gender unknown, as in the US temporary employees are not required to provide their gender.

2. Please note that 2015 and 2016 numbers do not include HMI. At 2016 year end, we did not have all the relevant FTE splits to include HMI in the tables.

3. Significant increase in 2017 due to ambitious recruitment targets to support the strong company growth and the inclusion of HMI.

4. Our employees work primarily in customer support, manufacturing & logistics and in R&D.

People Theme	Description	Total ASML			Asia			Europe			US		
Sustainable relationship with our people	Number of new hires payroll employees (in FTEs)	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
		Number of new hires ¹	865	1,156	3,010	293	507	1,595	256	324	644	316	325	771
	Rate of new hires (in %)	7	9	19	12	18	37	4	5	8	10	10	19
	Gender												
	Female	148	213	592	31	74	295	63	76	140	54	64	157
	Male	717	943	2,418	262	433	1,300	193	248	504	262	261	614
	Total	865	1,156	3,010	293	507	1,595	256	324	644	316	325	771
	Age group ²												
	< 30	349	531	1,267	174	343	781	66	95	224	109	93	262
	30 - 50	465	565	1,574	118	158	794	176	213	394	171	194	386
	> 50	51	58	169	1	6	20	14	16	26	36	36	123
	Total	865	1,154	3,010	293	507	1,595	256	324	644	316	323	771

¹ The new hires 2017 includes the HMI acquisition of approximately 700 FTE (at the time of acquisition in 2016).

² The increase in 2017 is in line with our business growth.

2. For US 2016, 2 unknown.

People Theme	Description	Gender			Age group			
Diversity & inclusion	Male/female in managerial positions (in headcount)	Female	Male	Total	< 30	30 - 50	>50	Total
			Supervisory Board	3	5	8	—	—
	Board of Management	—	5	5	—	1	4	5
	Senior Management	32	323	355	—	186	169	355
	Middle Management	161	1,543	1,704	—	1,155	549	1,704
	Junior Management	75	608	683	11	575	97	683
	Other	1,734	9,417	11,151	2,067	7,446	1,638	11,151

Edgar Filing: ASML HOLDING NV - Form 20-F

People Theme	Description	2015	2016	2017	Comments
Talent Management	Number of scholarships	54	50	50	
Talent Management	Number of non-product related training hours per FTE				
	Female	14.1	13.3	11.2	
	Male	11.1	8.7	8.6	
	Total	11.5	9.3	8.9	
Talent Management	Nomination courses: Leadership Development Programs				
	Number of training hours	n/a	22,789	37,588	The increase is due to more courses started in 2017. This was a new indicator in 2016.
	Number of employees attending (unique)	n/a	323	431	This was a new indicator in 2016.
Diversity & inclusion	Workforce by gender male / female (in %)				
	Female	13	%13	%14	%
	Male	87	%87	%86	%
	Total	100	%100	%100	%
Diversity & inclusion	Number of nationalities working for ASML				
	Asia	23	22	25	
	Europe	86	90	94	
	US	59	71	76	
	Total	97	105	115	
Diversity & inclusion	Foreign nationals working for ASML (in %)				
	Asia	6	5	4	
	Europe	21	22	24	
	US	17	20	26	
	Total	17	18	20	
Sustainable relationship with our people	Absenteeism (in %)				
	Asia ¹	0.7	0.4	0.4	
	Europe	2.1	2.3	2.4	
	US	1.4	1.5	1.4	

1. In some Asian countries sick leave is regarded as annual leave, hence illness-related absenteeism is recorded as 0 percent.

People Theme	Description	2015	2016	2017	Comments
Labor relations	Percentage of employees covered by collective bargaining agreements	51	% 50	% 46	%
Fair remuneration	Ratio of base salary of women to men				
	Senior Management	105	% 106	% 106	%
	Middle Management	97	% 98	% 97	%
	Non-management	99	% 99	% 99	%
Fair remuneration	Ratio of total cash of women to men				
	Middle Management	97	% 97	% 96	%
Community involvement	Number of students met	n/a	1,637	7,299	This was a new process/indicator as of July 1, 2016.
Community involvement	Time investment of volunteers (in hours) - Technology promotion and Campus promotion	n/a	1,789	4,533	This was a new process/indicator as of July 1, 2016.
Community involvement	Time investment of volunteers (in hours) - Community Involvement	n/a	2,669	4,545	This was a new process/indicator in 2016.
Community involvement	Cash commitments - Charity (x 1,000 EUR)	551	635	749	
Community involvement	Cash commitments - Sponsorship (x 1,000 EUR)	491	425	620	

Edgar Filing: ASML HOLDING NV - Form 20-F

Partners					
Theme	Description	2015	2016	2017	Comments
Sustainable relationship with suppliers & Responsible supply chain	Total number of supplier audits conducted	101	126	88	The decrease in the number of supplier audits conducted is due to limited auditing capacity.

Operations					
Theme	Description	2015	2016	2017	Comments
Environmental efficiency own operations	Energy consumption (in TJ)	1,106	1,297	1,321	
Environmental efficiency own operations	Water consumption (in 1,000 m ³)	745	896	874	
Environmental efficiency own operations	Waste generated (in 1,000 kg)	5,287	3,895	3,935	
	Nonhazardous waste	4,987	3,583	3,602	
	Hazardous waste	300	312	333	
Environmental efficiency own operations	Number and monetary value of significant fines and sanctions filed for non-compliance with environmental laws and regulations	—	—	—	
Environmental efficiency own operations	CO ₂ footprint (in kton) made up of	37.2	45.9	46.6	
	CO ₂ footprint - direct scope 1 (in kton)	21.4	20.4	19.0	
	CO ₂ footprint - indirect scope 2 (in kton)	15.8	25.5	27.6	

Operations					
Theme	Description	2015 2,3	2016 3	2017	Comments
Employee safety	Number of incidents resulting in personal injury / illness (per region) ¹				
	Asia	n/a	50	36	
	Europe	n/a	120	120	
	US	n/a	81	91	
	Total	n/a	251	247	
Employee safety	Number of incidents resulting in personal injury / illness (by body part affected)				
	Head	n/a	n/a	38	
	Eye	n/a	n/a	10	
	Shoulder	n/a	n/a	4	
	Chest	n/a	n/a	6	
	Back	n/a	n/a	19	
	Arm	n/a	n/a	14	
	Hand	n/a	n/a	77	
	Leg	n/a	n/a	45	

Edgar Filing: ASML HOLDING NV - Form 20-F

Foot	n/a	n/a	20
Other	n/a	n/a	14
Total	n/a	n/a	247

Employee safety	Lost workday rate	n/a	0.17	0.13
-----------------	-------------------	-----	------	------

Employee safety	Severity rate	n/a	3.64	6.71	Due to a select number of injuries which resulted in multiple weeks of absence, the severity rate increased in 2017. The decreased amount of recordable incidents in 2017 further increased the impact of these few injuries.
-----------------	---------------	-----	------	------	---

The online EHS incident reporting tool was implemented at Cymer Light Sources on August 1, 2016, so not all 1. Cymer Light Sources incidents for the indicator number of incidents resulting in personal injury / illness may be included in 2016.

2. As of 2016 we use Occupational Health and Safety Act guidelines and therefore data previously reported in 2015 is not comparable and not included here.

As of 2017 we use the Occupational Health and Safety Act guidelines to categorize the number of incidents 3. resulting in personal injury / illness by body part affected. Therefore, data previously reported is not comparable and not included here. Please see the 2016 Integrated Report for the categorization of the incidents occurred in 2016.

Stakeholder Engagement

We communicate with our stakeholders through various channels and at a variety of levels. The following table is an overview of our main stakeholder groups, the way we communicate with them and an overview of the topics most relevant to them.

Stakeholder	Main communication channels	Most relevant themes
Customers	<ul style="list-style-type: none"> • Customer Loyalty Survey • Direct interaction via account teams and zone quality managers • Voice of the customer auditorium sessions • Bi-annual Technology Review Meetings (between our major customers, ASML's CTO, product managers and other ASML executives) and Executive Review Meetings (between ASML executives and major clients) • Different technology symposia and special events 	<ul style="list-style-type: none"> • Innovation • Talent management • Operational excellence • Sustainable relationship with customers
	<ul style="list-style-type: none"> • Direct interaction with the Investor Relations department (e.g. financial results conference calls, investor visits to ASML, visits to investors during roadshows) • AGM • Investor Day (scheduled as needed, usually every other year) • Different investor conferences • Various sustainability self-assessments and survey feedback 	<ul style="list-style-type: none"> • Financial performance & financing and capital return policy • Innovation & Knowledge management • Talent management & Relationship with our people • Business risk & business continuity • Business ethics & compliance • Responsible supply chain
Shareholders		
Employees ¹	<ul style="list-style-type: none"> • Employee satisfaction survey • Feedback from online training programs (e.g. ethics/Code of Conduct) • ASML Speak up service • 	<ul style="list-style-type: none"> • Innovation • Talent management • Operational excellence •

	<ul style="list-style-type: none"> Works Council • Young ASML ², Women@ASML, Seniors@ASML, Pink ASML ³ • Intranet articles • Onboarding sessions for new employees • Lunches with board members • All-employee meeting • Senior Management meetings • Departmental meetings • ASML's supplier days • Supplier Relationship Satisfaction Survey • 	<ul style="list-style-type: none"> Sustainable relationship with our people • Diversity & inclusion
Suppliers	<ul style="list-style-type: none"> Direct interaction via supplier account teams / procurement account managers • Supplier audits • ASML Speak up service 	<ul style="list-style-type: none"> • Sustainable relationship with suppliers • Sustainable relationship with customers • Innovation • Business risk & continuity
Society	<ul style="list-style-type: none"> • SEMI meetings 	<ul style="list-style-type: none"> • Talent management
a. Industry peers	<ul style="list-style-type: none"> Responsible Business Alliance meetings and workgroups • FME⁴ events and meetings • 	<ul style="list-style-type: none"> • Community involvement • Innovation •
b. Governments ⁵	<ul style="list-style-type: none"> Meetings with municipalities and regional and national government officials • EU joint technology initiatives • ASML scholarship programs • 	<ul style="list-style-type: none"> • Environmental efficiency own operations
c. Universities	<ul style="list-style-type: none"> Internships • Partnerships with universities and institutes (e.g. in the Netherlands, Korea, Taiwan) • 	
d. Local Communities &	<ul style="list-style-type: none"> Labor market communication program • Neighbor Evening 	

Other

- Brainport ⁶
- StartupDelta initiative
- Jet-Net
- Dutch technology week
- Company visits
- Meetings with various schools and local cultural institutions (e.g. in the Netherlands and U.S.)
- ASML Speak up service

1. Including Works Council and unions.

2. Internal platform that aims to connect, develop, and support young professionals within ASML via social and professional initiatives.

3. Internal platform that aims to contribute to making ASML a safe and great place to work, which explicitly welcomes diversity in gender expression and sexual orientation.

4. FME is a Dutch organization that represents employers and businesses in the technology industry.

5. Including regulatory bodies in the countries where ASML operates and municipalities.

6. Brainport Eindhoven Region (the Netherlands) is an innovative technology region, home to world-class businesses, knowledge institutes, and research institutions.

Assurance Report of the Independent Auditor
To the Board of Management of ASML Holding N.V.
Our conclusion

We have reviewed the following non-financial information (hereafter: the Non-financial Information) of the 'Integrated Report 2017' based on U.S. generally accepted accounting principles (hereafter: 'the Report') of ASML Holding N.V. (hereafter: ASML), based in Veldhoven, the Netherlands: Message from our CEO (page 1), Highlights (page 2), Management Board report (pages 4 to 40 and pages 55 (starting from Materiality Assessment) to 59) and the Non-financial statements (pages 146-155).

Based on our review, nothing has come to our attention to indicate that the Non-financial Information is not prepared, in all material respects, in accordance with the GRI Sustainability Reporting Guidelines version G4 Core option and the applied supplemental reporting criteria as described in section 'About the Non-financial Information' of the Report.

Basis for our conclusion

We have performed our review on the Non-financial Information in accordance with Dutch law, including Dutch Standard 3810N : "Assurance engagements relating to sustainability reports", which is a specified Dutch standard that is based on the International Standard on Assurance Engagements (ISAE) 3000 : "Assurance Engagements other than Audits or Reviews of Historical Financial Information".

This review engagement is aimed at obtaining limited assurance. Our responsibilities under this standard are further described in the section 'Our responsibilities for the review of the Non-financial Information' below.

We are independent of ASML in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Unexamined prospective information

The Non-financial Information includes prospective information such as ambitions, strategy, plans, expectations and estimates. Inherently the actual future results are uncertain . We do not provide any assurance on the assumptions and achievability of prospective information in the Non-financial Information.

Responsibilities of the Board of Management for the Non-financial Information

The Board of Management of ASML is responsible for the preparation of the Non-financial Information in accordance with the GRI Sustainability Reporting Guidelines version G4 Core option and the applied supplemental reporting criteria as described in section 'About the Non-financial Information' of the Report.

The Board of Management is also responsible for such internal control as it determines is necessary to enable the preparation of the Non-financial Information that is free from material misstatement, whether due to fraud or error.

Our responsibilities for the review of the Non-financial Information

Our responsibility is to plan and perform the assurance engagement in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion.

Procedures performed in an assurance engagement to obtain a limited level of assurance are aimed at determining the plausibility of information and are less extensive than a reasonable assurance engagement. The level of assurance obtained in review engagements is therefore substantially less than the level of assurance obtained in an audit engagement.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of the Non-financial Information. The materiality affects the nature, timing and extent of our review procedures and the evaluation of the effect of identified misstatements on our conclusion.

We apply the 'Nadere voorschriften Kwaliteitssystemen' (Regulations on quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have exercised professional judgement and have maintained professional skepticism throughout the review, in accordance with the Dutch Standard 3810N, ethical requirements and independence requirements.

Our review engagement included:

• Performing an analysis of the external environment and obtaining an understanding of relevant social themes and issues, and the characteristics of the organization.

