ASML HOLDING NV
Form 20-F
January 29, 2010

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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, 2009

Commission file number 025566

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)

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8555 South River Parkway,
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(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.

433,638,976 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 (ü) 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 (ü)

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 (ü) No ( )

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 (ü) 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 (ü) Accelerated filer ( ) Non-accelerated filer ( )

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:
U.S. GAAP (ü) 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 (ü)

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

Richard A. Ely
Skadden, Arps, Slate, Meagher & Flom (UK) LLP
40 Bank Street, Canary Wharf
London E14 5DS England

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Part I

Special Note Regarding Forward-Looking Statements

In addition to historical information, this annual report on Form 20-F contains statements relating to our future business and/or results. These statements include certain projections and business trends 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 forecast , potential , intend , continue and variations of these words or comparable words.

Forward-looking statements do not guarantee future performance and involve risks and uncertainties. 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 Item 3.D. Risk Factors and those detailed from time to time in our other filings with the United States Securities and Exchange Commission (the Commission or the SEC). These forward-looking statements are made only as of the date of this annual report on Form 20-F. We do not undertake to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

Item 1 Identity of Directors, Senior Management and Advisors

Not applicable.

Item 2 Offer Statistics and Expected Timetable

Not applicable.

Item 3 Key Information

A. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with Item 5 Operating and Financial Review and Prospects and Item 18 Financial Statements .

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Five-Year Financial Summary

Year ended December 31 (in thousands, except per share data)	**2005** EUR	**2006**[1] EUR	**2007**[1] EUR	**2008** EUR	**2009** **EUR**
Consolidated statements of operations data					
Net sales	2,528,967	3,581,776	3,768,185	2,953,678	**1,596,063**
Cost of sales	1,554,772	2,127,797	2,218,526	1,938,164	**1,137,671**
Gross profit on sales	974,195	1,453,979	1,549,659	1,015,514	**458,392**
Research and development costs[2]	323,874	386,567	486,141	516,128	**466,761**
Amortization of in-process research and development costs			23,148		
Selling, general and administrative costs	201,204	204,799	225,668	212,341	**156,644**
Income (loss) from operations	449,117	862,613	814,702	287,045	**(165,013)**
Interest income (expense), net	(14,094)	(854)	33,451	22,599	**(6,537)**
Income (loss) from operations before income taxes	435,023	861,759	848,153	309,644	**(171,550)**
(Provision for) benefit from income taxes	(123,559)	(243,211)	(177,152)	12,726	**20,625**
Net income (loss)	311,464	618,548	671,001	322,370	**(150,925)**
Earnings per share data					
Basic net income (loss) from continuing operations per ordinary share	0.64	1.30	1.45	0.75	**(0.35)**
Basic net income (loss) per ordinary share	0.64	1.30	1.45	0.75	**(0.35)**
Diluted net income (loss) per ordinary share[3]	0.64	1.26	1.41	0.74	**(0.35)**
Number of ordinary shares used in computing per share amounts (in thousands)					
Basic	484,103	474,860	462,406	431,620	**432,615**
Diluted	542,979	503,983	485,643	434,205	**432,615**

1

As of January 1, 2008, ASML accounts for award credits offered to its customers as part of a volume purchase agreement using the deferred revenue model. Until December 31, 2007, ASML accounted for award credits using the cost accrual method. The comparative figures for the years 2007 and 2006 have been adjusted to reflect this change in accounting policy. The change in accounting policy did not affect the 2005 figures.

2 As of January 1, 2009, Research and Development (R&D) credits are presented as part of R&D costs instead of as a separate line item. The comparative figures for the years 2005 through 2008 have been adjusted accordingly.

3 The calculation of diluted net income (loss) per ordinary share assumes the exercise of options issued under ASML stock option plans for periods in which exercises would have a dilutive effect. The calculation of diluted net income (loss) per ordinary share does not assume exercise of such options when such exercises would be anti-dilutive.

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As of December 31 (in thousands, unless otherwise indicated)	2005 EUR	2006[1] EUR	2007[1] EUR	2008 EUR	2009 **EUR**
Consolidated balance sheets data					
Cash and cash equivalents	1,904,609	1,655,857	1,271,636	1,109,184	**1,037,074**
Working capital[4]	1,785,836	2,236,173	1,997,988	1,964,906	**1,704,714**
Total assets	3,756,023	3,953,888	4,073,128	3,939,394	**3,727,497**
Long-term debt	382,558	381,433	602,016	647,050	**663,102**
Total shareholders equity	1,711,837	2,148,003	1,891,004	1,988,769	**1,774,768**
Capital stock	9,694	10,051	39,206	38,887	**39,028**
Consolidated statements of cash flows data					
Depreciation and amortization	90,531	87,092	126,344	119,190	**140,201**
Impairment	8,350	17,354	9,022	25,109	**15,896**
Net cash provided by total operating activities	711,493	492,280	701,011	280,746	**97,764**
Purchases of property, plant and equipment	(72,660)	(70,619)	(179,152)	(259,770)	**(104,959)**
Acquisition of subsidiary (net of cash acquired)			(188,011)		
Net cash used in total investing activities	(60,803)	(70,629)	(362,152)	(259,805)	**(98,082)**
Capital repayment[5]			(1,011,857)		
Purchase of shares in conjunction with conversion rights of bondholders and share-based payments		(678,385)	(359,856)	(87,605)	
Dividend paid				(107,841)	**(86,486)**
Net proceeds from issuance of bond			593,755		
Net cash provided by (used in) total financing activities	2,879	(657,624)	(715,363)	(184,238)	**(73,444)**
Net increase (decrease) in cash and cash equivalents	676,479	(248,752)	(384,221)	(162,452)	**(72,110)**
Ratios and other data					
Gross profit as a percentage of net sales	38.5	40.6	41.1	34.4	**28.7**
Income (loss) from operations as a percentage of net sales	17.8	24.1	21.6	9.7	**(10.3)**
Net income (loss) as a percentage of net sales	12.3	17.3	17.8	10.9	**(9.5)**
Shareholders equity as a percentage of total assets	45.6	54.3	46.4	50.5	**47.6**
	(28.4)	(28.2)	(20.9)	4.1	**(12.0)**

Income taxes as a percentage of income (loss) before income taxes					
Sales of systems (in units)	196	266	260	151	**70**
Average selling price of system sales (in millions)	11.4	12.1	12.9	16.7	**16.8**
Value of systems backlog (in millions)	1,434	2,146	1,697	755	**1,853**
Systems backlog (in units)[6]	95	163	89	41	**69**
Average selling price of systems backlog (in millions)	15.1	13.2	19.1	18.4	**26.8**
Value of booked systems (in millions)	1,998	4,075	2,970	1,569	**2,334**
Net bookings for the year (in units)[7]	160	334	186	103	**98**
Average selling price of booked systems (in millions)	12.5	12.2	16.0	15.2	**23.8**
Number of payroll employees in FTEs	5,055	5,594	6,582	6,930	**6,548**
Number of temporary employees in FTEs	1,106	1,486	1,725	1,329	**1,137**
Increase (decrease) net sales in percentage	2.6	41.6	5.2	(21.6)	**(46.0)**
Number of ordinary shares outstanding (in thousands)	484,670	477,099	435,626[5]	432,074	**433,639**
ASML share price[8]	16.90	18.84	21.66	12.75	**24.00**
Volatility 260 days in percentage of ASML shares[9]	26.00	28.08	27.52	51.14	**38.45**
Dividend per ordinary share in Euro			0.25	0.20	**0.20**

4 Working capital is calculated as the difference between total current assets, including cash and cash equivalents, and total current liabilities.

5 In 2007, as part of a capital repayment program, EUR 1,012 million of share capital was repaid to our shareholders and the number of outstanding ordinary shares was reduced by 11 percent (pursuant to a synthetic share buyback).