• Evaluating the appropriateness of the reporting criteria used and their consistent application, including the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates made by management and related disclosures in the Non-Financial Information.

• Evaluating the design and implementation of the reporting systems and processes related to the information in the Non-financial Information.

• Interviewing relevant staff at corporate level responsible for the corporate social responsibility strategy and policy.

• Interviews with relevant staff responsible for providing the information in the Non-financial Information, carrying out internal control procedures on the data and consolidating the data in the Non-financial Information.

• A visit to the production site in Veldhoven, the Netherlands aimed at, on a local level, validating source data and evaluating the design of internal control and validation procedures.

• An analytical review of the data and trends submitted for consolidation at corporate level.

• Reviewing relevant data and evaluation of internal and external documentation, based on limited sampling, to assess the accuracy of the information in the Non-financial Information.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the review and significant findings, including any significant findings in internal control that we identify during our review.

Rotterdam, the Netherlands
February 6, 2018
KPMG Accountants N.V.

J. van Delden RA

Appendix - Board of Management and Supervisory Board Remuneration

The remuneration of the BoM for the financial year 2017 is based upon the Remuneration Policy. The SB ensures that the policy and its implementation are linked to the company's objectives.

In 2017, the STI resulted in a cash payout of 136.70 percent of the target payout. Of the two qualitative performance criteria (Technology Leadership Index and Market Position), one was achieved between target and maximum performance level and the other at maximum level. For the financial performance criteria, the SB at the beginning of the year chose the following three measures for the 2017 performance year: 1. EBIT Margin %, 2. Number of EUV Shipments, and 3. Free Cash Flow. The achievement over 2017 for these measures was as follows (expressed as payout percentage of target payout): EBIT margin 150 percent of target; EUV shipments 100 percent of target, and Free Cash Flow 150 percent of target. The total STI outcome results in a cash payout of EUR 3.5 million, representing 88.86 percent of the base salary of the BoM.

At the beginning of 2018, the SB decided to apply the three financial performance measures chosen for 2017 also for the 2018 performance year: 1. EBIT Margin %, 2. Number of EUV Shipments, and 3. Free Cash Flow.

Share ownership guidelines

Per December 31, 2017 all members of the BoM complied with the share ownership guidelines as incorporated in the Remuneration Policy.

Internal pay ratio ¹

The pay ratio of CEO compensation compared to the average employee compensation during 2017 is 32:1.

This ratio consists of the CEO's total direct compensation during 2017 of EUR 3,318,108 as reported in the Total direct compensation, pension and other benefits table in this appendix, compared to the average compensation of all employees (equal to EUR 102 thousand). The average compensation of all employees was calculated from the numbers as reported in Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 22 Selected operating expenses and additional information (wages and salaries + share-based payments) / average number of payroll employees = EUR 1,546 million / 15,136 = EUR 102 thousand.

CFO Wolfgang Nickl to leave ASML by the end of April 2018

Mr. Nickl will step down from his position with ASML as per the 2018 AGM, completing his current term. A pro-rated compensation will apply for the period January through April 2018.

This ratio is prepared in accordance with the Dutch Corporate Governance Code and has not been prepared to comply the Pay Ratio Disclosure requirements under SEC regulations.

Total direct compensation, pension and other benefits

The remuneration of key management personnel, comprising of members of the BoM in 2017, 2016 and 2015 was as follows:

Board of Management	Financial Year	Fixed	Short-term (variable)	Long-term (variable)	Total Direct Compensation	Other		Total Remuneration
		Base salary	STI (Cash)	LTI (share awards)		Pension and expense reimbursement	Other benefits	
		EUR	EUR	EUR	EUR	EUR	EUR	EUR
P.T.F.M.	2017	978,000	869,002	1,471,106 ²	3,318,108	169,742	51,263	3,539,113
Wennink	2016	978,000	782,498	1,473,162 ³	3,233,660	173,030	50,823	3,457,513
	2015	954,000	708,059	1,681,875 ⁴	3,343,934	163,098	50,575	3,557,607
M.A. van den Brink	2017	978,000	869,002	1,471,106 ²	3,318,108	169,742	50,014	3,537,864
	2016	978,000	782,498	1,478,790 ³	3,239,288	173,030	49,786	3,462,104
	2015	954,000	708,059	1,727,752 ⁴	3,389,811	163,098	49,938	3,602,847
W.U. Nickl	2017	661,000	587,332	649,741 ^{2,5,6}	1,898,073	66,724	46,745	2,011,542
	2016	661,000	528,866	2,103,103 ⁵	3,292,969	67,890	46,498	3,407,357
	2015	612,000	454,226	1,782,976 ⁵	2,849,202	60,992	46,031	2,956,225
F.J. van Hout	2017	661,000	587,332	918,950 ²	2,167,282	113,950	42,966	2,324,198
	2016	661,000	528,866	1,009,870 ³	2,199,736	115,649	44,801	2,360,186
	2015	640,000	475,008	1,286,902 ⁴	2,401,910	83,430	44,775	2,530,115
F.J.M. Schneider-	2017	661,000	587,332	913,769 ²	2,162,101	113,950	31,654	2,307,705
Maunoury	2016	661,000	528,866	991,216 ³	2,181,082	88,982	31,405	2,301,469
	2015	623,000	462,391	1,253,164 ⁴	2,338,555	81,254	30,671	2,450,480

The remuneration reported as part of the LTI (share awards) is based on cost incurred under US GAAP and IFRS-EU. The costs of share awards are charged to the Consolidated Statements of Operations over the 3 year vesting period based on the maximum achievable number of share awards. Therefore the costs for e.g. the financial 1. year 2017 include costs of the BoM performance share plan 2017, 2016, 2015 and 2014. Furthermore, the difference between the amount based on the maximum achievable number of shares awards and the amount based on the actual number of share awards that vest, is released to the Consolidated Statements of Operations in the financial year in which the share awards vest.

The remuneration reported as part of the LTI (share awards) for the year 2017 includes an adjustment for the BoM performance share plan 2014 based on the actual number of share awards vested in 2017. The adjustment for Mr. 2. Wennink, Mr. van den Brink, Mr. Nickl, Mr. van Hout and Mr. Schneider-Maunoury amounts to EUR -271,533, EUR -271,533, EUR -963,017, EUR -182,095, EUR -177,459, respectively.

The remuneration reported as part of the LTI (share awards) for the year 2016 includes an adjustment for the BoM performance share plan 2013 based on the actual number of share awards vested in 2016. The adjustment for Mr. 3. Wennink, Mr. van den Brink, Mr. van Hout and Mr. Schneider-Maunoury amounts to EUR -97,905, EUR -103,729, EUR -85,757, EUR -83,482, respectively.

The remuneration reported as part of the LTI (share awards) for the year 2015 includes an adjustment for the BoM performance share plan 2012 based on the actual number of share awards vested in 2015. The adjustment for Mr. 4. Wennink, Mr. van den Brink, Mr. van Hout and Mr. Schneider-Maunoury amounts to EUR -39,229, EUR -41,543, EUR -34,376, EUR -33,443, respectively.

5. The remuneration reported as part of the LTI (share awards) for the years 2015, 2016 and 2017 includes a compensation for Mr. Nickl for part of his shares and stock options that were forfeited when he left his former

company. This compensation took the form of a maximum of 56,000 performance related shares awarded in 2014, subject to performance conditions, a three year vesting period and a two year holding period as applicable under the Remuneration Policy.

6. The remuneration reported over 2017 includes an accelerated expense of EUR 452,203 of the LTI (share awards) for the years 2015, 2016, and 2017 resulting from the amended requisite service period.

The table below provides a comprehensive overview of conditional share awards that are granted in the performance period and unconditional share awards that are included in the holding period or that have become freely tradable in 2017.

Details of performance shares granted to members of the BoM are as follows:

Board of Management	Grant date	Status	Full control	Number		Vesting date	Number of shares at vesting date	End of lock-up date
				of shares at grant date	Fair value at grant date			
P.T.F.M.	1/20/2017	Conditional	No	20,243	114.05	1/20/2020	—	1/20/2022
Wennink	1/22/2016	Conditional	No	16,579	83.60	1/22/2019	—	1/22/2021
	1/23/2015	Conditional	No	16,710	94.43	1/23/2018	—	1/23/2020
	1/24/2014	Unconditional	No	19,280	64.39	1/24/2017	15,063	1/24/2019
	4/19/2013	Unconditional	No	35,035	55.47	4/19/2016	33,270	4/19/2018
	4/18/2012	Unconditional	Yes	45,689	37.33	4/18/2015	44,638	4/18/2017
M.A. van den Brink	1/20/2017	Conditional	No	20,243	114.05	1/20/2020	—	1/20/2022
	1/22/2016	Conditional	No	16,579	83.60	1/22/2019	—	1/22/2021
	1/23/2015	Conditional	No	16,710	94.43	1/23/2018	—	1/23/2020
	1/24/2014	Unconditional	No	19,280	64.39	1/24/2017	15,063	1/24/2019
	4/19/2013	Unconditional	No	37,111	55.47	4/19/2016	35,241	4/19/2018
W.U. Nickl	4/18/2012	Unconditional	Yes	48,387	37.33	4/18/2015	47,274	4/18/2017
	1/20/2017	Conditional	No	11,629	114.05	1/20/2020	—	1/20/2022
	1/22/2016	Conditional	No	11,205	83.60	1/22/2019	—	1/22/2021
	1/23/2015	Conditional	No	10,720	94.43	1/23/2018	—	1/23/2020
	1/24/2014	Unconditional	No	12,373	64.39	1/24/2017	9,669	1/24/2019
F.J. van Hout	1/24/2014	Unconditional	No	56,000 ¹	64.39	1/24/2017	43,748	1/24/2019
	1/20/2017	Conditional	No	11,629	114.05	1/20/2020	—	1/20/2022
	1/22/2016	Conditional	No	11,205	83.60	1/22/2019	—	1/22/2021
	1/23/2015	Conditional	No	11,210	94.43	1/23/2018	—	1/23/2020
	1/24/2014	Unconditional	No	12,929	64.39	1/24/2017	10,101	1/24/2019
F.J.M. Schneider-Maunoury	4/19/2013	Unconditional	No	30,681	55.47	4/19/2016	29,135	4/19/2018
	4/18/2012	Unconditional	Yes	40,023	37.33	4/18/2015	39,102	4/18/2017
	1/20/2017	Conditional	No	11,629	114.05	1/20/2020	—	1/20/2022
	1/22/2016	Conditional	No	11,205	83.60	1/22/2019	—	1/22/2021
	1/23/2015	Conditional	No	10,912	94.43	1/23/2018	—	1/23/2020
Maunoury	1/24/2014	Unconditional	No	12,599	64.39	1/24/2017	9,843	1/24/2019
	4/19/2013	Unconditional	No	29,877	55.47	4/19/2016	28,372	4/19/2018
	4/18/2012	Unconditional	Yes	38,944	37.33	4/18/2015	38,048	4/18/2017

ASML compensated part of the shares and stock options that were forfeited when Mr. Nickl left his former company in the US. This compensation takes the form of a maximum of 56,000 performance related shares awarded¹ in 2014, subject to the performance conditions, a three year vesting period and a two year holding period as applicable under the Remuneration Policy.

Edgar Filing: ASML HOLDING NV - Form 20-F

The following table sets forth an overview of the remuneration awarded to SB members in 2017 and 2016 (in EUR):

Year ended	Total	Supervisory Board	Audit Committee	Remuneration Committee	Selection and Nomination Committee	Technology and Strategy Committee	Other
December 31, 2017							
Gerard J. Kleisterlee	134,750	98,750	12,250	¹ —	14,250	9,500	—
Douglas A. Grose	112,500	87,500	—	—	9,500	14,250	1,250 ²
Pauline F.M. van der Meer Mohr	81,750	60,000	12,250	—	9,500	—	—
Antoinette (Annet) P. Aris	79,000	60,000	—	9,500	—	9,500	—
Rolf-Dieter Schwalb	86,500	60,000	12,250	14,250	—	—	—
Clara (Carla) M.S. Smits-Nusteling	78,750	60,000	18,750	—	—	—	—
Johannes (Hans) M.C. Stork	99,000	80,000	—	9,500	—	9,500	—
Wolfgang H. Ziebart	79,000	60,000	—	9,500	—	9,500	—
Total	751,250	566,250	55,500	42,750	33,250	52,250	1,250
Year ended	Total	Supervisory Board	Audit Committee	Remuneration Committee	Selection and Nomination Committee	Technology and Strategy Committee	Other
December 31, 2016							
Gerard J. Kleisterlee	113,250	86,250	³ 10,000	¹ —	9,000	³ 8,000	—
Arthur P.M. van der Poel	29,250	23,750	³ 2,500	³ —	3,000	—	³ —
Douglas A. Grose	105,000	80,000	—	—	8,000	12,000	5,000 ⁶
Pauline F.M. van der Meer Mohr	78,000	60,000	10,000	—	8,000	—	—
Antoinette (Annet) P. Aris	76,000	60,000	—	8,000	—	8,000	—
Rolf-Dieter Schwalb	81,000	60,000	10,000	11,000	⁴ —	—	—
Clara (Carla) M.S. Smits-Nusteling	75,000	60,000	15,000	—	—	—	—
Johannes (Hans) M.C. Stork	94,000	80,000	—	6,000	³ —	8,000	—
Wolfgang H. Ziebart	77,000	60,000	—	9,000	⁵ —	8,000	—
Total	728,500	570,000	47,500	34,000	28,000	44,000	5,000

¹ During 2017 and 2016 Gerard J. Kleisterlee was invited as a guest to the Audit Committee and received an observer fee.

² Amount differs from 2016 as the fee was only applicable in the first quarter of 2017.

Amount differs from the annual compensation as the member was not part of the SB / committee for the full year.

³ The role of Chairman of the SB changed from Arthur P.M. van der Poel to Gerard J. Kleisterlee after the first quarter of 2016.

⁴ Amount differs from the annual compensation due to a role change from member to chairman of the committee.

⁵ Amount differs from the annual compensation due to a role change from chairman to member of the committee.

⁶ In addition to the annual fixed fee, the Vice Chairman of the SB receives EUR 5,000 per year to fulfill his role.

Additional reimbursements

In addition, ASML paid a net cost allowance amounting to EUR 1,380 in 2017 to each SB member, and EUR 1,980 to the Chairman of the SB in 2017.

Loans

The Company has not granted any (personal) loans to, nor has it granted any guarantees or the like in favor of, any of the members of the SB.

Total remuneration

The annual remuneration for the members of the BoM and SB members during 2017 amounts to EUR 14.5 million (2016: EUR 15.7 million).

Appendix - Selected Financial Data

The following selected consolidated financial data should be read in conjunction with our Management Board Report and Consolidated Financial Statements.

Five-year financial summary

Year ended December 31 (in millions, except per share data)	2013 EUR	2014 EUR	2015 EUR	2016 EUR	2017 EUR
Consolidated Statements of Operations data					
Net sales	5,245.3	5,856.3	6,287.4	6,794.8	9,052.8
Cost of sales	(3,068.1)	(3,259.9)	(3,391.7)	(3,750.3)	(4,976.1)
Gross profit	2,177.2	2,596.4	2,895.7	3,044.5	4,076.7
Other income	64.4	81.0	83.2	93.8	95.8
Research and development costs	(882.0)	(1,074.1)	(1,068.1)	(1,105.8)	(1,259.7)
Selling, general and administrative costs	(311.7)	(321.1)	(345.7)	(374.8)	(416.6)
Income from operations	1,047.9	1,282.2	1,565.1	1,657.7	2,496.2
Interest and other, net	(24.4)	(8.6)	(16.5)	33.7	(50.3)
Income before income taxes	1,023.5	1,273.6	1,548.6	1,691.4	2,445.9
Provision for income taxes	(8.0)	(77.0)	(161.4)	(219.5)	(310.7)
Income after income taxes	1,015.5	1,196.6	1,387.2	1,471.9	2,135.2
Profit (loss) related to equity method investments	—	—	—	—	(16.7)
Net income	1,015.5	1,196.6	1,387.2	1,471.9	2,118.5
Earnings per share data					
Basic net income per ordinary share	2.36	2.74	3.22	3.46	4.93
Diluted net income per ordinary share ¹	2.34	2.72	3.21	3.44	4.91
Number of ordinary shares used in computing per share amounts (in millions)					
Basic	429.8	437.1	430.6	425.6	429.8
Diluted ¹	433.4	439.7	432.6	427.7	431.6

¹ The calculation of diluted net income per ordinary share assumes the exercise of options issued under our stock option plans and the issuance of shares under our share plans for periods in which exercises or issuances would have a dilutive effect. The calculation of diluted net income per ordinary share does not assume exercise of options when exercise would be anti-dilutive.

Five-year financial summary

As of and for the year ended December 31 (in millions)	2013 EUR	2014 EUR	2015 EUR	2016 EUR	2017 EUR
Consolidated Balance Sheets data					
Cash and cash equivalents	2,330.7	2,419.5	2,458.7	2,906.9	2,259.0
Short-term investments	679.9	334.9	950.0	1,150.0	1,029.3
Working capital ¹	4,156.9	4,257.4	4,600.4	5,276.8	5,665.1
Total assets	11,513.7	12,203.9	13,295.0	17,205.9	18,196.4
Long-term debt ²	1,074.6	1,154.1	1,129.7	3,319.5	3,025.3
Shareholders' equity	6,922.4	7,512.6	8,388.8	9,820.4	10,676.2
Issued and outstanding shares	40.1	39.4	38.8	39.4	38.8
Consolidated Statements of Cash Flows data					
Depreciation and amortization ³	228.7	254.6	296.9	356.9	417.5
Net cash provided by operating activities	1,054.2	1,025.2	2,025.5	1,665.9	1,798.6
Purchase of property, plant and equipment ⁴	(210.8)	(358.3)	(371.8)	(316.3)	(338.9)
Purchase of intangible assets	(4.0)	(3.0)	(1.1)	(8.4)	(19.1)
Purchase of short-term investments	(904.9)	(504.7)	(950.0)	(2,520.0)	(1,129.3)
Maturity of short-term investments	1,195.0	849.8	334.9	2,320.0	1,250.0
Cash from (used for) derivative financial instruments	—	—	(171.9)	(15.0)	27.0
Loans issued and other investments	—	—	—	(7.4)	(0.6)
Repayment on loans	—	—	—	—	1.6
Acquisition of equity method investments	—	—	—	—	(1,019.7)
Dividend income from equity method investments	—	—	—	—	19.7
Acquisition of subsidiary (net of cash acquired)	(443.7) ⁵	—	—	(2,641.3)	—
Net cash used in investing activities	(368.4)	(16.2)	(1,159.9)	(3,188.6)	(1,209.3)
Dividend paid	(216.1)	(268.0)	(302.3)	(445.9)	(516.7)
Purchase of treasury shares	(300.0)	(700.0)	(564.9)	(400.0)	(500.0)
Net proceeds from issuance of shares	31.8	39.7	33.2	582.7	⁶ 50.6
Net proceeds from issuance of notes	740.4	⁷ —	—	2,230.6	⁸ —
Repurchase of notes	(368.3) ⁹	—	—	—	—
Repayment of debt	(4.1)	(4.1)	(3.6)	(4.7)	(243.0)
Tax benefit (deficit) from share-based payments	4.0	3.1	3.7	0.9	—
Net cash from (used in) financing activities	(113.1)	(928.4)	(833.9)	1,963.6	(1,209.1)
Net increase (decrease) in cash and cash equivalents	563.1	88.8	39.2	448.2	(647.9)

1. Working capital is calculated as the difference between total current assets and total current liabilities.

2. Long-term debt includes the current portion of long-term debt.

In 2017, depreciation and amortization includes EUR 308.2 million of depreciation of property, plant and equipment (2016: EUR 290.8 million, 2015: EUR 243.0 million, 2014: EUR 209.5 million and 2013: EUR 197.1 million), EUR 105.5 million of amortization of intangible assets (2016: EUR 63.5 million, 2015: EUR 51.2 million, 2014: EUR 43.9 million and 2013: EUR 27.6 million) and EUR 3.8 million of amortization of underwriting commissions and discount related to the bonds and credit facility (2016: EUR 2.6 million, 2015: EUR 2.7 million, 2014: EUR 1.2 million and 2013: EUR 4.1 million).

In 2017, an amount of EUR 13.4 million (2016: EUR 21.6 million, 2015: EUR 91.0 million, 2014: EUR 95.5 million, 2013: EUR 115.9 million) of the additions in property, plant and equipment relates to non-cash transfers from inventory. Since the transfers between inventory and property, plant and equipment are non-cash events, these are not reflected in the Consolidated Statements of Cash Flows data. For further details see Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 13 Property, plant and equipment.

5. In addition to the cash paid in relation to the acquisition of Cymer, we issued 36,464,576 shares for an amount of EUR 2,346.7 million (non-cash event) as part of the consideration paid.
6. Net proceeds from issuance of shares include an amount of EUR 536.6 million which is included in the consideration transferred for the acquisition of HMI.
7. Net proceeds from issuance of notes relate to the total cash proceeds of EUR 740.4 million (net of incurred transaction costs) from the issuance of our EUR 750 million 3.375 percent senior notes due 2023.
Net proceeds from issuance of notes relate to the total cash proceeds of EUR 2,230.6 million (net of incurred transaction costs) from the issuance of our EUR 500 million 0.625 percent senior notes due 2022, our EUR 1,000 million 1.375 percent senior notes due 2026 and our EUR 750 million 1.625 percent senior notes due 2027.
8. Repurchase of notes relates to the net cash outflows of EUR 368.3 million for the partial repurchase of our EUR 600 million 5.75 percent senior notes due 2017 including the partial unwinding of the related interest rate swaps.
- 9.

Five-year financial summary

As of and for the year ended December 31	2013	2014	2015	2016	2017
Ratios and other data					
Gross profit as a percentage of net sales	41.5	44.3	46.1	44.8	45.0
Income from operations as a percentage of net sales	20.0	21.9	24.9	24.4	27.6
Net income as a percentage of net sales	19.4	20.4	22.1	21.7	23.4
Shareholders' equity as a percentage of total assets	60.1	61.6	63.1	57.1	58.7
Income taxes as a percentage of income before income taxes	0.8	6.0	10.4	13.0	12.7
Sales of lithography systems (in units) ¹	157	136	169	157	198
Value of systems backlog (in millions EUR) ^{2,3}	1,953.3	2,772.4	3,184.3	3,961.3	6,684.5
Lithography systems backlog (in units) ^{1,2,3}	56	82	79	83	140
Value of booked systems (in millions EUR) ^{2,3}	4,644.0	4,902.2	4,639.0	5,396.3	9,357.2
Net bookings lithography systems (in units) ^{1,2,3}	166	157	165	160	255
Number of payroll employees (in FTEs)	10,360	11,318	12,168	13,991	16,219
Number of temporary employees (in FTEs)	2,865	2,754	2,513	2,656	2,997
Increase (decrease) net sales in percentage	10.9	11.6	7.4	8.1	33.2
Number of ordinary shares issued and outstanding (in millions)	440.9	432.9	428.0	429.9	427.4
Closing ASML share price on Euronext Amsterdam (in EUR)	68.04	89.50	82.55	106.65	145.15
Volatility 260 days as percentage of our shares listed on Euronext Amsterdam (in EUR) ⁴	23.98	27.49	33.62	25.47	18.84
Closing ASML share price on NASDAQ (in USD)	93.70	107.83	88.77	112.20	173.82
Volatility 260 days as percentage of our shares listed on NASDAQ (in USD) ⁵	24.01	26.01	28.94	26.85	21.80
Dividend per ordinary share (in EUR)	0.61	0.70	1.05	1.20	1.40 ⁶
Dividend per ordinary share (in USD)	0.84 ⁷	0.76 ⁷	1.21 ⁷	1.28 ⁷	1.74 ^{6,8}

1. Lithography systems do not include metrology and inspection systems.

2. Our systems backlog and net bookings include all system sales orders for which written authorizations have been accepted (for EUV starting with the NXE:3350B).

3. Our systems backlog and net bookings values are calculated without giving effect to the impact of adoption of the new Revenue Recognition Standard (ASC 606) and Lease Standard (ASC 842) which ASML will adopt effective January 1, 2018.

4. Volatility represents the variability in our share price on Euronext Amsterdam as measured over the 260 business days of each year presented (source: Bloomberg Finance LP).

5. Volatility represents the variability in our share price on NASDAQ as measured over the 260 business days of each year presented (source: Bloomberg Finance LP).

6. Subject to approval of the AGM to be held on April 25, 2018.

7. The dividend per ordinary share in USD has been adjusted compared to the relevant Annual Reports on Form 20-F for such years to reflect the actual exchange rates at time of dividend payment.

8. The exchange rate used to express the proposed dividend per ordinary share in USD is the exchange rate of USD/EUR 1.24 as of January 28, 2018.

Exchange rate information

We publish our Consolidated Financial Statements in euro. A portion of our assets, liabilities, net sales and costs is, and historically has been, denominated in currencies other than the euro. For a discussion of the impact of exchange rate fluctuations on our financial condition and results of operations, see Management Board Report - Risk Factors - Fluctuations in foreign exchange rates could harm our results of operations, Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 1 General information / summary of significant accounting policies; Note 3 Fair value measurement; and Note 4 Financial risk management.

The following are the Noon Buying Rates certified by the Federal Reserve Bank for customs purposes, expressed in US dollars per euro:

Calendar year	2013	2014	2015	2016	2017	2018 ²
Period End	1.38	1.21	1.09	1.06	1.20	1.24
Period Average ¹	1.33	1.33	1.10	1.10	1.14	1.22
Period High	1.38	1.39	1.20	1.15	1.20	1.25
Period Low	1.28	1.21	1.05	1.04	1.04	1.19

1. The average of the Noon Buying Rates on the last business day of each month during the period presented.

2. Through January 28, 2018.

Months of	August 2017	September 2017	October 2017	November 2017	December 2017	January 2018
Period High	1.20	1.20	1.18	1.19	1.20	1.25
Period Low	1.17	1.17	1.17	1.16	1.17	1.19

Appendix - Results of Operations 2016 Compared to 2015

Set out below our Consolidated Statements of Operations data for the years ended December 31, 2015 and 2016:

Year ended December 31 (in millions)	2015 EUR	2016 EUR
Total net sales	6,287.4	6,794.8
Cost of sales	(3,391.7)	(3,750.3)
Gross profit	2,895.7	3,044.5
Other income	83.2	93.8
Research and development costs	(1,068.1)	(1,105.8)
Selling, general and administrative costs	(345.7)	(374.8)
Income from operations	1,565.1	1,657.7
Interest and other, net	(16.5)	33.7
Income before income taxes	1,548.6	1,691.4
Provision for income taxes	(161.4)	(219.5)
Net income	1,387.2	1,471.9

Set out below are our Consolidated Statements of Operations data for the years ended December 31, 2015 and 2016 expressed as a percentage of our total net sales:

Year ended December 31	2015	2016
Total net sales	100.0	100.0
Cost of sales	(53.9)	(55.2)
Gross profit	46.1	44.8
Other income	1.3	1.4
Research and development costs	(17.0)	(16.3)
Selling, general and administrative costs	(5.5)	(5.5)
Income from operations	24.9	24.4
Interest and other, net	(0.3)	0.5
Income before income taxes	24.6	24.9
Provision for income taxes	(2.6)	(3.2)
Net income	22.1	21.7

Net sales and gross profit

The following table shows a summary of net sales, units sold and gross profit for the years ended December 31, 2015 and 2016:

Year ended December 31 (in millions EUR, unless otherwise indicated)	2015 EUR	2016 EUR
Total net sales	6,287.4	6,794.8
Net system sales ¹	4,310.4	4,672.0
Net service and field option sales ¹	1,977.0	2,122.8
Sale of lithography systems (in units) ²	169	157
Gross profit as a percentage of net sales	46.1	44.8

1.