6 Our systems backlog as of December 31 includes only system orders for which written authorizations have been accepted and shipment and revenue recognition dates within 12 months have been assigned.

7 Our net bookings, during the year, include only system orders for which written authorizations have been accepted and shipment and revenue recognition dates within 12 months have been assigned.

8 Closing price of ASML s ordinary shares listed on the Official Segment of the stock market of Euronext Amsterdam (source: Bloomberg Finance LP).

9 Volatility represents the variability in our share price on the Official Segment of the stock market of Euronext Amsterdam as measured over the 260 business days of each year presented (source: Bloomberg Finance LP).

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Exchange Rate Information

We publish our consolidated financial statements in Euros. In this Annual Report, references to , euro or EUR are t Euros, and references to $, U.S. dollar , USD or US$ are to United States dollars.

A portion of our net sales and expenses 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 Item 5.A. Operating Results, Foreign Exchange Management , Note 1 General Information, Summary of Significant Accounting Policies and Note 3 Market Risk and Derivatives to our consolidated financial statements.

The following are the Noon Buying Rates certified by the Federal Reserve Bank of New York for customs purposes (the Noon Buying Rate), expressed in U.S. dollars per euro.

Calendar year	2005	2006	2007	2008	2009	January 2010 (through January 22, 2010)
Period End	1.18	1.32	1.46	1.39	1.43	**1.42**
Average[1]	1.24	1.26	1.37	1.47	1.39	**1.44**
High	1.35	1.33	1.49	1.60	1.51	**1.45**
Low	1.17	1.19	1.29	1.24	1.25	**1.41**

1 The average of the Noon Buying Rates on the last business day of each month during the period presented.

Months of	July 2009	August 2009	September 2009	October 2009	November 2009	December 2009	January 2010 (through January 22, 2010)
High	1.43	1.44	1.48	1.50	1.51	1.51	**1.45**
Low	1.39	1.41	1.42	1.45	1.47	1.42	**1.41**

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

In conducting our business, we face many risks that may interfere with our business objectives. Some of these risks relate to our operational processes, while others relate to our business environment. 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 ASML faces. Some risks may not yet be known to ASML and certain risks that ASML does not currently believe to be material could become material in the future.

Risks Related to the Semiconductor Industry

The Semiconductor Industry is Highly 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, the timing, duration and volatility of which are difficult to predict. The semiconductor industry has historically been cyclical. Sales of our lithography systems depend in large part upon the level of capital expenditures by semiconductor manufacturers. These capital expenditures depend upon a range of competitive and market factors, including:

- the current and anticipated market demand for semiconductors and for products utilizing semiconductors;
- semiconductor prices;
- semiconductor production costs;
- changes in semiconductor inventory levels;
- general economic conditions; and
- access to capital.

Reductions or delays in capital equipment purchases by our customers could have a material adverse effect on our business, financial condition and results of operations.

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In an industry downturn, our ability to maintain profitability 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 achieve net income. If sales levels 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. As we need to keep certain levels of inventory on hand to meet anticipated product demand, we may also incur increased costs related to inventory obsolescence in an industry downturn. In addition, industry downturns generally result in overcapacity, resulting in downward pressure on prices and impairment of machinery and equipment, which in the past has had, and in the future could have, a material adverse effect on our business, financial condition and results of operations.

The current financial crisis affecting the banking system and global financial markets is in many respects unprecedented in the history of our Company. The continued concern over the instability of the financial markets and the global economic downturn could result in a number of follow-on effects on our business, including: declining business and consumer confidence resulting in reduced, delayed or shorter-term capital expenditures for our products; insolvency of key suppliers resulting in product delays; the inability of customers to obtain credit to finance purchases of our products, delayed payments from our customers and/or customer insolvencies; and other adverse effects that we cannot currently anticipate. If global economic and market conditions remain uncertain or deteriorate further, we are likely to experience continuing material adverse impacts on our business, financial condition and results of operations.

Conversely, in anticipation of periods of increasing demand for semiconductor manufacturing equipment, we must maintain sufficient manufacturing capacity and inventory, and we must attract, hire, integrate and retain a sufficient number of qualified employees to meet customer demand. Our ability to predict the timing and magnitude of industry fluctuations is limited and our products require significant lead-time to complete. Accordingly, we may not be able to effectively increase our production capacity to respond to an increase in customer demand in an industry upturn resulting in lost revenues, damage to customer relationships and we may lose market share.

Our Business Will Suffer If We Do Not Respond Rapidly to Commercial and Technological Changes in the Semiconductor Industry

The semiconductor manufacturing industry is subject to:

- rapid change towards more complex technologies;
- frequent new product introductions and enhancements;
- evolving industry standards;
- changes in customer requirements; and
- continued shortening of product life cycles.

Our products could become obsolete sooner than anticipated because of a faster than anticipated change in one or more of the technologies related to our products or in market demand for products based on a particular technology. Our success in developing new products and in enhancing our existing products depends on a variety of factors, including the successful management of our research and development (R&D) programs and timely completion of product development and design relative to competitors. If we do not develop and introduce new and enhanced systems at competitive prices and on a timely basis, our customers will not integrate our systems into the planning and design of new production facilities and upgrades of existing facilities, which would have a material adverse effect on our business, financial condition and results of operations.

In addition, we are investing considerable financial and other resources to develop and introduce new products and product enhancements, such as Extreme Ultraviolet lithography (EUV), that our customers may not ultimately adopt. If our customers do not adopt these new technologies, products or product enhancements that we develop due to a preference for more established or alternative new technologies and products or for other reasons, we would not recoup any return on our investments in these technologies or products, which would result in the recording of impairment charges on these investments and could have a materially adverse effect on our business, financial condition and results of operations.

The success of EUV will be particularly dependent on light source (laser) availability and continuing technical advances as well as infrastructure developments in masks and resists, without which the tools cannot achieve the productivity and yield that are required to justify their capability economically.

We Face Intense Competition

The semiconductor equipment industry is highly competitive. The principal elements of competition in our market segments are:

- the technical performance characteristics of a lithography system;
- the value of ownership of that system based on its purchase price, maintenance costs, productivity and customer service and support;
- a strengthening of the euro particularly against the Japanese yen which results in lower prices and margins;
- the strength and breadth of our portfolio of patents and other intellectual property rights; and

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our customers desire to obtain lithography equipment from more than one supplier.

Our competitiveness increasingly depends upon our ability to develop new and enhanced semiconductor equipment that is competitively priced and introduced on a timely basis, as well as our ability to protect and defend our intellectual property rights. See Item 4.B. Business Overview, Intellectual Property and Note 17 to our consolidated financial statements.

ASML s primary competitors are Nikon Corporation (Nikon) and Canon Kabushika Kaisha (Canon). Both Nikon and Canon have 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, and may cause a decline in our sales or loss of market acceptance for our lithography systems. In addition, adverse market conditions, industry overcapacity or a further decrease in the value of the Japanese yen in relation to the euro or the U.S. dollar could further intensify price-based competition in those regions that account for the majority of our sales, resulting in lower prices and margins and a material adverse effect on our business, financial condition and results of operations.

Risks Related to ASML

The Number of Systems We Can Produce Is Limited by Our Dependence on a Limited Number of Suppliers of Key Components

We rely on outside vendors for the components and subassemblies used in our systems, 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 and the risk of untimely delivery of these components and subassemblies.

The number of lithography systems we are able to produce is limited by the production capacity of Carl Zeiss SMT AG (Zeiss). Zeiss is our single supplier of lenses and other critical optical components. If Zeiss were unable to maintain and increase production levels or if we are unable to maintain our business relationship with Zeiss 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 Zeiss were to terminate its relationship with us or if Zeiss were unable to maintain production of lenses over a prolonged period, we would effectively cease to be able to conduct our business. See Item 4.B. Business Overview, Manufacturing, Logistics and Suppliers .

In addition to Zeiss current position as our single supplier of lenses, the excimer laser illumination systems that provide the ultraviolet light source, referred to as deep UV , used in our high resolution steppers and Step & Scan systems, and the extreme ultraviolet light source, referred to as EUV , used in our next generation EUV systems, are available from only a very limited number of suppliers.

Although the timeliness, yield and quality of deliveries to date from our other subcontractors generally have been satisfactory, manufacturing of certain of these components and subassemblies that we use in our manufacturing processes is an extremely complex process and delays caused by suppliers may occur in the future. 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. We expect customer concentration to increase because of continuing consolidation in the semiconductor manufacturing industry. Consequently, while the identity of our largest customers may vary from year to year, we expect sales to remain concentrated among relatively few customers in any particular year. In 2009, sales to our largest customer accounted for EUR 349 million, or 21.9 percent of net sales, compared to EUR 754 million, or 25.5 percent of net sales, in 2008. 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 the limited number of our customers, credit risk on our receivables is concentrated. Our three largest customers (based on net sales) accounted for 44.0 percent of accounts receivable at December 31, 2009, compared to 42.2 percent at December 31, 2008. As a result, 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.

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 equipment systems (70 units in 2009 and 151 units in 2008), with an average selling price (ASP) in 2009 of EUR 16.8 million (EUR 21.1 million for new systems and

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EUR 7.9 million for used systems) and an ASP in 2008 of EUR 16.7 million (EUR 20.4 million for new systems and EUR 4.8 million for used systems). As a result, the timing of recognition of revenue from a small number of product sales may have a significant impact on our net sales and operating results for a particular reporting period. Specifically, the failure to receive anticipated orders, or delays in shipments near the end of a particular reporting period, due, for example, to:

- a downturn in the highly cyclical semiconductor industry;
- unanticipated shipment rescheduling;
- cancellation or order push-back by customers;
- unexpected manufacturing difficulties; and
- delays in deliveries by suppliers,

may cause net sales in a particular reporting period to fall significantly below net sales in previous periods or our expected net sales, and may have a material adverse effect on our operating results for that period.

In particular our published quarterly earnings may vary significantly from quarter to quarter and may vary in the future for the reasons discussed above.

The Pace of Introduction of Our New Products Is Accelerating and Is Accompanied by Potential Design and Production Delays and by Significant Costs

The development and initial production, installation and enhancement of the systems we produce is often accompanied by design and production delays and related costs of a nature typically associated with the introduction and transition to full-scale manufacturing of complex capital equipment. While we expect and plan for a corresponding learning curve effect in our product development cycle, we cannot predict with precision the time and expense required to overcome these initial problems and to ensure full performance to specifications. There is a risk that we may not be able to introduce or bring to full-scale production new products as quickly as we expected in our product introduction plans, which could have a material adverse effect on our business, financial condition and results of operations.

In order for the market to accept technology enhancements, our customers, in many cases, must upgrade their existing technology capabilities. Such upgrades from established technology may not be available to our customers to enable volume production using our new technology enhancements. This could result in our customers not purchasing, or pushing back or cancelling orders for our technology enhancements, which could negatively impact our business, financial condition and results of operations.

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. 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 construed as we expect;
- patents will expire which may result in key technology becoming widely available which may hurt our competitive position;
- the steps we take to prevent misappropriation or infringement of our proprietary rights may not be successful; and
- third parties may be able to develop or obtain patents for similar competing technology.

In addition, litigation may be necessary to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Any such litigation may result in substantial costs and diversion of 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 may be subject to claims of infringement from third parties, alleging that our products used by such customers in the manufacture of semiconductor products and/or the processes relating to the use of our products infringe one or more patents issued to such parties. If such claims were successful, we could be required to indemnify customers 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 may also incur substantial licensing or settlement costs where doing so would strengthen or expand our intellectual property rights or limit our exposure to intellectual property claims brought by others, which may have a material adverse effect on our business, financial condition and results of operations.

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We Are Subject to Risks in Our International Operations

The majority of our sales are made to customers outside Europe. There are a number of risks inherent in doing business in some of those regions, including the following:

- potentially adverse tax consequences;
- unfavorable political or economic environments;
- unexpected legal or regulatory changes; and
- an inability to effectively protect intellectual property.

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, approximately 28 percent of our 2009 revenues and approximately 12 percent of our 2008 revenues 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 Taiwan 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.

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 located in Veldhoven, the Netherlands, in Wilton, Connecticut, the United States and in Linkou, Taiwan. These facilities are 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 or that, if it were available, it could be obtained on favorable terms. Such a disruption could have a material adverse effect on our business, financial condition and results of operations.

Because of Labor Laws and Practices, Any Workforce Reductions That We May Seek to Implement in Order to Reduce Costs Company-Wide May Be Delayed or Suspended

The semiconductor market is highly cyclical and as a consequence we may need to implement workforce reductions in case of a downturn, in order to adapt to such market changes. In accordance with labor laws and practices applicable in the jurisdictions in which we operate, a reduction of any significance may be subject to certain formal procedures, which can delay, or may result in the modification of our planned workforce reductions. For example, in the Netherlands, if our Works Council renders adverse advice in connection with a proposed workforce reduction in the Netherlands, but we nonetheless determine to proceed, we must temporarily suspend any action while the Works Council determines whether to appeal to the Enterprise Chamber of the Amsterdam Court of Appeal. This appeal process can cause a delay of several months and may require us to address any procedural inadequacies identified by the Court in the way we reached our decision. Such delays could impair our ability to reduce costs company-wide to levels comparable to those of our competitors. See Item 6.D. Employees .

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 U.S. dollar, Japanese yen and the euro as we incur manufacturing costs for our systems predominantly in euro while a

portion of our net sales and cost of sales is denominated in U.S. dollars and Japanese yen.

In addition, a substantial portion of our assets and liabilities and operating results are denominated in U.S. dollars, and a small portion of our assets, liabilities and operating results are denominated in currencies other than the euro and the U.S. dollar. Our consolidated financial statements are expressed in euro. Accordingly, our results of operations and assets and liabilities are exposed to fluctuations in various exchange rates. In general, our customers run their businesses in U.S. dollars, and therefore a further weakening of the U.S. dollar against the euro might impact the ability of our customers to purchase our products.

Furthermore, a strengthening of the euro particularly against the Japanese yen could further intensify price-based competition in those regions that account for the majority of our sales, resulting in lower prices and margins and a material adverse effect on our business, financial condition and results of operations.

Also see Item 5.A. Operating Results, Foreign Exchange Management , Item 5.F. Tabular Disclosure of Contractual Obligations , Item 11 Quantitative and Qualitative Disclosures About Market Risk and Note 3 to our consolidated financial statements.

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.

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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 staff from monitoring and improving operations in 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.

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 depend 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 we may not be able to continue to attract and retain such personnel, which could adversely affect our business, financial condition and results of operations.

In addition, the increasing complexity of our products results in a longer learning curve for new and existing employees leading to an inability to decrease cycle times and incurring significant additional costs, which could adversely affect our business, financial condition and results of operations.

Risks Related to Our Ordinary Shares

The Price of Our Ordinary Shares is Volatile

The current market price of our ordinary shares may not be indicative of prices that will prevail in the future. In particular, the market price of our ordinary shares has in the past experienced significant fluctuation, including fluctuation that is unrelated to our performance. This fluctuation may continue in the future.

Restrictions on Shareholder Rights May Dilute Voting Power

Our Articles of Association provide that we are subject to the provisions of Netherlands 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 Supervisory Board. As a result, holders of ordinary shares may have more difficulty in protecting their interests in the face of actions by members of our Supervisory Board than if we were incorporated in the United States or another jurisdiction.