As per January 1, 2017, ASML presents net sales with respect to metrology and inspection systems as part of net system sales instead of net service and field option sales. The comparative numbers have been adjusted to reflect this change in accounting policy.

2. Lithography systems do not include metrology and inspection systems.

In 2016 we delivered record financial performance, with contributions from each of our wide range of product offerings, notably DUV and Holistic Lithography. It was also the year when the industry turned the corner on the introduction of EUV. We laid the foundation for further expansion of our pattern fidelity strategy with the acquisition of HMI. We strengthened our partnership with Carl Zeiss AG by agreeing to acquire an indirect minority stake in Carl Zeiss SMT GmbH to secure the extension of EUV beyond the next decade.

We shipped 46 TWINSCAN NXT:1980 systems in 2016, supporting the ramp of the 10 nm node as well as process development for the 7 nm foundry node. With the introduction of the NXT:1980, we have shortened the time to maturity, enabling a faster, more cost-effective node ramp. More customers are now recognizing the value of upgrading their existing NXT systems to the latest performance, which has supported our field upgrade sales. We also continued to support our XT and NXT systems with productivity upgrades and as part of the transition from planar to NAND, and we supported a large additional number of system relocations, helping customers to optimize their ramp plans.

Our fourth-generation EUV-system, the NXE:3350B, achieves an overlay of 1.0 nm, a 50 percent improvement over the NXE:3300B, and also features projection optics with a higher transmission, which means it generates higher throughput from a given EUV power source. In addition, the availability of systems in the field improved during 2016, with systems achieving a four-week availability of more than 80 percent regularly across the installed base; the best result was more than 90 percent over four weeks. Consistency of availability between systems and across sites still needs to be improved. EUV lithography met our 2016 productivity and availability targets. In 2016 we achieved a productivity of more than 1,500 wafers per day, on a 3 day average on an NXE:3350B system at a customer site. Total net sales increased by 8.1 percent, driven by an increase in net system sales of 8.4 percent and an increase in net service and field option sales of 7.4 percent in 2016 compared to 2015. The increase in net system sales is mainly due to an increase in the number of EUV systems recognized in 2016 compared to 2015 (2016: 4 and 2015:1), which have a higher Average Selling Price than our DUV systems. The increase in net service and field option sales is mainly driven by an increase in the sales of productivity and focus upgrade packages.

Gross profit as a percentage of total net sales decreased from 46.1 percent in 2015 to 44.8 percent in 2016 primarily driven by higher EUV system sales (which currently have a gross margin below the average of our DUV systems), partly offset by a shift in product mix of systems sold towards more high-end systems.

Other income

Other income consists of contributions for R&D programs under the NRE funding arrangements from certain Participating Customers in the CCIP and amounted to EUR 93.8 million for 2016 (2015: EUR 83.2 million).

Research and development costs

R&D costs (net of credits and excluding contributions under the NRE Funding Agreements from Participating Customers in the CCIP) were EUR 1,105.8 million in 2016 as compared to EUR 1,068.1 million in 2015. R&D costs for both 2016 and 2015 were primarily focused on programs supporting EUV, DUV immersion, and Holistic Lithography. In 2016, R&D activities mainly related to:

- EUV - Further improving productivity, and supporting the design and industrialization of our NXE:3400B system including pellicle development.

- DUV immersion - Focused on development of our next generation immersion platform, the NXT:2000i, as well as maturing the product introduction in the field of our NXT:1980 system.

- Holistic Lithography - Further development of YieldStar, process window control and enlargement solutions.

Selling, general and administrative costs

SG&A costs increased by 8.4 percent mainly driven by HMI acquisition related expenses, an increase in the number of employees, and further impacted by exchange rate fluctuations, primarily related to our US operations.

Interest and other, net

Interest and other, net increased by EUR 50.2 million in 2016 compared to 2015. In addition, in 2016 we recognized EUR 55.2 million gain on foreign currency revaluations on transactions and balances relating to the HMI acquisition in Interest and other, net.

Income taxes

The effective tax rate increased to 13.0 percent of income before income taxes in 2016 compared to 10.4 percent in 2015. This increase is mainly due to a change in legislation. Prior to 2016, the RDA was a corporate income tax credit used for R&D activities. As of 2016, the RDA is converted into a wage tax benefit reducing R&D costs.

Net income

Net income in 2016 amounted to EUR 1,471.9 million, or 21.7 percent of total net sales, representing EUR 3.46 basic net income per ordinary share, compared with net income in 2015 of EUR 1,387.2 million, or 22.1 percent of total net

sales, representing EUR 3.22 basic net income per ordinary share.

Appendix - Principal Accountant Fees and Services

KPMG has served as our independent registered public accounting firm for the years ending December 31, 2017 and 2016. The following table sets out the aggregate fees for professional audit services and other services rendered by KPMG and their member firms and / or affiliates in 2017 and 2016:

Year ended December 31 (in thousands)	2016		2017		KPMG Network EUR	Total EUR
	KPMG Accountants N.V. EUR	KPMG Network EUR	Total EUR	KPMG Accountants N.V. EUR		
Audit of the financial statements	1,199	307	1,506	1,517	491	2,008
Other audit engagements	135	—	135	70	—	70
Tax-related advisory services	—	—	—	—	—	—
Other non-audit services	35	—	35	48	—	48
Principal accountant fees	1,369	307	1,676	1,635	491	2,126

Audit fees and audit-related fees

Audit of the financial statements primarily relate to the audit of the Financial Statements as set out in this Integrated Report, certain procedures on our quarterly results and services related to our statutory and regulatory filings of our subsidiaries. Other audit engagements relate to assurance services on non-financial information, procedures performed in relation to our bond offerings in 2016 and procedures performed on a Form S-8 filing.

Other non-audit services relate to certain agreed-upon procedures on the targets achieved in order for the Remuneration Committee to assess compliance with the Remuneration Policy, agreed-upon procedures related to XBRL and agreed-upon procedures related to reporting on compliance with advanced pricing agreements with tax authorities.

The Audit Committee has approved the external audit plan and audit fees for the years 2017 and 2016.

The Audit Committee monitors compliance with the Dutch and US rules on non-audit services provided by an independent registered public accounting firm, which outlines strict separation of audit and advisory services for Dutch public interest entities.

Appendix - Property, Plant and Equipment

We lease a number of our facilities under operating leases. We also own a number of buildings, mainly consisting of production facilities in Veldhoven, the Netherlands, in Wilton, Connecticut, and San Diego, California, both in the US, in Linkou and Tainan, both in Taiwan and in Pyeongtaek, South-Korea. The book value of land and buildings owned amounts to EUR 1,089.1 million as of December 31, 2017 compared with EUR 1,082.0 million as of December 31, 2016. See Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 13 Property, plant and equipment.

Our capital expenditures (purchases of property, plant and equipment, see the Consolidated Statements of Cash Flows as recorded in the Consolidated Financial Statements) for 2017, 2016 and 2015 amounted to EUR 338.9 million, EUR 316.3 million and EUR 371.8 million, respectively. The increased capital expenditures in 2017 compared to 2016 relates to the expansion and upgrades of facilities, prototypes, evaluation and training systems.

Subject to market conditions, we expect that our capital expenditures (purchases of property, plant and equipment) in 2018 will be approximately EUR 300 million. These expenditures will mainly consist of further expansion and upgrades of facilities. We expect to finance these capital expenditures through cash generated by operations and existing cash and cash equivalents.

Facilities in Europe

Our headquarters, main manufacturing and R&D facilities are located at a single site in Veldhoven, the Netherlands. This state-of-the-art facility includes 66 thousand square meters of office space and 50 thousand square meters of cleanroom used for manufacturing and R&D activities and 24 thousand square meters of warehouses. Our facilities in Veldhoven, the Netherlands are partly owned and partly leased. During 2015 we have exercised purchase options which are effectuated in 2016. Some of our office facilities at our headquarters in Veldhoven, the Netherlands, are financed through a special purpose vehicle that is a variable interest entity. We also lease several sales and service facilities at locations across Europe.

Facilities in the US

Our US head office is located in a 5,000 square meter office building in Chandler, Arizona. We maintain R&D and manufacturing operations in a 28,000 square meter facility in Wilton, Connecticut, and a 9,000 square meter facility in San Jose, California. Furthermore, our facilities in San Diego include 25,000 square meters of buildings used for manufacturing and office space, 19,000 square meters of buildings used for engineering and R&D activities and 7,000 square meters of buildings used for warehousing. As a result of the HMI acquisition, our facilities in San Jose, California expanded by approximately 34,000 square meters for R&D and local sales and service activities.

Facilities in Asia

Our Asian headquarters is located in Hong Kong, The People's Republic of China. In addition, our facility in Linkou, Taiwan comprises a cleanroom (approximately 3,000 square meters) and office space (approximately 6,000 square meters). Our facility in Korea comprises of a cleanroom (approximately 700 square meters) and office space (approximately 6,000 square meters). We also lease and own several sales, service and training facilities at locations across Asia. As a result of the Cymer acquisition, we acquired a manufacturing facility in Pyeongtaek, South Korea, mainly used for refurbishment activities of light sources. As a result of the HMI acquisition, we acquired manufacturing facilities in Tainan, Taiwan (approximately 8,000 square meters) and Beijing, China (approximately 4,000 square meters) and office space in Hsinchu, Taiwan (approximately 2,000 square meters). Additionally, both Cymer and HMI lease various smaller locations across Asia which are mainly used for local sales and service activities.

Appendix - Taxation

Tax strategy and transparency

Our tax strategy is based on a well-defined set of principles and internationally accepted standards. Tax is a subject of growing interest to our stakeholders, so we strive for transparency in the way we report and pay our taxes.

We derive our tax principles from our Code of Conduct and our Business Principles. The code, Business Principles and our tax principles guide how we report and pay tax in the countries we operate in, including profit tax, trade taxes and income tax.

ASML strives to report and pay taxes in accordance with all relevant tax laws and regulations. We will comply with the letter and spirit of these laws and regulations, meaning that we are committed to complying not only with the detail of the relevant laws, but also their intent.

Profit allocation

Our worldwide profits are allocated to the various countries in which ASML operates based on the value created by ASML's business in those jurisdictions. ASML's allocation method is based on internationally accepted standards as published by the OECD, as well as relevant rules and regulations in the local jurisdictions where we operate.

Around 90 percent of our taxable income is in the Netherlands because the vast majority of our research, design and manufacturing activities are based there. The income from other activities, such as regional equipment sales and after-sales support, is subject to taxation in the countries where these activities take place, the main ones being the US, Hong Kong, South Korea, Taiwan, Singapore and Japan.

Timely and complete compliance

We aim to file all the required tax-relevant returns with the appropriate tax authorities in a timely and complete manner. To ensure this happens, tax returns are monitored through ASML's corporate control framework and comprehensive tax control frameworks. The control frameworks are regularly reviewed and tested. Furthermore, ASML aims for timely payment of taxes to the relevant authorities.

ASML strives for open and constructive dialogue with tax authorities, disclosing all relevant facts and circumstances. We aim to be clear about all aspects pertaining to our tax position and to share these in a transparent manner, fostering a relationship of honesty and certainty with the tax authorities.

Tax governance

Our Tax department works under the supervision of our BoM. The Audit Committee of the SB reviews our tax strategy and also regularly confers with our tax professionals to discuss tax policies and the impact of tax laws and regulations on ASML.

In 2017 we closely followed developments regarding the implementation of local legislation and regulations concerning the Action Plan on Base Erosion and Profit Shifting, or BEPS, issued by the OECD in 2015 to combat tax avoidance. The action plan led to proposed new legislation in several countries where we operate. Parts of the action plan are currently being carried out in some of these countries. In Europe, BEPS implementation is to be coordinated through directives from the EU. Among the proposals is the anti-tax avoidance directives (ATAD I and ATAD II), which the EU adopted in June 2016 and February 2017. In 2016, the EU also issued a proposal for country by country reporting and published so-called 'notices' on the exchange of information and state aid through rulings. None of these directives and proposals are expected to have an adverse effect on ASML's effective tax rate. Effective as per January 2017 the Dutch authorities adopted amended legislation in respect of Dutch tax deductions for R&D investments (the so-called 'Innovation box'). The effect of this amended legislation on ASML's Effective tax Rate as compared to the law in force before this date is not material.

We discuss potential tax risks and our tax position with the Audit Committee. In the Netherlands, we participate in a cooperative compliance program.

Dutch taxation

The statements below represent a summary of current Dutch tax laws, regulations and judicial interpretations thereof. The description is limited to the material tax implications for a holder of ordinary shares who is not, and / or is not deemed to be, a resident of the Netherlands for Dutch tax purposes ('Non-Resident Holder'). This summary does not address special rules that may apply to special classes of holders of ordinary shares and should not be read as extending by implication to matters not specifically referred to herein. As to individual tax consequences, each

investor in our ordinary shares should consult his or her tax counsel.

General

The acquisition of ordinary shares by a non-resident of the Netherlands should not be treated as a taxable event for Dutch tax purposes. The material tax consequences in connection with owning and disposing of our ordinary shares are discussed below.

Substantial interest

A person that, (inter alia) directly or indirectly, and either independently or jointly with his partner (as defined in the Dutch Personal Income Tax Act 2001), owns 5.0 percent or more of our share capital, owns profit participating rights that correspond to at least 5.0 percent of the annual profits of a Dutch company or to at least 5.0 percent of the liquidation proceeds of such company or holds options to purchase 5.0 percent or more of our share capital, is deemed to have a substantial interest in our shares, or our options, as applicable. Specific rules apply in case certain family members of the Non-Resident Holder hold a substantial interest. A deemed substantial interest also exists if (part of) a substantial interest has been disposed of, or is deemed to be disposed of, in a transaction where no taxable gain has been recognized. Specific attribution rules exist in determining the presence of a substantial interest.