Our authorized share capital also includes a class of cumulative preference shares and ASML has granted Stichting Preferente Aandelen ASML , a Netherlands foundation, an option to acquire, at their nominal value of EUR 0.02 per share, such cumulative preference shares. Exercise of the cumulative 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 further Item 6.C. Board Practices and Item 10.B. Memorandum and Articles of Association .

Item 4 Information on the Company

A. History and Development of the Company

We commenced business operations in 1984. ASM Lithography Holding N.V. was incorporated in the Netherlands on October 3, 1994 to serve as the holding company for our worldwide operations, which include operating subsidiaries in the Netherlands, the United States, Italy, France, Germany, the United Kingdom, Ireland, Belgium, Korea, Taiwan, Singapore, China (including Hong Kong), Japan, Malaysia and Israel. In 2001, we changed our name from ASM Lithography Holding N.V. to ASML Holding N.V. Our registered office is located at De Run 6501, 5504 DR Veldhoven, the Netherlands, telephone +31 40 268 3000.

In May 2001, we merged with Silicon Valley Group (SVG) (now part of ASML US, Inc.), a company that was active in lithography, as well as in track and thermal businesses, which we subsequently divested or discontinued.

From time to time, ASML pursues acquisitions of smaller businesses that it believes will complement or enhance ASML s core lithography business. These have included the acquisition of MaskTools in July 1999 and the acquisition of Brion Technologies, Inc. (Brion) in March 2007.

Capital Expenditures and Divestitures

Our capital expenditures (purchases of property, plant and equipment) for 2009, 2008 and 2007 amounted to EUR 105.0 million, EUR 259.8 million and EUR 179.2 million, respectively. Our capital expenditures in these years generally related to the

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construction of new facilities in Veldhoven for our latest technologies such as EUV and double patterning (in 2007, 2008 and 2009) and in Taiwan for our ASML Center of Excellence (ACE , in 2007 and 2008), purchases of machinery and equipment, information technology investments, and leasehold improvements to our facilities (in 2007, 2008 and 2009).

Divestitures mainly consisting of machinery and equipment (more specifically prototypes, demonstration and training systems) amounted to EUR 10.9 million for 2009, EUR 4.3 million for 2008 and EUR 19.2 million for 2007. See Note 11 to our consolidated financial statements.

B. Business Overview

We are one of the world s leading providers of advanced technology systems for the semiconductor industry. We offer an integrated portfolio of lithography systems mainly for manufacturing complex integrated circuits (semiconductors , ICs or chips). We supply lithography systems to IC manufacturers throughout Asia, the United States and Europe and also provide our customers with a full range of support services from advanced process and product applications knowledge to complete round-the-clock service support.

Our Business Model

Our business model is derived from our Value of Ownership concept which is based on the following principles:

- offering ongoing improvements in productivity, imaging and overlay by introducing advanced technology based on modular platforms and advanced applications outside the traditional lithography business, each resulting in lower costs per product for our customers;
- providing customer services that ensure rapid, efficient installation and superior on-site support and training to optimize manufacturing processes of our customers and improve productivity;
- maintaining appropriate levels of R&D to offer the most advanced technology suitable for high-throughput and low-cost volume production at the earliest possible date;
- enhancing the capabilities of the installed base of our customers through ongoing field upgrades of key value drivers (productivity, imaging and overlay) based on further technology developments;
- reducing the cycle time between a customer s order of a system and the use of that system in volume production on-site;
- expanding operational flexibility in research and manufacturing by reinforcing strategic alliances with world class partners, including outsourcing companies;
- improving the reliability and uptime of our installed system base; and
- providing refurbishing services that effectively increase residual value by extending the life of equipment.

Market and Technology Overview

Introduction

Chip making is all about shrink or reducing the size of chip designs. The worldwide electronics and computer industries have experienced significant growth since the commercialization of ICs in the 1960 s, largely due to the continual reduction in the cost per function performed by ICs. Improvement in the design and manufacture of ICs with higher circuit or packing densities has resulted in smaller and lower cost, ICs capable of performing a greater number of functions at faster speeds and with reduced power consumption. Despite the recent financial and economic crisis, we believe that these long-term trends will continue for the foreseeable future and will be accompanied by a continuing demand, subject to ongoing cyclical variation, for production equipment that can accurately produce advanced ICs in high volumes at the lowest possible cost. Lithography is used to print complex circuit patterns onto

the wafers that are the primary raw material for ICs and is one of the most critical and expensive steps in their fabrication. It is therefore a significant focus of the IC industry s demand for cost-efficient enhancements to production technology.

We primarily design, manufacture, market and service semiconductor processing equipment used in the fabrication of ICs. Our lithography equipment includes Step & Scan systems, which combine stepper technology with a photo-scanning method.

Our systems use a mask to achieve the required chip pattern. A mask is a flat, transparent quartz plate containing an opaque microscopic pattern: an image of the electronic circuitry for one layer of a chip. The mask is placed in a scanner where intense light passing through it projects the pattern, via a series of reducing lenses, onto part of the wafer. Before exposure, the wafer is coated with photoresist and positioned so that the projected pattern aligns with existing features on the chip/wafer. After exposure and developing, the pattern left on the wafer surface is used to selectively process and build up the next layer.

Customer Roadmaps

Supported by their technology roadmaps, IC manufacturers continue to show interest in resolution shrink as a means to lower manufacturing costs per unit. The leading IC manufacturers for both volatile and non-volatile memory, as well as logic and microprocessor units, have plans to migrate their production capabilities in the foreseeable future to resolutions close to or beyond 20 nm, for which they will require state-of-the-art lithography equipment.

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Products

We develop lithography systems and related products for the semiconductor industry and related patterning applications. Our product development strategy focuses on the development of product families based on a modular, upgradeable design.

Our older PAS 2500 and PAS 5000 lithography systems, which we no longer manufacture but continue to refurbish, are used for g-line and i-line processing of wafers up to 150 mm in diameter and are employed in manufacturing environments and in special applications for which design resolutions no more precise than 0.5 microns are required.

Our PAS 5500 product family comprises advanced wafer steppers and Step & Scan systems suitable for i-line, Krypton Fluoride (KrF) and Argon Fluoride (ArF) processing of wafers up to 200 mm in diameter and is employed in volume manufacturing to achieve design nodes requiring resolutions down to 90 nm. In 1997, we introduced the PAS 5500 Step & Scan systems with improved resolution and overlay.

We offer TWINSCAN systems, based on i-line, KrF and ArF processing of wafers up to 300 mm in diameter for manufacturing environments for which design resolutions down to 38 nanometer (nm) are required. The modular upgradeable design philosophy of the Step-and-Scan product family has been further refined and applied in the design of our most advanced product family. The TWINSCAN platform, introduced in 2000, is the basis for our current and next generation Step-and Scan systems, which are capable of extending shrink technology down to 38 nm.

We are the leader in the innovation of immersion technologies and we were the world s first producer of dual-stage design (TWINSCAN) systems. Wafer measurement, including focus and alignment, is completed on the dry stage, while the imaging process, using water applied between the wafer and the lens, is completed on the wet stage. The dual-stage advantage of TWINSCAN systems enables our customers to benefit from the process enhancements of immersion while continuing to use familiar and proven metrology technology.

Furthermore, we continuously develop and sell a range of product options and enhancements designed to increase productivity and improve imaging and overlay to optimize value of ownership over the entire life of our systems.

Product Development

In 2003, we introduced the second generation of TWINSCAN systems based on the XT body with a 50 percent reduction in the main production area occupied by our system.

In 2004, we shipped our first lithography systems based on immersion technology. These shipments marked the delivery of the industry s first high productivity immersion scanners for mainstream production.

In 2006, we shipped the industry s first EUV Alpha Demo Tools to two research institutions, which work closely with most of the world s major IC manufacturers in developing manufacturing processes and materials. EUV combines a wavelength of 13.5 nm and a lens system with a numerical aperture (NA) of 0.25 to provide imaging at a resolution of

27 nm.

In 2006, we started volume production of the TWINSCAN XT:1700i, a 193 nm immersion scanner capable of imaging at the 45 nm node in volume production environments. With a new catadioptric lens design, this system featured an NA of 1.2, substantially higher than that of its predecessor, the XT:1400, which had an NA of 0.93, exceeding the non-immersion barrier of 1.0. The XT:1700i has enabled chipmakers to improve resolution by 30 percent and has been employed in the development and manufacturing of the latest advanced generation of ICs.

The acquisition of Brion in 2007 enabled ASML to improve the implementation of optical proximity correction (OPC) technology and resolution enhancement techniques (RET) such as Double Patterning Technology (DPT) and Source-Mask Optimization (SMO) for masks. These improvements are extending the practical resolution limits of ASML ArF immersion products. Brion s computational lithography capabilities enable us to offer products that further improve the set-up and control of ASML lithography systems.

Brion s current computational lithography portfolio comprises not only traditional products (such as RET/OPC/DPT/SMO), but also solutions that directly interface with the numerous calibration controls in an ASML scanner to optimize performance. Our computational lithography products capture detailed knowledge of scanner design and real performance, which enables them to accurately predict real-life manufacturing performance. Such predictions are essential in addressing possible ramp-up and yield problems in advance, potentially avoiding months of delay in time-to-market for our customers. The same prediction capabilities allow the ASML scanners to be optimally calibrated for improved performance in production, given specific chip designs or reticles, thereby achieving improved yield.

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Once a scanner is optimally set-up for a given application, ASML also offers scanner control solutions that ensure that the performance of the lithographic process remains optimal and stable throughout production. These scanner control solutions also leverage the scanner controls to compensate for potential performance drifts in the scanner itself, as well as in other steps of the device manufacturing process, such as reticle deterioration, resist coating fingerprints, etching fingerprints, or chemical-mechanical planarization fingerprints. To ensure optimal control performance, ASML s scanner control solutions use ASML s own advanced wafer metrology technology, Yieldstar.

In the third quarter of 2007, ASML began volume shipment of the XT:1900i, with a new industry benchmark of 1.35 NA, which is close to the practical limit for water-based immersion technology. This optical lithography system is capable of volume production of ICs down to 40 nm and below and is used for high volume IC manufacturing at multiple customers worldwide.

In 2008, we discontinued research into optical maskless lithography due to the reduced market opportunity for this technology. Research studies on alternative technologies continue for both mask-based and maskless lithography.

In the third quarter of 2008, ASML announced an enhanced version of the XT:1900i system, the XT:1950i, with improved throughput of 148 wafers per hour, resolution of 38 nm and a scheduled overlay of 4 nm. In the first quarter of 2009, we started shipments of XT:1950i systems, which extend the performance, imaging and overlay specifications of the successful XT:1900i system.

Also in the third quarter of 2008, ASML commenced shipment of the XT:1000, which uses the catadioptric lens technology developed for the XT:1700i and XT:1900i to extend the maximum NA of the previous generation of 248 nm wavelength, KrF, systems to 0.93 NA from the previous maximum available of 0.80 NA. The XT:1000 s high NA of 0.93 can resolve 80 nm device features, far smaller than the 100 nm of other KrF systems. The XT:1000 also improves value to customers, with an increased throughput of 165 300 mm wafers per hour under volume manufacturing conditions while maintaining the same industry-leading 6 nm overlay as leading-edge ArF systems.

By the end of 2009, ASML had shipped more than 850 TWINSCAN systems demonstrating the acceptance of the TWINSCAN platform as the semiconductor industry s standard for 300 mm lithography. We also announced an improved version of the successful TWINSCAN platform called NXT featuring new stage and position control technology, providing improved imaging and overlay performance for immersion. Initial shipments started in the third quarter of 2009 with volume production expected in 2010.

Also by the end of 2009, ASML had received five orders for next generation EUV systems, the first of which is scheduled for shipment in the second half of 2010. EUV will provide a large process window and much greater shrink compared to current approaches and we expect it to be a multi-generation lithography solution. The first generation of these systems will combine a wavelength of 13.5 nm and a lens system with a NA of 0.25 to provide imaging at a resolution of 27 nm. The EUV platform is targeted for production of ICs down to 22 nm and beyond.

In February 2009, Brion Technologies, a subsidiary of ASML, announced Tachyon SMO, a new source-mask optimization (SMO) product that allows full co-optimization of source and mask. This product provides the industry with low k1 manufacturable imaging solutions and is a major advancement of Brion s industry standard SMO technology, which was currently in use at the leading logic and memory manufacturers.

In July 2009, ASML introduced FlexRay^{tm} programmable illumination and BaseLiner^{tm} scanner matching technology. Together, they offer scanner stability optimization and stabilize manufacturing process windows.

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The table below outlines our current product portfolio of Stepper and Scanner Systems by resolution and wavelength.

Current ASML lithography product portfolio of Step & Scan Systems[1]

	Resolution	Wavelength	Lightsource	Numerical aperture
PAS 5500 SYSTEMS				
PAS 5500/4X0	280 nm	365 nm	i-line	0.48-0.65
PAS 5500/750	130 nm	248 nm	KrF	0.50-0.70
PAS 5500/850	110 nm	248 nm	KrF	0.55-0.80
PAS 5500/1150	90 nm	193 nm	ArF	0.50-0.75
TWINSCAN SYSTEMS				
TWINSCAN XT:400	350 nm	365 nm	i-line	0.48-0.65
TWINSCAN XT:450	220 nm	365 nm	i-line	0.48-0.65
TWINSCAN XT:8X0	110 nm	248 nm	KrF	0.55-0.80
TWINSCAN XT:875	90 nm	248 nm	KrF	0.55-0.80
TWINSCAN XT:1000	80 nm	248 nm	KrF	0.50-0.93
TWINSCAN XT:1450	57 nm	193 nm	ArF	0.65-0.93
TWINSCAN XT:1700 immersion	45 nm	193 nm	ArF	0.75-1.20
TWINSCAN XT:1900 immersion	40 nm	193 nm	ArF	0.85-1.35
TWINSCAN XT:1950 immersion	38 nm	193 nm	ArF	0.85-1.35
TWINSCAN NXT:1950 immersion	38 nm	193 nm	ArF	0.85-1.35

1 This table does not include the older (including pre-used) products sold on the PAS 2500, PAS 5000 and PAS 5500 platforms

XT is a TWINSCAN system for 200 and 300 mm wafer sizes;
Wavelength refers to 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;
1 nm is equal to one billionth of a meter;
The X in the number represents different models in the product portfolio within the same resolution. For example XT:8X0 can either represent XT:800 or XT:850;
NXT is an improved version of the current TWINSCAN system, introducing new stages and stage position control technology, which enable improved imaging and overlay.

Sales, Customer Support and Customers
We market and sell our products through our direct sales staff.

We support our customers with a broad range of applications, services, and technical support products to maintain and maximize the performance of our systems at customer sites. We also offer refurbished and remanufactured tools, system upgrades and enhancements, and technical training.

Our field engineers and applications, service and technical support specialists are located throughout Asia, the United States and Europe.

In 2006, ASML established the ASML Center of Excellence (ACE) in Asia. The primary goal of ACE is to serve as a supplementary engine to propel ASML s long-term growth. ACE features customer support, training, logistics, refurbishment, technology and application development. ACE also enables sourcing of selected equipment modules, components and services in the region. Finally, ACE is used as a training center to develop worldwide talent for ASML s workforce. In the fourth quarter of 2008, we completed construction of the building and facility that houses ACE near Taipei, Taiwan and into which the ACE organization was moved.