Income tax consequences for individual non-resident holders on owning and disposing of the ordinary shares

An individual who is a Non-Resident Holder will not be subject to Dutch income tax on received income in respect of our ordinary shares or capital gains derived from the sale, exchange or other disposition of our ordinary shares, provided that such holder:

- Does not carry on and has not carried on a business in the Netherlands through a (deemed) permanent establishment or a permanent representative to which the ordinary shares are attributable;

- Does not hold and has not held a (deemed) substantial interest in our share capital or, in the event the Non-Resident Holder holds or has held a (deemed) substantial interest in our share capital, such interest is, or was, a business asset in the hands of the holder;

- Does not share and has not shared directly (through the beneficial ownership of ordinary shares or similar securities) in the profits of an enterprise managed and controlled in the Netherlands which (is deemed to) own(s), or (is deemed to have) has owned, our ordinary shares; and

- Does not carry out and has not carried out any activities which generate taxable profit in the Netherlands or taxable income in the Netherlands to which the holding of our ordinary shares was connected.

Corporate income tax consequences for corporate non-resident holders

Income derived from ordinary shares or capital gains derived from the sale, exchange or disposition of ordinary shares by a corporate Non-Resident Holder is taxable if:

- The holder carries on a business in the Netherlands through a permanent establishment or a permanent representative in the Netherlands (Dutch enterprise) and the ordinary shares are attributable to this permanent establishment or permanent representative, unless the participation exemption (discussed below) applies; or

- The holder has a substantial interest in our share capital, which is held with the primary aim or one of the primary aims to evade the levy of income tax at the level of another person and which is not put into place with valid commercial reasons that reflect economic reality; or

- The holder is a resident of Aruba, Curacao or Saint Martin with a permanent establishment or permanent representative in Bonaire, Eustatius or Saba to which our ordinary shares are attributable and certain conditions are met; or

- Certain assets of the holder are deemed to be treated as a Dutch enterprise under Dutch tax law and the ordinary shares are attributable to this Dutch enterprise.

To qualify for the Dutch participation exemption, the holder must generally hold at least 5.0 percent of our nominal paid-in capital and meet certain other requirements.

Dividend withholding tax

In general, a dividend distributed by us in respect of our ordinary shares will be subject to a withholding tax imposed by the Netherlands at the statutory rate of 15.0 percent.

Dividends include:

- Dividends in cash and in kind;

- Deemed and constructive dividends;

- Consideration for the repurchase or redemption of ordinary shares (including a purchase by a direct or indirect ASML subsidiary) in excess of qualifying average paid-in capital unless such repurchase is made for temporary investment purposes or is exempt by law;

- Stock dividends up to their nominal value (unless distributed out of qualifying paid-in capital);

Any (partial) repayment of paid-in capital not qualifying as capital for Dutch dividend withholding tax purposes; and
Liquidation proceeds in excess of qualifying average paid-in capital for Dutch dividend withholding tax purposes.

Under certain circumstances, a reduction of Dutch dividend withholding tax can be obtained:

An exemption at source is available if the participation exemption applies and the ordinary shares are attributable to a business carried out in the Netherlands;

An exemption at source is available for dividend distributions to certain qualifying EU/EEA resident corporate holders, unless such holder holds our ordinary shares with the primary aim or one of the primary aims to evade the levy of Dutch dividend withholding tax at the level of another person and our ordinary shares are not held for valid commercial reasons that reflect economic reality;

An exemption at source is available for dividend distributions to certain qualifying corporate holders that are a resident of a non-EU/EEA jurisdiction with which the Netherlands has concluded a tax treaty that includes a dividend article, unless such holder holds our ordinary shares with the primary aim or one of the primary aims to evade the levy of Dutch dividend withholding tax at the level of another person and our ordinary shares are not held for valid commercial reasons that reflect economic reality;

Certain tax exempt organizations (e.g. pension funds and excluding collective investment vehicles) resident in EU/EEA member states or in qualifying non-EU/EEA states may be eligible for a refund of Dutch dividend withholding tax upon their request. Based on domestic law not yet entered into force, in those circumstances, an exemption at source may also become available upon request;

Upon request and under certain conditions, certain qualifying Non-Resident Individual and Corporate Holders of ordinary shares resident in EU/EEA member states or in a qualifying non-EU/EEA state may be eligible for a refund of Dutch dividend withholding tax insofar the withholding tax levied is higher than the personal and corporate income tax which would have been due if they were resident of the Netherlands.

Furthermore, a Non-Resident Holder of ordinary shares can be eligible for a partial or complete exemption or refund of all or a portion of the above withholding tax under a tax treaty that is in effect between the Netherlands and the Non-Resident Holder's country of residence. The Netherlands has concluded such treaties with the US, Canada, Switzerland, Japan, most EU member states, as well as many other countries. Under the treaty between the US and the Netherlands for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income (the 'US Tax Treaty'), dividends paid by us to a Non-Resident Holder that is a resident of the US as defined in the US Tax Treaty (other than an exempt organization or exempt pension trust, as discussed below) are generally liable to 15.0 percent Dutch withholding tax or, in the case of certain US corporate shareholders owning directly at least 10.0 percent of our voting power, a reduction to 5.0 percent, provided that the Holder is the beneficial owner of the dividends received and does not have an enterprise or an interest in an enterprise that is, in whole or in part, carried on through a permanent establishment or permanent representative in the Netherlands to which the dividends are attributable. The US Tax Treaty also provides for a dividend withholding tax exemption on dividends, but only for a shareholder owning directly at least 80.0 percent of our voting power and meeting all other requirements. The US Tax Treaty provides for a complete exemption from tax on dividends received by exempt pension trusts and exempt organizations, as defined therein. Except in the case of exempt organizations, the reduced dividend withholding tax rate (or exemption from withholding) can be applied at the source upon payment of the dividends, provided that the proper forms have been filed in advance of the payment. Exempt organizations, in principle, remain subject to the statutory withholding rate of 15.0 percent and are required to file for a refund of such withholding, however such organizations may become eligible for the exemption at source when the domestic law as described above has entered into force.

A Non-Resident Holder may not claim the benefits of the US Tax Treaty unless (i) he/she is a resident of the US as defined therein, or (ii) he/she is deemed to be a resident on the basis of the provisions of article 24(4) of the US Tax Treaty, and (iii) his or her entitlement to those benefits is not limited by the provisions of article 26 (limitation on benefits) of the US Tax Treaty.

Dividend stripping rules

Under Dutch tax legislation regarding anti-dividend stripping, no exemption from, or refund of, Dutch dividend withholding tax is granted if the recipient of dividends paid by us is not considered the beneficial owner of such dividends.

Gift or inheritance taxes

Dutch gift or inheritance taxes will not be levied on the transfer of ordinary shares by way of gift or upon the death of a Non-Resident Holder, unless the transfer is construed as an inheritance or as a gift made by or on behalf of a person, who at the time of the gift or death, is deemed to be resident of the Netherlands.

Gift tax and inheritance tax are levied on the beneficiary. For purposes of Dutch gift and inheritance tax, an individual of Dutch nationality is deemed to be a resident of the Netherlands if he/she has been a resident thereof at any time during the ten years preceding the time of the gift or death. For purposes of Dutch gift tax, a person not possessing Dutch nationality is deemed to be a resident of the Netherlands if he / she has resided therein at any time in the twelve months preceding the gift.

Value added tax

No Dutch VAT is imposed on dividends in respect of our ordinary shares or on the transfer of our shares.

Residence

A Non-Resident Holder will not become resident, or be deemed to be resident, in the Netherlands solely as a result of holding our ordinary shares or of the execution, performance, delivery and / or enforcement of rights in respect of our ordinary shares.

US taxation

The following is a discussion of the material US federal income tax consequences relating to the acquisition, ownership and disposition of ordinary shares by a United States Holder (as defined below) acting in the capacity of a beneficial owner who is not a tax resident of the Netherlands. This discussion deals only with ordinary shares held as capital assets and does not deal with the tax consequences applicable to all categories of investors, some of which (such as tax-exempt entities, financial institutions, regulated investment companies, dealers in securities/traders in securities that elect a mark-to-market method of accounting for securities holdings, insurance companies, investors owning directly, indirectly or constructively 10.0 percent or more of our outstanding voting shares, investors who hold ordinary shares as part of hedging or conversion transactions and investors whose functional currency is not the US dollar) may be subject to special rules. In addition, the discussion does not address any alternative minimum tax or any state, local, Foreign Investment in Real Property Tax Act-related US federal income tax consequences, or non-US tax consequences.

This discussion is based on the US-Netherlands Income tax treaty, the Internal Revenue Code of 1986, as amended to the date hereof, final, temporary and proposed Treasury Department regulations promulgated, and administrative and judicial interpretations thereof, changes to any of which subsequent to the date hereof, possibly with retroactive effect, may affect the tax consequences described herein. In addition, there can be no assurance that the IRS will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, a ruling from the IRS or an opinion of counsel with respect to the US federal income tax consequences of acquiring or holding shares. Prospective purchasers of ordinary shares are advised to consult their tax advisers with respect to their particular circumstances and with respect to the effects of US federal, state, local or non-US tax laws to which they may be subject.

As used herein, the term 'United States Holder' means a beneficial owner of ordinary shares for US federal income tax purposes whose holding of such ordinary shares does not form part of the business property or assets of a permanent establishment or fixed base in the Netherlands; who is fully entitled to the benefits of the treaty in respect of such ordinary shares; and is:

• An individual citizen or tax resident of the US; or

• A corporation or other entity treated as a corporation for US federal income tax purposes created or organized in or under the laws of the US or of any political subdivision thereof; or

• An estate of which the income is subject to US federal income taxation regardless of its source; or

• A trust whose administration is subject to the primary supervision of a court within the US and which has one or more US persons who have the authority to control all of its substantial decisions.

If an entity treated as a partnership for US federal income tax purposes owns ordinary shares, the US federal income tax treatment of a partner in such partnership will generally depend upon the status and tax residency of the partner and the activities of the partnership. A partnership that owns ordinary shares and the partners in such partnership should consult their tax advisors about the US federal income tax consequences of holding and disposing of the ordinary shares.

Passive Foreign Investment Company considerations

We believe we were not a passive foreign investment company for US federal income tax purposes in 2017 and that we will not be a passive foreign investment company in 2018. However, as passive foreign investment company status is a factual matter that must be determined annually at the close of each taxable year, there can be no certainty as to our actual passive foreign investment company status in any particular year until the close of the taxable year in question. We have not conducted a detailed study at this time to confirm our non-passive foreign investment company status. If we were treated as a passive foreign investment company in any year during which a United States Holder owned common shares, certain adverse tax consequences could apply. Investors should consult their tax advisors with respect to any passive foreign investment company considerations.

Taxation of dividends

United States Holders should generally include in gross income, as foreign-source dividend income the gross amount of any non-liquidating distribution (before reduction for Dutch withholding taxes) we make out of our current or accumulated earnings and profits (as determined for US federal income tax purposes) when the distribution is actually

or constructively received by the United States Holder. Distributions will not be eligible for the dividends-received deduction generally allowed to US corporations in respect of dividends received from other US corporations. The amount of the dividend distribution includible in income of a United States Holder should be the US dollar value of the foreign currency (e.g. euros) paid, determined by the spot rate of exchange on the date of the distribution, regardless of whether the payment is in fact converted into US dollars. Distributions in excess of current and accumulated earnings and profits, as determined for US federal income tax purposes, will be treated as a non-taxable return of capital to the extent of the United States Holder's US tax basis in the ordinary shares and thereafter as taxable capital gain. We presently do not maintain calculations of our earnings and profits under US federal income tax principles. If we do not report to a United States Holder the portion of a distribution that exceeds earnings and profits, the distribution will generally be taxable as a dividend even if that distribution would otherwise be treated as a non-taxable return of capital or as capital gain under the rules described above.

Subject to limitations provided in the US Internal Revenue Code, a United States Holder may generally deduct from its US federal taxable income, or credit against its US federal income tax liability, the amount of qualified Dutch withholding taxes. However, Dutch withholding tax may be credited only if the United States Holder does not claim a deduction for any Dutch or other non-US taxes paid or accrued in that year. In addition, Dutch dividend withholding taxes will likely not be creditable against the United States Holder's US tax liability to the extent we are not required to pay over the amount withheld to the Dutch Tax Administration. Currently, a Dutch corporation that receives dividends from qualifying non-Dutch subsidiaries may credit source country tax withheld from those dividends against Dutch withholding tax imposed on a dividend paid by a Dutch corporation, up to a maximum of 3.0 percent of the dividend paid by the Dutch corporation. The credit reduces the amount of dividend withholding that we are required to pay to the Dutch Tax Administration but does not reduce the amount of tax we are required to withhold from dividends. For US foreign tax credit purposes, dividends paid by us generally will be treated as foreign-source income and as 'passive category income' (or in the case of certain holders, as 'general category income'). Gains or losses realized by a United States Holder on the sale or exchange of ordinary shares generally will be treated as US-source gain or loss. The rules governing the foreign tax credit are complex and we suggest that each United States Holder consult his or her own tax advisor to determine whether, and to what extent, a foreign tax credit will be available.

Dividends received by a United States Holder will generally be taxed at ordinary income tax rates. However, the Jobs and Growth Tax Relief Reconciliation Act of 2003, as amended by the Working Families Tax Relief Act of 2004, the American Jobs Creation Act of 2004, the American Taxpayer Relief Act of 2012, and most recently the 2017 tax reform act (Public Law No. 115-97) reduces to 20.0 percent the maximum tax rate for certain dividends received by individuals, so long as certain exclusions do not apply and the stock has been held for at least 60 days during the 121-day period beginning 60 days before the ex-dividend date. Dividends received from 'qualified foreign corporations' generally qualify for the reduced rate. A non-US corporation (other than a passive foreign investment company) generally will be considered to be a qualified foreign corporation if: (i) the shares of the non-US corporation are readily tradable on an established securities market in the US or (ii) the non-US corporation is eligible for the benefits of a comprehensive income tax treaty with the US that has been identified as a qualifying treaty and contains an exchange of information program. Individual United States Holders should consult their tax advisors regarding the impact of this provision on their particular situations.

Dividends paid by us generally will constitute 'portfolio income' for purposes of the limitations on the use of passive activity losses (and, therefore, generally may not be offset by passive activity losses) and as 'investment income' for purposes of the limitation on the deduction of investment interest expense.

Taxation on sale or other disposition of ordinary shares

Upon a sale or other disposition of ordinary shares, a United States Holder will generally recognize capital gain or loss for US federal income tax purposes in an amount equal to the difference between the amount realized, if paid in US dollars, or the US dollar value of the amount realized (determined at the spot rate on the settlement date of the sale) if proceeds are paid in currency other than the US dollar, as the case may be, and the United States Holder's US tax basis (determined in US dollars) in such ordinary shares. Generally, the capital gain or loss will be long-term capital gain or loss if the holding period of the United States Holder in the ordinary shares exceeds one year at the time of the sale or other disposition. The deductibility of capital losses is subject to limitations for US federal income tax purposes. Gain or loss from the sale or other disposition of ordinary shares generally will be treated as US source income or loss for US foreign tax credit purposes. Generally, any gain or loss resulting from currency fluctuations during the period between the date of the sale of the ordinary shares and the date the sale proceeds are converted into US dollars will be treated as ordinary income or loss from sources within the US. Each United States Holder should consult his or her tax advisor with regard to the translation rules applicable when computing its adjusted US tax basis and the amount realized upon a sale or other disposition of its ordinary shares if purchased in, or sold or disposed of for, a currency other than US dollar.

Information reporting and backup withholding

Information returns may be filed with the IRS in connection with payments on the ordinary shares or proceeds from a sale, redemption or other disposition of the ordinary shares. A 'backup withholding' tax may be applied to, and withheld from, these payments if the beneficial owner fails to provide a correct taxpayer identification number to the

paying agent and to comply with certain certification procedures or otherwise establish an exemption from backup withholding. Any amounts withheld under the backup withholding rules might be refunded (or credited against the beneficial owner's US federal income tax liability, if any) depending on the facts and provided that the required information is furnished to the IRS.

The discussion set out above is included for general information only and may not be applicable depending upon a holder's particular situation. Holders should consult their tax advisors with respect to the tax consequences to them of the purchase, ownership and disposition of shares including the tax consequences under state, local and other tax laws and the possible effects of changes in US federal and other tax laws.

Appendix - Financing and Capital Return Policy

Policy on liquidity and financing

We seek to ensure that our principal sources of liquidity will be sufficient to satisfy our liquidity requirements. Our liquidity needs are affected by many factors. We believe that cash generated from operations, together with our other sources of liquidity are sufficient to satisfy our requirements, including our expected capital expenditures and debt servicing.

Our goal is to remain an investment grade rated company and maintain a capital structure that supports this.

Return policy

We aim to pay an annual dividend that will be stable or growing over time. The dividend proposal in any given year will be subject to the availability of distributable profits or retained earnings and may be affected by, among other factors, the BoM's views on our potential future liquidity requirements, including for investments in production capacity, the funding of our R&D programs and for acquisition opportunities that may arise from time to time; and by future changes in applicable income tax and corporate laws. In addition to dividend payments, we intend to return cash to our shareholders on a regular basis through share buybacks or capital repayment, subject to our actual and anticipated level of liquidity requirements and other relevant factors.

For more information on our financing and capital return policy, see Management Board Report - Financial Performance - Liquidity and capital resources and Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 26 Shareholders' equity and Note 27 Purchases of equity securities by the issuer and affiliated purchasers.

Appendix - Competition

The semiconductor equipment industry is highly competitive. The principal elements of competition in our market are:

- The technical performance characteristics of a lithography system;
- The cost of ownership of lithography systems based on purchase price, maintenance costs, availability, productivity, and customer service and support costs;
- The exchange rate of the euro against the functional currency of our competitors and our customers, particularly against the Japanese yen;
- The strength and breadth of our portfolio of patents and other intellectual property rights; and
- Our customers' desire to obtain lithography equipment from more than one supplier.

We believe that the market for lithography systems and the investments required to be a significant competitor in this market

segment has resulted in increased competition for market share through aggressive prosecution of patents. Our competitiveness

depends upon our ability to protect and defend our patents, as well as our ability to develop new and enhanced semiconductor

equipment that is competitively priced and introduced on a timely basis.

Appendix - Government Regulation

Our business is subject to direct and indirect regulations in each of the countries in which our customers or we do business. As a result, changes in various types of regulations could affect our business adversely. The implementation of new safety, environmental or legal requirements could impact our products, or our manufacturing or distribution processes, and could affect the timing of product introductions, the cost of our production, and products as well as their commercial success. The impact of these changes in regulation could adversely affect our business, financial condition and our results of operations even where the specific regulations do not directly apply to us or to our products.

Appendix - Offer and Listing Details

Our ordinary shares are listed for trading in the form of registered ASML NASDAQ shares and in the form of registered ASML Euronext Amsterdam shares. The principal trading market of our ordinary shares is Euronext Amsterdam. Our ordinary shares also trade on NASDAQ.

Our shares listed on NASDAQ are registered with J.P. Morgan, our New York Transfer Agent, pursuant to the terms of the Transfer Agent Agreement between ASML and J.P. Morgan. Our shares listed on Euronext Amsterdam are held in dematerialized form through the facilities of Euroclear Nederland, the Dutch centralized securities custody and administration system. The New York Transfer Agent charges shareholders a fee of up to USD 5.00 per 100 shares for the exchange of our shares listed at NASDAQ for our shares listed at Euronext Amsterdam and vice versa.

Dividends payable on our shares listed at NASDAQ are declared in euro and converted to US dollars at the rate of exchange at the close of business on the date determined by the BoM. The resulting amounts are distributed through the New York Transfer Agent and no charge is payable by holders of our shares listed at NASDAQ in connection with this conversion or distribution.

Pursuant to the terms of the Transfer Agent Agreement, we have agreed to reimburse the New York Transfer Agent for certain out of pocket expenses, including in connection with any mailing of notices, reports or other communications made generally available by ASML to holders of ordinary shares. The New York Transfer Agent has waived its fees associated with routine services to ASML associated with our shares listed at NASDAQ. In addition, the New York Transfer Agent in consideration of its acting as Transfer Agent has agreed to make a contribution towards covering certain expenses incurred by ASML in connection with the issuance and transfer of our shares listed on NASDAQ. In the year ended December 31, 2017, the Transfer Agent contributed USD 0.5 million towards coverage of expenses incurred by ASML (which mainly comprised of audit, advisory, legal and listing fees incurred due to the existence of our share listing on NASDAQ).

The following table sets forth, for the periods indicated, the high and low closing prices of our shares listed at NASDAQ and our shares listed at Euronext Amsterdam.

	ASML NASDAQ shares USD		ASML Euronext Amsterdam shares EUR	
	High	Low	High	Low
Annual Information				
2017	186.37	109.92	158.45	105.15
2016	112.20	76.51	107.00	70.86
2015	113.80	83.08	103.80	73.64
2014	109.64	79.90	89.88	57.57
2013	100.96	63.08	74.30	47.20
Quarterly Information				
4th quarter 2017	186.37	168.52	158.45	143.20
3rd quarter 2017	171.20	129.67	144.05	114.30
2nd quarter 2017	137.26	126.89	124.35	113.55
1st quarter 2017	133.79	109.92	124.40	105.15
4th quarter 2016	112.20	99.20	107.00	90.64
3rd quarter 2016	110.83	94.61	99.35	84.66
2nd quarter 2016	101.39	91.30	89.78	79.91
1st quarter 2016	99.90	76.51	88.18	70.86
Monthly Information				
January 2018	206.51	177.73	167.00	146.00
December 2017	177.03	169.33	149.15	143.20
November 2017	186.37	172.44	158.45	147.60

Edgar Filing: ASML HOLDING NV - Form 20-F

October 2017	180.75	168.52	154.80	143.40
September 2017	171.20	154.81	144.05	130.60
August 2017	156.31	150.18	131.30	127.05

ASML INTEGRATED REPORT 2017 179

Appendix - Material Contracts

Acquisition of Hermes Microvision, Inc.

On June 16, 2016, ASML and HMI entered into a share swap agreement pursuant to which ASML acquired HMI for a consideration of TWD 99.7 billion (EUR 2.9 billion). The acquisition was completed on November 22, 2016. See Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 2 Business combinations.

Investment in Carl Zeiss SMT Holding GmbH & Co. KG

On November 2, 2016, ASML, Carl Zeiss AG, Carl Zeiss SMT Holding Management GmbH, Carl Zeiss SMT GmbH, and Carl Zeiss SMT Holding GmbH & Co. KG entered into the Carl Zeiss SMT Investment Agreement.

Pursuant to the Carl Zeiss SMT Investment Agreement, we acquired a 24.9 percent limited partnership interest in Carl Zeiss SMT Holding GmbH & Co. KG, which became the sole owner of Carl Zeiss SMT GmbH, our sole supplier of critical optical columns, for EUR 1.0 billion.

In addition, pursuant to the Carl Zeiss SMT Investment Agreement, ASML, Carl Zeiss AG, and Carl Zeiss SMT Holding Management GmbH entered into the Carl Zeiss SMT Partnership and Joint Venture Agreement, establishing Carl Zeiss SMT Holding GmbH & Co. KG. Under the Carl Zeiss SMT Partnership and Joint Venture Agreement, we have been granted minority protection and veto rights in Carl Zeiss SMT Holding GmbH & Co. KG. The Carl Zeiss SMT Partnership and Joint Venture Agreement includes a right of first offer, pursuant to which, if Carl Zeiss AG wishes to transfer its 75.1 percent direct or indirect partnership interest to a third party, ASML has the right to make a first offer to purchase such partnership interest. If the right of first offer process does not result in a sale of the Carl Zeiss AG partnership interest to ASML or a third party, then any future sales by Carl Zeiss AG of its interest in the Carl Zeiss SMT Partnership and Joint Venture Agreement are subject to a right of first refusal of ASML. In addition, Carl Zeiss AG has drag-along rights, pursuant to which, in connection with a sale by Carl Zeiss AG of the Carl Zeiss AG partnership interest to a third party, Carl Zeiss AG may require ASML to sell its own partnership interest, subject to ASML's right of first refusal to any such sale. Furthermore, the Carl Zeiss SMT Partnership and Joint Venture Agreement contains provisions relating to the governance and management of Carl Zeiss SMT Holding GmbH & Co. KG.

Appendix - Exchange Controls

There are currently no limitations, either under the laws of the Netherlands or in the Articles of Association of ASML, to the rights of non-Dutch residents to hold or vote ordinary shares. Cash distributions, if any, payable in euros on our shares listed at Euronext Amsterdam may be officially transferred by a bank from the Netherlands and converted into any other currency without being subject to any Dutch legal restrictions. However, for statistical purposes, such payments and transactions must be reported by ASML to the Dutch Central Bank. Furthermore, no payments, including dividend payments, may be made to jurisdictions subject to certain sanctions, adopted by the government of the Netherlands, implementing resolutions of the Security Council of the United Nations. Cash distributions, if any, on our shares listed at NASDAQ shall be declared in euros but paid in US dollars, converted at the rate of exchange at the close of business on the date fixed for that purpose by the BoM in accordance with the Articles of Association.

Appendix - Documents on Display

We are subject to certain reporting requirements of the Exchange Act. As a "foreign private issuer", we are exempt from the rules under the Exchange Act prescribing certain disclosure and procedural requirements for proxy solicitations, and our officers, directors and principal shareholders are exempt from the reporting and "short-swing" profit recovery provisions contained in Section 16 of the Exchange Act, with respect to their purchases and sales of shares. In addition, we are not required to file reports and Financial Statements with the SEC as frequently or as promptly as companies that are not foreign private issuers whose securities are registered under the Exchange Act. However, we are required to file with the SEC, within 4 months after the end of each fiscal year, an Annual Report on Form 20-F containing Financial Statements audited by an independent accounting firm and interactive data comprising Financial Statements in extensible business reporting language. We publish unaudited interim financial information after the end of each quarter. We furnish this quarterly financial information to the SEC under cover of a Form 6-K.

Documents we file with the SEC are publicly available at its public reference room at 100 F Street, N.E., Washington, DC 20549, United States. The SEC also maintains a website that contains reports and other information regarding registrants that are required to file electronically with the SEC. The address of this website is <http://www.sec.gov>. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

ASML INTEGRATED REPORT 2017 182

Appendix - Controls and Procedures

Disclosure controls and procedures

As of December 31, 2017, ASML's senior management conducted an evaluation, under the supervision and with the participation of ASML's CEO and CFO, of the effectiveness of the design and operation of ASML's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act). Based on such evaluation, ASML's CEO and CFO have concluded that, as of December 31, 2017, ASML's disclosure controls and procedures are effective in recording, processing, summarizing and reporting, on a timely basis, information required to be disclosed by ASML in the reports that it files or submits under the Exchange Act and are effective in ensuring that information required to be disclosed by ASML is accumulated and communicated to ASML's management, including ASML's CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

Management's report on internal control over financial reporting

ASML's management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. Under the supervision and with the participation of ASML's CEO and CFO, ASML's management conducted an evaluation of the effectiveness of ASML's internal control over financial reporting as of December 31, 2017 based upon the framework in "Internal Control – Integrated Framework" (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, management has concluded that ASML's internal control over financial reporting was effective as of December 31, 2017 at providing reasonable assurance regarding the reliability of financial reporting and the preparation of the Financial Statements for external purposes in conformity with US GAAP.

KPMG Accountants N.V., an independent registered public accounting firm, has audited the Financial Statements as included in this Integrated Report and, have also audited and issued a report, included herein, on the effectiveness of ASML's internal control over financial reporting.

Changes in internal control over financial reporting

Due to changes in accounting standards in the areas of revenue recognition and lease accounting, which are effective as from 2018, transition controls are included in the framework to obtain reasonable assurance regarding the reliability of the impact of the new accounting standards as disclosed in this Integrated Report. In addition we have included HMI and its subsidiaries in the assessment of internal control over financial reporting for 2017. Also in 2017, we have included controls related to our equity method accounting for our investment in Carl Zeiss SMT Holding GmbH & Co. KG.