Customers and Geographic Regions

In 2009, sales to our largest customer accounted for EUR 349 million, or 21.9 percent of net sales, compared to EUR 754 million, or 25.5 percent of net sales, in 2008 (2007: EUR 818 million or 21.7 percent of net sales). We expect that sales to relatively few customers will continue to account for a high percentage of our net sales in any particular period for the foreseeable future.

In 2009, we derived 72.6 percent of net sales from Asia, 23.1 percent from the United States and 4.3 percent from Europe. In general, since ASML s founding in 1984, the percentage of our sales derived from Asia has increased and the cumulative percentage of our sales derived from the United States and Europe has decreased. See Note 19 to the consolidated financial statements.

Manufacturing, Logistics and Suppliers

Our business model is based on outsourcing production of a significant part of the components and modules that comprise our lithography systems, working in partnership with suppliers from all over the world. Our manufacturing activities comprise the subassembly and testing of certain modules and the final assembly and fine tuning / testing of a finished system from components

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and modules that are manufactured to our specifications by third parties and by us. All of our manufacturing activities (subassembly, final assembly and system fine tuning / testing) are performed in cleanroom facilities located in Veldhoven, the Netherlands, in Wilton, Connecticut, the United States and in Linkou, Taiwan, Republic of China. We procure stepper and scanner system components and subassemblies from a single supplier or a limited group of suppliers in order to ensure overall quality and timeliness of delivery. We jointly operate a formal strategy with suppliers known as value sourcing , which is based on competitive performance in quality, logistics, technology and total cost. The essence of value sourcing is to maintain a supply base that is world class, globally competitive and globally present.

Our value sourcing strategy is based on the following strategic principles:
- maintaining long-term relationships with our suppliers;
- sharing risks and rewards with our suppliers;
- dual sourcing of knowledge, globally, together with our suppliers; and
- single, dual or multiple sourcing of products, where possible or required.

Value sourcing is intended to align the performance of our suppliers with our requirements on quality, logistics, technology and total costs.

Zeiss is our sole external supplier of main optical systems and one of the suppliers of other components. In 2009, approximately 26 percent of our aggregate cost of sales was purchased from Zeiss (2008: 32 percent; 2007: 40 percent).

Zeiss is highly dependent on its manufacturing and testing facilities in Oberkochen and Wetzlar, Germany, and its suppliers. Moreover, Zeiss has a finite capacity for production of lenses and optical components for our stepper and scanner systems. The expansion of this production capacity may require significant lead-time. From time to time, the number of systems we have been able to produce has been limited by the capacity of Zeiss to provide us with lenses and optical components. During 2009, our sales were not limited by the deliveries from Zeiss.

If Zeiss is unable to maintain or increase production levels, we might not be able to respond to customer demand. As a result, our relationships with current and prospective customers could be harmed, which would have a material adverse effect on our business, financial condition and results of operations.

Our relationship with Zeiss is structured as a strategic alliance pursuant to several agreements executed in 1997 and later years. These agreements define a framework in all areas of our business relationship. The partnership between ASML and Zeiss is focused on continuous improvement of operational excellence.

Pursuant to these agreements, ASML and Zeiss have agreed to continue their strategic alliance until either party provides at least three years notice of its intent to terminate. Although we believe such an outcome is unlikely, if Zeiss were to terminate its relationship with us, or if Zeiss were unable to produce lenses and optical components over a prolonged period, we would effectively cease to be able to conduct our business.

In addition to Zeiss, we also rely on other outside vendors for the components and subassemblies used in our systems, 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 and the risk of untimely delivery of these components and subassemblies.

Research and Development

The semiconductor manufacturing industry is subject to rapid technological changes and new product introductions and enhancements. We believe that continued and timely development and introduction of new and enhanced systems are essential for us to maintain our competitive position. As a result, we have historically devoted a significant portion of our financial resources to R&D programs and we expect to continue to allocate significant resources to these efforts. In addition, we have established sophisticated development centers in the Netherlands, the United States and Taiwan. We are also involved in joint R&D programs with both public and private partnerships and consortiums, involving independent research centers, leading chip manufacturers and governmental programs. We aim to own or license our jointly developed technology and designs of critical components.

We apply for subsidy payments in connection with specific development projects under programs sponsored by the Netherlands government, the European Union, the United States government and the Taiwanese government. Amounts received under these programs generally are not required to be repaid.

We invested EUR 467 million in R&D (net of credits) in 2009, compared to EUR 516 million in 2008 and EUR 486 million in 2007. In addition to these R&D investments, in 2007 we recognized a one-off charge related to the Brion acquisition of EUR 23 million (amortization of in-process R&D).

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In 2009, our R&D efforts drove further development of the several versions of the TWINSCAN platform along with leading-edge technologies, including immersion, double patterning and EUV. The continuous drive by our customers for cost reductions has led us to increase significantly the commonality of components across different TWINSCAN platform versions and led to our announcement in 2009 of an improved version of TWINSCAN platform called NXT, which provides improved imaging and overlay performance. We continue to develop technology to support applications of double patterning . Double patterning is a resolution enhancement technique that involves splitting a dense circuit pattern into multiple, less-dense patterns. We also are putting increased effort in holistic lithography, enabling further shrink by integrating computational lithography, wafer lithography and process control and optimizing process windows and lithography system set-up for volume production.

In 2009, we increased our resources for development of EUV technology. This technology promises a means for cost-effective extendibility of our customers roadmaps. The EUV Alpha Demo Tools (ADT) have provided us with sufficient data to begin to finalize the planned pre-production tools. Our key customers now have direct access to EUV technology, which we expect will result in the acceptance of this technology as well as drive the development of EUV infrastructure, including mask fabrication and resist processes. These pre-production tools are planned for shipment starting in the second half of 2010.

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 or for us or, alternatively, to have license rights in place with respect to such technology. However, we face the risk that such measures will be inadequate. Intellectual property laws may not sufficiently support our proprietary rights, our patent applications may not be granted and our patents may not be construed as we expect. Furthermore, competitors may be able to develop or protect similar technology earlier and independently.

Litigation 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 litigation 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. We also may incur substantial licensing or settlement costs where doing so would strengthen or expand our intellectual property rights or limit our exposure to intellectual property claims of third parties.

In 2007, ASML and Zeiss signed an agreement with Canon for the global cross-license of patents in their respective fields of semiconductor lithography and optical components, used to manufacture ICs. There was no transfer of technology and no payment was made among the parties.

From 2001 through late 2004, we were party to a series of civil litigations and administrative proceedings in which Nikon alleged ASML s infringement of Nikon patents relating to lithography. ASML in turn filed claims against Nikon. Pursuant to agreements executed on December 10, 2004, ASML, Zeiss and Nikon agreed to settle all pending worldwide patent litigation between the companies. The settlement included an exchange of releases, a cross-license of patents related to lithography equipment used to manufacture semiconductor devices and payments to Nikon by ASML and Zeiss. In connection with the settlement, ASML and Zeiss made settlement payments to Nikon from 2004

to 2007.

Competition

The semiconductor equipment industry is highly competitive. The principal elements of competition in our market segments are:

- the technical performance characteristics of a lithography system;
- the value of ownership of that system based on its purchase price, maintenance costs and productivity;
- a strengthening of the euro particularly against the Japanese yen which results in lower prices and margins;
- the strength and breadth of our portfolio of patent and other intellectual property rights; and
- our customers desire to obtain lithography equipment from more than one supplier.

We believe that the market segment for lithography systems and the investments required to be a significant competitor in this market segment have resulted in increased competition for market share through the aggressive prosecution of patents. Our competitiveness will increasingly depend 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.