During the year ended December 31, 2017, there have been no other changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent limitations of disclosure controls and procedures in internal control over financial reporting

It should be noted that any system of controls, however well-designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system will be met. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events.

Appendix - Organizational Structure

ASML Holding N.V. is a holding company that operates through its subsidiaries. We have operating subsidiaries in the Netherlands, the United States, Italy, France, Germany, the United Kingdom, Ireland, Belgium, Korea, Taiwan, Singapore, China, Hong Kong, Japan, Malaysia and Israel. Our major operating subsidiaries, each of which is ultimately wholly-owned by ASML Holding N.V., are ASML Netherlands B.V., ASML Systems B.V., ASML Hong Kong Ltd. and ASML US Inc.

See Exhibit Index - Exhibit 8.1 - List of main subsidiaries.

Appendix - Information and Investor Relations

Financial Calendar

April 18, 2018

Announcement of First Quarter results for 2018

April 25, 2018

Annual General Meeting of Shareholders

July 18, 2018

Announcement of Second Quarter results for 2018

October 17, 2018

Announcement of Third Quarter results for 2018

Fiscal Year

ASML's fiscal year ends on December 31, 2018

Listing

Our ordinary shares are listed for trading on Euronext Amsterdam and on NASDAQ.

Investor Relations

ASML Investor Relations supplies information regarding the company and its business opportunities to investors and financial analysts. Our annual reports, quarterly releases and other information are also available on our Website.

Appendix - ASML Worldwide Contact Information

Corporate Headquarters

De Run 6501

5504 DR Veldhoven

The Netherlands

Mailing Address

P.O. Box 324

5500 AH Veldhoven

The Netherlands

United States Main Office

2650 W Geronimo Place

Chandler, AZ 85224

U.S.A.

Asia Main Office

Suites 3704-6, Tower Two, Times Square

1 Matheson Street

Causeway Bay, Hong Kong

Investor Relations

phone: +31 40 268 3938

email: investor.relations@asml.com

For additional contact information please visit our Website.

Appendix - Reference Table 20-F

Item	Form 20-F Caption	Location in this document	Page
Part I			
1	Identity of Directors, Senior Management and Advisors	Not applicable	
2	Offer Statistics and Expected Timetable	Not applicable	
3	Key Information		
	A. Selected Financial Data	Other Appendices - Appendix - Selected Financial Data	<u>163</u>
	B. Capitalization and Indebtedness	Not applicable	
	C. Reasons for the Offer and Use of Proceeds	Not applicable	
	D. Risk Factors	Management Board Report - Risk Factors	<u>48</u>
4	Information on the Company		
	A. History and Development of the Company		
		Management Board Report - Our Company	<u>8</u>
		Management Board Report - Our Company - A short company history	<u>8</u>
		Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 2 Business combinations	<u>107</u>
		Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 10 Equity method investments	<u>115</u>
		Other Appendices - Appendix - Property, Plant and Equipment	<u>170</u>
		Other Appendices - Appendix - ASML Worldwide Contact Information	<u>186</u>
		Other Appendices - Appendix - Organizational Structure	<u>184</u>
	B. Business Overview		
		Management Board Report - Our Company	<u>8</u>
		Management Board Report - The Role of Lithography	<u>7</u>
		Management Board Report - Markets and Products	<u>14</u>
		Management Board Report - Products and Technology - Innovation is our lifeblood	17
		Management Board Report - Products and Technology - How we manage innovation	17
		Management Board Report - Products and Technology - ASML's 'open innovation' concept	18
		Management Board Report - Products and Technology - Knowledge management	18
		Management Board Report - Products and Technology - Protecting our intellectual property	<u>19</u>
		Management Board Report - People - Our flexible labor model - Paragraph 1	26
		Management Board Report - Partners	<u>31</u>
		Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 19 Legal contingencies	<u>128</u>

Edgar Filing: ASML HOLDING NV - Form 20-F

	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 21 Segment disclosure	<u>134</u>
	Other Appendices - Appendix - Competition	<u>177</u>
	Other Appendices - Appendix - Government Regulation	<u>178</u>
	Management Board Report - Risk Factors	<u>48</u>
C. Organizational Structure		
	Other Appendices - Appendix - Organizational Structure	<u>184</u>
D. Property, Plant and Equipment		
	Other Appendices - Appendix - Property, Plant and Equipment	<u>170</u>
4A Unresolved Staff Comments		
	Not applicable	

5 Operating and Financial Review and Prospects

Executive
Summary

Management Board Report - Business Strategy - Our vision and mission	<u>12</u>
Management Board Report - Business Strategy - Our strategy	<u>12</u>
Management Board Report - Business Strategy - Profitability / Acquisitions	<u>13</u>
Management Board Report - Financial Performance - ASML operations update on key performance indicators	<u>42</u>
Management Board Report - Trend Information	<u>45</u>

A. Operating
Results

Management Board Report - Financial Performance - Operating results	<u>42</u>
Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 1	<u>98</u>
General information / summary of significant accounting policies	<u>98</u>
Other Appendices - Appendix - Results of Operations 2016 Compared to 2015	<u>167</u>

B. Liquidity and Capital Resources

Management Board Report - Financial Performance - Liquidity and capital resources	<u>44</u>
---	-----------

C. Research and Development, Patents and Licenses, etc.

Management Board Report - Risk Factors - Failure to adequately protect the intellectual property rights upon which we depend could harm our business	50
Management Board Report - Risk Factors - Defending against intellectual property claims brought by others could harm our business	50
Management Board Report - Products and Technology	<u>16</u>
Management Board Report - Financial Performance - Operating results	<u>42</u>
Other Appendices - Appendix - Results of Operations 2016 Compared to 2015	<u>167</u>

D. Trend
Information

Management Board Report - Trend Information	<u>45</u>
---	-----------

E. Off-Balance Sheet Arrangements

Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 10	<u>115</u>
Equity method investments	

F. Tabular Disclosure of Contractual Obligations

Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 17	<u>124</u>
Commitments, contingencies and guarantees	

G. Safe Harbor

Special Note Regarding Forward-Looking Statements	
---	--

6 Directors, Senior Management and Employees

A. Directors and Senior Management

Management Board Report - Board of Management	<u>5</u>
Supervisory Board Report - Supervisory Board	<u>61</u>
Supervisory Board Report - Meetings and Attendance - Supervisory Board members' meeting attendance	64

B. Compensation

Supervisory Board Report - Remuneration Report	<u>68</u>
Other Appendices - Appendix - Board of Management and Supervisory Board Remuneration	<u>159</u>

C. Board
Practices

Management Board Report - Board of Management	<u>5</u>
Supervisory Board Report - Supervisory Board	<u>61</u>

D. Employees	Supervisory Board Report - Supervisory Board Committees	65
	Management Board Report - Risk Factors - Our business and future success depend on our ability to attract and retain a sufficient number of adequately educated and skilled employees	52
	Management Board Report - People - Human rights and labor relations - Paragraphs 2 and 3	26
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 18 Employee benefits	<u>125</u>
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 22 Selected operating expenses and additional information	<u>137</u>
	Non-Financial Statements - Non-financial Indicators - People - Talent Management - Number of FTEs (payroll and temporary)	151

E. Share Ownership		
	Supervisory Board Report - Remuneration Report	<u>68</u>
	Corporate Governance - Other Information on Governance	<u>83</u>
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 18 Employee benefits	<u>125</u>
	Other Appendices - Appendix - Board of Management and Supervisory Board Remuneration	<u>159</u>
7 Major Shareholders and Related Party Transactions		
A. Major Shareholders		
	Corporate Governance - Other Information on Governance	<u>83</u>
B. Related Party Transactions		
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 28 CCIP	<u>141</u>
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 29 Related party transactions	<u>141</u>
C. Interests of Experts & Counsel	Not applicable	
8 Financial Information		
A. Consolidated Statements and Other Financial Information		
	Management Board Report - Products and Technology - Protecting our intellectual property	<u>19</u>
	Consolidated Financial Statements	<u>90</u>
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 19 Legal contingencies	<u>128</u>
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 21 Segment disclosure	<u>134</u>
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 26 Shareholders' equity	<u>138</u>
B. Significant Changes		
	Management Board Report - Trend Information	<u>45</u>
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 30 Subsequent events	<u>142</u>
9 The Offer and Listing		
A. Offer and Listing Details		
	Other Appendices - Appendix - Offer and Listing Details	<u>179</u>
B. Plan of Distribution	Not applicable	
C. Markets		
	Other Appendices - Appendix - Offer and Listing Details	<u>179</u>
D. Selling Shareholders	Not applicable	
E. Dilution	Not applicable	
F. Expenses of the Issue	Not applicable	

10 Additional Information

A. Share Capital

Not applicable

B. Memorandum and Articles of Association

Corporate Governance - Other Information on Governance - Appointment of Board of Management and Supervisory Board - Articles of Association 87

C. Material Contracts

Other Appendices - Appendix - Material Contracts 180

D. Exchange Controls

Other Appendices - Appendix - Exchange Controls 181

E. Taxation

Other Appendices - Appendix - Taxation 171

F. Dividends and
Paying Agents

Not applicable

G. Statement by Experts	Not applicable	
H. Documents on Display	Other Appendices - Appendix - Documents on Display	<u>182</u>
I. Subsidiary Information	Other Appendices - Appendix - Organizational Structure	<u>184</u>
11	Quantitative and Qualitative Disclosures About Market Risk	
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 3 Fair value measurement - Paragraph on valuation techniques used	108
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 4 Financial risk management	<u>109</u>
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 5 Cash and cash equivalents and short-term investments	<u>112</u>
12	Description of Securities Other Than Equity Securities	
	Not applicable	
Part II		
13	Defaults, Dividend Arrearages and Delinquencies	
	None	
14	Material Modifications to the Rights of Security Holders and Use of Proceeds	
	None	
15	Controls and Procedures	
	Other Appendices - Appendix - Controls and Procedures	<u>183</u>
16A	Audit Committee Financial Expert	
	Corporate Governance - Supervisory Board - Composition and role of the four committees of the Supervisory Board - Audit Committee - Paragraph 1	79
16B	Code of Ethics	
	Management Board Report - Business Ethics and Compliance	<u>58</u>
16C	Principal Accountant Fees and Services	
	Other Appendices - Appendix - Principal Accountant Fees and Services	<u>169</u>
16D	Exemptions from the Listing Standards for Audit Committees	
	Not applicable	
16E	Purchases of Equity Securities by the Issuer and Affiliated Purchasers	
	Consolidated Financial Statements - Notes to the Consolidated Financial Statements - Note 27 Purchases of equity securities by the issuer and affiliated purchasers	<u>140</u>

16F	Change in Registrant’s Certifying Accountant	None	
16G	Corporate Governance	Corporate Governance - Other Information on Governance - NASDAQ Corporate Governance Standards	87
16H	Mine Safety Disclosure	Not applicable	
Part III			
17	Financial Statements	Not applicable	
18	Financial Statements	Consolidated Financial Statements	<u>90</u>
19	Exhibits	Exhibit Index	<u>201</u>
	Definitions	Definitions	<u>192</u>

This document contains information required for the Annual Report on Form 20-F for the year ended December 31, 2017 of ASML Holding N.V. Reference is made to the Form 20-F cross reference table contained herein under 'Reference Table - 20-F'. Only the information in this document that is referenced in the Form 20-F cross reference table and this paragraph shall be deemed to be filed with the Securities and Exchange Commission for any purpose. Any additional information in this document which is not referenced in the Form 20-F cross reference table, or the Exhibits themselves, shall not be deemed to be incorporated by reference, shall not be part of the 2017 Annual Report on Form 20-F and is furnished to the Securities and Exchange Commission for information only.

ASML INTEGRATED REPORT 2017 191

Name	Description
2018 AGM	The Annual General Meeting of Shareholders of April 25, 2018
3TG	Tin, tantalum, tungsten and gold
AFM	Autoriteit Financiële Markten; Authority for the Financial Markets of the Netherlands
AGM	Annual General Meeting of Shareholders
ArF	Argon Fluoride
ArFi	Argon Fluoride Immersion
ASC	Accounting Standards Codification
ASML	ASML Holding N.V. and / or any of its subsidiaries and / or any equity method investments, as the context may require
ASML Foundation	The ASML Foundation supports projects in the regions where ASML operates. It's aim is to increase the self-sufficiency of disadvantaged youngsters (4 - 18 years old) through educational initiatives that develop their talents and unlock their potential
ASU	Accounting Standards Update
BEPS	Base Erosion and Profit Shifting
BoM	Board of Management
Brion	Brion Technologies, Inc.
Business Principles	Business principles of ASML
Canon	Canon Kabushiki Kaisha
CCIP	Customer Co-Investment Program
CEO	Chief Executive Officer
CFO	Chief Financial Officer
Code	Dutch Corporate Governance Code
Code of Conduct	Code of ethics and conduct
Company	ASML Holding N.V.
CO ₂	Carbon Dioxide

CO ₂ footprint - direct scope 1	Consists of the combustion of natural gas and purchased CO ₂
CO ₂ footprint - indirect scope 2	Calculated by multiplying electricity consumptions of the manufacturing locations by the local conversion factors
COO	Chief Operations Officer
CTO	Chief Technology Officer
Cymer	Cymer Inc., Cymer LLC and its subsidiaries
D&E	Development and Engineering
DRAM	Dynamic Random Access Memory (often called performance memory)
Dutch Central Bank	The Dutch Central Bank (De Nederlandsche Bank), which is the supervisor of all pension companies in the Netherlands
DUV	Deep Ultraviolet
EEA	European Economic Area
EHS	Environment, Health and Safety
EHS Competence Center	Defines EHS standards for ASML, gathers best-known practices and helps managers across the business to implement these
EMEA	Europe, the Middle East and Africa
EPS	Earnings per share
ESOP	Employee Stock and Stock Option Plans
EURIBOR	Euro Interbank Offered Rate