Government Regulation

Our business is subject to direct and indirect regulation 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 technological, safety 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. Moreover, environmental and other regulations that adversely affect the pricing of our products could adversely affect our results of operation. The impact of these changes in regulation could adversely affect our business even where the specific regulations do not directly apply to us or to our products.

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C. Organizational Structure

ASML Holding N.V. is a holding company that operates through its subsidiaries. Our major operating subsidiaries, each of which is a wholly-owned subsidiary, are as follows:

See Exhibit 8.1 for a list of our subsidiaries.

D. Property, Plant and Equipment

We principally obtain our facilities under operating leases. However, we also own a limited number of buildings, mainly consisting of the new production facilities in the Netherlands and Taiwan. The book value of land and buildings owned by us amounted to EUR 354 million as of December 31, 2009 compared to EUR 302 million as of December 31, 2008. As a result of the decline in revenues caused by the recent financial and economic crisis, we experienced temporary underutilization of our facilities, mainly in the first half of 2009.

Depending on market conditions, we expect that our capital expenditures (purchases of property, plant and equipment) in 2010 will be approximately EUR 100 million, in line with 2009 capital expenditures. Purchases of property, plant and equipment in 2009 mainly include amounts spent to finalize the first part of the construction of the production facilities in Veldhoven for our latest technologies such as EUV and NXT (double patterning). We intend to fund capital expenditures primarily with cash on hand and/or cash generated through operations.

Facilities in Europe

Our headquarters, applications laboratory and R&D facilities are located at a single site in Veldhoven, the Netherlands. This state-of-the-art facility includes 65 thousand square meters of office space and 30 thousand square meters of buildings used for manufacturing and R&D activities. We lease the majority of these facilities through long-term operating leases that contain purchase options. Some of our office facilities at our headquarters in Veldhoven are financed through a special purpose vehicle that is a variable interest entity. See Item 5.E. Off-Balance Sheet Arrangements and Note 15 to our consolidated financial statements. We also lease several sales and service facilities at locations across Europe.

Facilities in the United States

Our main United States operations are located in a nine thousand square meters office building in Tempe, Arizona. We maintain lithography research, development and manufacturing operations in a 27 thousand square meters facility in Wilton, Connecticut and a six thousand square meters facility in Santa Clara, California. We also lease several sales and service facilities at locations across the United States.

Facilities in Asia

Our Asian headquarters is located in a 425 square meters office space in Hong Kong. Furthermore, our ACE facility, located in Linkou, Taiwan comprises cleanroom (approximately two thousand square meters) and office space (approximately six thousand square meters). The ACE facility supports customers in the Asia-Pacific region by focusing on technology and applications development, equipment support, training, logistics and refurbishment. ACE

also enables local sourcing of equipment, components and services. We also lease and own several sales and service and training facilities at locations across Asia.

Item 4A Unresolved Staff Comments

Not applicable.

Item 5 Operating and Financial Review and Prospects

Executive Summary

Introduction

ASML is one of the world s leading providers of lithography equipment that is critical to the production of ICs or chips. ASML s market share based on revenue was approximately 68 percent in 2009 (2008: 65 percent; 2007: 65 percent). This is according to

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the latest available data up to and including November 2009 as reported by SEMI, an independent semiconductor industry organization. Headquartered in Veldhoven, the Netherlands, ASML operates globally, with activities in Europe, the United States and Asia. As of December 31, 2009 we employed approximately 6,500 payroll employees (2008: 6,900) and approximately 1,100 temporary employees (2008: 1,300), measured in full-time employees, FTEs . ASML operated in 15 countries through over 60 sales and service locations.

In 2009, we generated net sales of EUR 1,596 million and loss from operations of EUR 165 million or 10.3 percent of net sales. Net loss in 2009 amounted to EUR 151 million or 9.5 percent of net sales, representing EUR 0.35 net loss per ordinary share.

In the executive summary below we provide an update of the semiconductor equipment industry, followed by our business strategy and a discussion of our key performance indicators.

Semiconductor equipment industry conditions

Chip making is all about shrink or reducing the size of chip designs. Historically the semiconductor industry has experienced significant growth largely due to the continual reduction of cost per function performed by ICs. Improvement in the design and manufacture of ICs with higher circuit densities resulted in smaller and cheaper ICs capable of performing a larger number of functions at higher speeds with lower power consumption. We believe that these long-term trends will continue for the foreseeable future and will be accompanied by a continuing demand for production equipment that is capable of accurate production of advanced ICs in high volumes at the lowest possible cost.

Lithography equipment is used to print complex circuit patterns onto silicon wafers, which are the primary raw materials for ICs. The printing process is one of the most critical and expensive steps in wafer fabrication. Lithography equipment is therefore a significant focus of the IC industry s demand for cost-efficient enhancements to production technology.

The costs to develop new lithography equipment are high. Accordingly, the lithography equipment industry is characterized by the presence of only a few primary suppliers: ASML, Nikon and Canon. ASML is one of the world s leading providers of lithography equipment with a market share based on revenue of approximately 68 percent in 2009 (2008: 65 percent; 2007: 65 percent). This is according to the latest available data up to and including November 2009 as reported by SEMI, an independent semiconductor industry organization.

Total lithography equipment shipped by the industry as a whole in the five years ended December 31, 2008 is set out in the following table:

Year Ended December 31	2004	2005	2006	2007	2008
Total units shipped	694	536	633	604	344
Total value (in millions USD)	5,268	4,988	6,386	7,144	5,388

(Source: Gartner Dataquest)

For the year 2009, the latest indications of independent market analysts show a drop in total lithography equipment shipped to the market by the industry of 61 percent in unit volume and 49 percent in value. The year 2009 was characterized by the financial and economic crisis which has led to lower overall semiconductor end-demand. Against this background, in the first half of 2009, our customers implemented inventory corrections, production capacity adjustments and experienced a lack of capital. In the second half of 2009, non-leading-edge production capacity additions were still delayed. However, demand increased compared to the first half of 2009 as our customers invested in leading-edge immersion technology, with DRAM customers introducing new memory devices and Foundry customers beginning to ramp up 40 nm products.

Business strategy

The long-term growth of the semiconductor industry is the result of 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. Today s transistors are around 250 times smaller than they were in the early 1970s. Using advanced semiconductors in industrial and consumer products often provides economic benefits, user-friendliness and increased safety. The technology revolution powered by semiconductors has brought many advantages: not only can information be more widely disseminated than ever before, affordable chip intelligence has also enabled industry and services sectors to create and distribute products and ideas at lightning speed.

Smarter, smaller and more energy-efficient chips are made with more sophisticated lithography systems like the ones produced by ASML. Lithography systems are crucial to the roadmaps of chipmakers to smaller transistors on chips. ASML s business strategy is based on achieving and further developing a position as a technology leader in semiconductor lithography. When

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executed, this strategy results in the delivery of lithography systems which enable customers to produce highest performance and lowest cost chips. The superior value of ownership offered to customers as a result of ASML s strategy also maximizes ASML s own financial performance, aligning the interests of ASML and our customers. We implement our strategy through customer focus, strategic investment in R&D, and operational excellence.

Customer focus

We serve different types of chipmakers by ensuring that our products provide premium value for customers in the various semiconductor market segments, including Flash and DRAM memory makers, integrated device manufacturers, and foundries or made-to-order chip contractors.

Through 2009, 18 of the top 20 chipmakers worldwide, in terms of semiconductor capital expenditure, were our customers. We also have a significant share of customers outside the top 20 and we strive for continued business growth with all customers.

In 2009, we achieved a top three position in customer satisfaction rankings amongst large suppliers of semiconductor equipment, according to VLSI Research, an independent industry research firm that surveyed customers representing 95 percent of the world s total semiconductor market. Our satisfaction ratings by customers surpassed every lithography competitor for the seventh year in a row.