Name	Description
Eurobonds	Our EUR 600 million 5.75 percent senior notes due 2017 (issued 2007, redeemed on June 13, 2017), our EUR 750 million 3.375 percent senior notes due 2023 (issued 2013), our EUR 500 million 0.625 percent senior notes due 2022 (issued 2016), EUR 1,000 million 1.375 percent senior notes due 2026 (issued 2016) and our EUR 750 million 1.625 percent senior notes due 2027 (issued 2016)
Euroclear Nederland	Nederlands Centraal Instituut voor Giraal Effectenverkeer B.V.
Euronext Amsterdam	Euronext Amsterdam N.V.
EU	European Union
EUV	Extreme Ultraviolet
Exchange Act	US Securities Exchange Act of 1934
Fab	Fabrication plant (semiconductors)
FASB	Financial Accounting Standards Board
FMSA	Financial Markets Supervision Act (Wet op het financieel toezicht (Wft))
Foundation	Stichting Preferente Aandelen ASML
Foundry	Contract Manufacturers of Logic Chips
FTEs	Full-time equivalents
Functional Ownership	Functional Ownership maturity measures the level of required knowledge among our teams of experts about the system functions they are responsible for
GRI	Global Reporting Initiative
GRI G4	Fourth generation of sustainability reporting guidelines as issued by the Global Reporting Initiative
H ₂	Hydrogen
High-NA	High Numerical Aperture
HMI	Hermes Microvision, Inc.
Holistic Lithography	Adjusting the patterning process steps as a whole, in order to support optimization of the entire chip making process
IC	Integrated Circuit

i-line	Lithography system with a mercury lamp as light source
IFRS	International Financial Reporting Standards
IFRS-EU	International Financial Reporting Standards as adopted by the European Union
Imaging	Transferring the pattern structure on the wafer
imec	Interuniversitair Micro-Elektronica Centrum
Installed Base Management	Net service and field option sales
Integrated Report 2016	The Integrated Report 2016 as published on the Website
Intel	Intel Corporation
Intel NRE Funding Agreements	The Intel Funding Agreements related to the development of 450mm and EUV lithography equipment
Internet of Things	The internetworking of physical devices, vehicles, buildings and other items—embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data
IRS	Internal Revenue Service
ISO	International Organization for Standardization
KPI	Key Performance Indicator
KPMG	KPMG Accountants N.V.
KrF	Krypton Fluoride
kWh	kilo Watt hour
LED	Light-Emitting Diode

Name	Description
LGBTI	Lesbian, gay, bisexual, transgender and intersex
LIBOR	London Interbank Offered Rate
Logic	Integrated Device Manufacturers and Foundries
LTI	Long-Term Incentive
Memory	NAND-Flash Memory and DRAM Memory chip makers
mm	Millimeter (one thousandth of a meter)
MRI	Magnetic Resonance Imaging
NAND	A binary operator composite of 'NOT AND' (often called storage memory)
NASDAQ	NASDAQ Stock Market LLC
New York Transfer Agent	J.P. Morgan Chase Bank, N.A.
Nikon	Nikon Corporation
Nikon Cross-License Agreement	The patent Cross-License agreement between Nikon and ASML related to lithography equipment used to manufacture semiconductor devices
nm	Nanometer (one billionth of a meter)
Node	<p>The 'technology node' (also known as the 'process node' or simply 'node') is a common metric used in the semiconductor industry to describe and differentiate the technologies used in fabricating microchips. Generally, a smaller technology node means a smaller feature size, allowing the production of smaller transistors which are both faster and use less power. Marketing claims and discrepancies among chip producers (foundries) means that the numbers assigned to a node - such as 45 nm, 32 nm, 22 nm, 16 nm, 14 nm, or 10 nm - have lost the exact meaning they once held. The numbers now refer more to a specific generation of chips, made using a particular technology.</p>
Non- GAAP	A numerical measure of a company's historical or future financial performance, financial position, or cash flows which are not calculated or presented in accordance with the most comparable Generally Accepted Accounting Principles (GAAP) measure
Non-Resident Holder	A holder of ordinary shares who is not, or is not deemed to be, a resident of the Netherlands for Dutch tax purposes
NRE	Non Recurring Engineering

NRE Funding Agreements	The Intel NRE Funding Agreements, the Samsung NRE Funding Agreement and the TSMC NRE Funding Agreements
NXE	NXE platform; a new platform utilizing the concepts of the TWINSCAN platform with complete new technologies in three areas: light source, lens system, and vacuum body
NXT	TWINSCAN NXT systems; an improved version of the TWINSCAN systems, introducing new stages and stage position control technology, which enables improved imaging and overlay
OCI	Other Comprehensive Income
OECD	Organization for Economic Co-operation and Development
Overlay	The layer-to-layer alignment of patterning structures
Pattern Fidelity	Improving how accurately a structure is printed and transferred compared to the design by use of metrology solutions (e.g. ASML YieldStar), inspection solutions (e.g. HMI e-beam tools) and statistical modeling to guide inspection on the wafer
Patterning	The interaction of lithography and resist with etching, deposition, cleaning and metrology in order to produce a pattern on the wafer
Participating Customers	The participants in the Customer Co-Investment Program: Intel, TSMC, and Samsung
Patent Selection	As included in the Nikon Cross-License Agreement, a selection of a limited number of the other party's patents, where the license for such patents expired in 2009, which is subject to a permanent covenant not to sue in respect of patent infringement claims
Pattern Fidelity Control	Measuring how good a structure is printed and etched compared to the structure on the reticle
PME	Bedrijfstakpensioenfonds Metalektronica
Preference Share Option	An option to acquire cumulative preference shares in our capital
R&D	Research and Development
RDA	Research and Development Deduction ("Research and Development Aftrek")

Name	Description
REACH	Registration, Evaluation, Authorization, and Restriction of Chemicals
Remuneration Policy	Remuneration Policy applicable to the Board of Management of ASML Holding N.V.
Reticle	Also known as Mask
ROAIC	Return on Average Invested Capital
RoHS	Reduction of Hazardous Substances
Reporting Unit ASML	Reporting Unit ASML (which is ASML excluding Reporting Unit Cymer Light Sources)
Samsung	Samsung Electronics Corporation
Samsung NRE Funding Agreement	The Samsung Funding Agreement related to the development of 300mm/450mm and EUV lithography equipment
Sarbanes-Oxley Act	The Sarbanes-Oxley Act of 2002
SB	Supervisory Board of ASML
SEC	The United States Securities and Exchange Commission
SEMI	Semiconductor Equipment and Materials International
SEMI S2	The SEMI S2 Safety Guideline, Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment, is intended as a set of performance-based EHS considerations for semiconductor manufacturing equipment.
SEMI S23	SEMI S23 Guide for Conservation of Energy, Utilities, and Materials Used by Semiconductor Manufacturing Equipment prescribes a method to collect, analyze, and report energy-consuming semiconductor manufacturing equipment utility data.
SG&A	Selling, General and Administrative
Shrink	Shrink is the process of developing smaller transistors on chips, using increasingly sophisticated lithography techniques
Silicon Valley Group	Silicon Valley Group, Inc. (SVG)

STI	Short-Term Incentive
Technical Competence	Technical Competence maturity gauges the capabilities and spread of technical competences among our people and also the extent to which they are embedded in our processes and operations
Transistor	The transistor is the fundamental building block of modern electronic devices, and is ubiquitous in modern electronic systems. A transistor is a semiconductor device used to amplify or switch electronic signals and electrical power. It is composed of semiconductor material usually with at least three terminals for connection to an external circuit. A voltage or current applied to one pair of the transistor's terminals controls the current through another pair of terminals. Because the controlled (output) power can be higher than the controlling (input) power, a transistor can amplify a signal. Transistors are in general found embedded in integrated circuits.
Throughput	The number of wafers a system can process per hour
TJ	Terajoule, the unit of energy
Transfer Agent Agreement	Agreement about transfer, registrar and dividend disbursement
Transparency International Corruption Index	Corruption perception index, published annually by Transparency International
TSMC	Taiwan Semiconductor Manufacturing Company Ltd.
TSMC NRE Funding Agreements	The TSMC Funding Agreements related to the development of 450mm and EUV lithography equipment
US	United States
US GAAP	Generally Accepted Accounting Principles in the United States of America
VAT	Value-added tax
Variable interest entity shareholders	Syndicate of three banks formed solely for the purpose of leasing the headquarter in Veldhoven
VLSI	An independent industry research firm that surveyed customers representing 95.0 percent of the world's total semiconductor market
WACC	Weighted Average Cost of Capital
Wavelength	The frequency of light going through projection lenses; the shorter the wavelength, the smaller the line-width and the finer the pattern on the IC

Name	Description
Website	www.asml.com . Information on our website is not incorporated into, and does not form part of this Integrated Report.
Works Council	Works Council of ASML Netherlands B.V.
YieldStar	Advanced wafer metrology system

ASML INTEGRATED REPORT 2017 197

ASML Holding N.V. hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on Form 20-F on its behalf.

ASML Holding N.V. (Registrant)

/s/ Peter T.F.M. Wennink

Name: Peter T.F.M. Wennink

Title: President, CEO and member of the Board of Management

Dated: February 6, 2018

/s/ Wolfgang U. Nickl

Name: Wolfgang U. Nickl

Title: Executive Vice President, CFO and member of the Board of Management

Dated: February 6, 2018

Exhibit Index

Exhibit No. Description

- 1 Articles of Association of ASML Holding N.V. (English translation) (Incorporated by reference to Amendment No. 13 to the Registrant’s Registration Statement on Form 8-A/A, filed with the SEC on February 8, 2013)
- 4.1 Agreement between ASM Lithography B.V. and Carl Zeiss, dated March 17, 2000 (Incorporated by reference to the Registrant’s Annual Report on Form 20-F for the fiscal year ended December 31, 2000)¹
- 4.2 Agreement between ASML Holding N.V. and Carl Zeiss SMT AG, dated October 24, 2003 (Incorporated by reference to the Registrant’s Annual Report on Form 20-F for the year ended December 31, 2003)¹
- 4.3 Form of Indemnity Agreement between ASML Holding N.V. and members of its Board of Management (Incorporated by reference to the Registrant’s Annual Report on Form 20-F for the year ended December 31, 2003)
- 4.4 Form of Indemnity Agreement between ASML Holding N.V. and members of its Supervisory Board (Incorporated by reference to the Registrant’s Annual Report on Form 20-F for the year ended December 31, 2003)
- 4.5 Form of Employment Agreement for members of the Board of Management (Incorporated by reference to the Registrant’s Annual Report on Form 20-F for the fiscal year ended December 31, 2003)
- 4.6 Nikon-ASML Patent Cross-License Agreement, dated December 10, 2004, between ASML Holding N.V. and Nikon Corporation (Incorporated by reference to the Registrant’s Annual Report on Form 20-F for the fiscal year ended December 31, 2014)¹
- 4.7 ASML/Carl Zeiss Sublicense Agreement, 2004, dated December 10, 2004, between Carl Zeiss SMT AG and ASML Holding N.V. (Incorporated by reference to the Registrant’s Annual Report on Form 20-F for the fiscal year ended December 31, 2004)¹
- 4.8 ASML Performance Stock Plan for Members of the Board of Management (Version 1) (Incorporated by reference to the Registrant’s Registration Statement on Form S-8 filed with the SEC on July 5, 2007 (file No. 333-144356))
- 4.9 ASML Performance Stock Option Plan for Members of the Board of Management (Version 2) (Incorporated by reference to the Registrant’s Registration Statement on Form S-8 filed with the Commission on July 5, 2007 (file No. 333-144356))
- 4.10 ASML Board of Management Umbrella Share Plan (Incorporated by reference to the Registrant’s Registration Statement on Form S-8 filed with the SEC on April 13, 2015 (file No. 333-203390))
- 4.11 Shareholder Agreement between ASML Holding N.V., Intel Holdings B.V., Intel Corporation and Stichting Administratiekantoor MAKTSJAB dated September 12, 2012 (Incorporated by reference to the Registrant’s Annual Report on Form 20-F for the year ended December 31, 2012)
- 4.12 Share Swap Agreement between ASML Holding N.V. and Hermes Microvision, Inc., dated June 16, 2016 (Incorporated by reference to the Registrant’s Annual Report on Form 20-F for the fiscal year ended December 31, 2016)
- 4.13 Investment Agreement among ASML Holding N.V., Carl Zeiss AG, Carl Zeiss SMT GmbH, Carl Zeiss SMT Holding GmbH & Co. KG and Carl Zeiss SMT Holding Management GmbH, dated November 2, 2016 (Incorporated by reference to the Registrant’s Annual Report on Form 20-F for the fiscal year ended December 31, 2016)
- 4.14 Partnership and Joint Venture Agreement, among Carl Zeiss AG, ASML Holding N.V. and Carl Zeiss SMT Holding Management GmbH, dated 29 June 2017²
- 8.1 List of Main Subsidiaries²
- 12.1 Certification of CEO and CFO Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934²
- 13.1 Certification of CEO and CFO Pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934²
- 15.1 Consent of Independent Registered Public Accounting Firm²
- 15.2 Consent of Independent Registered Public Accounting Firm²

Edgar Filing: ASML HOLDING NV - Form 20-F

101.INS XBRL Instance Document ²
101.SCH XBRL Taxonomy Extension Schema Document ²
101.CAL XBRL Taxonomy Extension Calculation Linkbase Document ²
101.DEF XBRL Taxonomy Extension Definition Linkbase Document ²
101.LAB XBRL Taxonomy Extension Label Linkbase Document ²
101.PRE XBRL Taxonomy Extension Presentation Linkbase Document ²

1. Certain information omitted pursuant to a request for confidential treatment filed separately with the SEC.
2. Filed at the SEC herewith.

ASML is party to 5 debt instruments under which the total amount of securities under each debt instrument does not exceed 10 percent of the total assets of ASML and its subsidiaries on a consolidated basis. Pursuant to paragraph 2(b) (i) of the instructions to the exhibits to Form 20-F, ASML agrees to furnish a copy of such instruments to the SEC upon request.

ASML INTEGRATED REPORT 2017 201

ASML ANNUAL REPORT 2016 203