Strategic investment in research and development

Our customer-base relies on ASML to deliver the right technology at the right time to meet long-term roadmaps which often extend many years into the future. In order to meet these demands, ASML is committed to significant long-term investments into R&D that are not significantly impacted by short-term cyclical swings. In 2009, despite experiencing the impact of a severe global economic downturn caused by the financial and economic crisis, these investments (net of credits) amounted to EUR 467 million (2008: EUR 516 million; 2007: EUR 486 million).

The foundation of our Lithography scanners is our dual-stage wafer imaging platform the TWINSCAN system which we introduced in 2000 and which allows exposure of one wafer while simultaneously measuring the wafer which will be exposed next. Our strong leadership in this capability has allowed us to achieve the industry s highest throughput, enabling reduced cost-per-exposure per wafer. ASML is the only lithography manufacturer that enables volume production based on dual stage systems.

We have focused our R&D investments on three core programs: immersion, double patterning and EUV.

Our innovative immersion lithography systems place a fluid between the wafer and a system s projection lens, to enhance focus and enabling circuit line-width to shrink to even smaller dimensions than what is possible with dry lithography systems. ASML pioneered this wet technology and has experienced strong demand for immersion-based systems, driven initially by NAND Flash solid state memory chipmakers which have aggressive shrink roadmaps to reduce cost per memory function. Shrinking the feature sizes on chips by means of immersion systems has meanwhile been adopted by most of our customers in all other semiconductor market segments, including DRAM memory chip, as well as the Logic chip segment including the Foundry contract chip manufacturers.

With immersion becoming the cornerstone of the modern chip factory, we have developed different immersion systems for different needs. We have optimized our TWINSCAN XT immersion systems for cost-effective imaging down to 40 nm patterning, while we have simultaneously developed a new dual wafer stage system called TWINSCAN NXT with improved positioning (overlay) and imaging. The NXT platform enables next generations of semiconductors through the so-called Double Patterning technique which requires two exposures per layer on a chip. Imaging patterns and lines between one another without creating contacts is very demanding on the exact placement of lines and patterns and this overlay requirement is uniquely served by our NXT planar wafer stage and breakthrough grid metrology. Our first TWINSCAN NXT system was shipped in the third quarter of 2009 and achieved overlay below the specification of 3 nm, which is only 12 silicon atoms across, or the length a human hair grows in just half a second.

We complement our scanner products with a rapidly expanding portfolio of software and metrology products to help our customers achieve better imaging at aggressive resolutions, offering significant revenue-generating and cost-saving opportunities to our customers. As customers optimize their scanner performance by taking into account the entire chip creation process, from design to volume manufacturing, we have called this approach holistic lithography . During the chip design phase ASML s holistic lithography software uses actual scanner profiles and tuning capabilities to create a design with the maximum process window for a given node and application. During manufacturing, ASML s holistic lithography leverages unique metrology techniques and feedback loops to monitor overlay and Critical Dimension Uniformity (CDU) performance to continuously maintain the system centered in the process window. During 2009 we launched new products such as FlexRay™ programmable illumination, Source

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Mask Optimization (SMO) tools and BaseLiner[tm] scanner stability, while announcing deals for sales of these products with major chip manufacturers.

Also in 2009, we confirmed our roadmap for EUV lithography with the first shipment of our pre-production system (for which we have received five orders) scheduled for the second half of 2010. EUV derives its name from the light source it uses the wavelength of which is 15 times shorter than the Deep Ultraviolet ArF light source used in our most advanced immersion systems. Despite the financial and economic crisis, assembly of our first pre-production systems started in 2009 in the new EUV cleanroom facility at our headquarters in Veldhoven, which was opened on schedule in May 2009. The NXE (EUV) system, which will be built on an evolved TWINSCAN platform, will enable our customers to extend their roadmap with chip features down to 22 nm and smaller. Industry support for EUV was boosted by the publication of excellent imaging results from many customers who have been working on our Alpha Demo Tools located at two major industry R&D centres (IMEC in Leuven, Belgium and CNSE Albany NanoTech in New York State, U.S.). Also, there was considerable progress reported publicly in EUV infrastructure development, ranging from reticles and resists to source power improvements. We have published a roadmap to develop a range of EUV models, offering the greatest extendibility at the lowest cost of ownership for the future of lithography.

Operational excellence

We strive to sustain our business success based on our technological leadership by continuing to execute our fundamental operating strategy well, including reducing lead-times while improving our cost competitiveness. Lead-time is the time from a customer s order to a tool s delivery.

Our business strategy includes outsourcing the majority of components and subassemblies that make up our products. We work in partnership with suppliers, collaborating on quality, logistics, technology and total cost. By operating our strategy of value sourcing, we strive to attain flexibility and cost efficiencies from our suppliers through mutual commitment and shared risk and reward. Value sourcing also allows the flexibility to adapt to the cyclicality of the world market for semiconductor lithography systems. As a result of an increase in the number of orders in the second half of 2009, our suppliers went from very low to very high levels of deliveries to ASML. Our supply-base has been able to handle the volatility well, as they have mirrored our flexible business model and have reduced their exposure to ASML compared with the previous economic downturn. ASML more than doubled the frequency of planning communication with its supply chain during the financial and economic crisis, in order to assist those suppliers and maintain their viability throughout the crisis. Our supply-base proved to be robust in coping with the volume swings.

ASML has a flexible labor model with a mix of fixed and flexible contracted labor in its manufacturing and R&D facilities located in Veldhoven. This reinforces our ability to adapt more quickly to semiconductor market cycles, including support for potential 24-hour, seven days-a-week production activities. By maximizing the flexibility of our high-tech workforce, we can shorten lead-times: a key driver of added value for customers. Flexibility also reduces our working capital requirements. The flexibility in our business model was used in response to the sharp downturn. We reduced our workforce by approximately 1,000 temporary employees, including 700 in Veldhoven. We rehired approximately 400 temporary employees in 2009.

In view of the economic volatility of the semiconductor industry, we continue to strive to improve efficiencies in our operations: addressing our cost structure and strengthening our capability to generate cash. We started cost reduction initiatives in the second quarter of 2008 and by the end of 2009 we had cut our costs by more than EUR 200 million per year, of which we expect approximately 75 percent is sustainable during an economic upturn up to a sales level of

approximately EUR 800 million per quarter. If the sales level increases above EUR 800 million per quarter, cost levels are expected to increase. We maintained our high R&D investments for our strategic R&D projects as well as our machinery and equipment capacity at our productions facilities, which is expected to give us a strong position for the anticipated recovery in demand for our products.

ASML operations update on key performance indicators

Significant effects of the financial and economic crisis on ASML

In the fourth quarter of 2008, the financial and economic crisis started to impact ASML severely and resulted in a sharp decrease in customer demand. As part of the cost reduction program, and in anticipation of a continued decrease in customer demand in 2009, ASML started to reduce costs through a restructuring program (without impacting key R&D projects) and recognized impairment charges of EUR 20.8 million on property, plant and equipment, inventory obsolescence charges of EUR 94.6 million and restructuring costs of EUR 22.4 million in the fourth quarter of 2008.

The actions taken in 2008 resulted in cost savings of more than EUR 200 million in 2009 and approximately EUR 30 million in 2008. The cost savings in 2009 and 2008 mainly related to efficiency improvements in our operations and the use of our flexible business model, reducing the cost of temporary employees, consultancy and other out-of-pocket expenses.

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In addition, cost savings in 2009 also included the effects of the Labor Time Reduction Program. From January 5, 2009 until June 21, 2009, ASML participated in the Labor Time Reduction Program, a Netherlands government program that helped companies to reduce working hours for employees without impacting their salaries. On average 1,033 employees participated in this program which reduced our loss from operations of approximately EUR 6 million.

Finally, the cost savings in 2009 included the effects from the restructuring measures taken by ASML in the fourth quarter of 2008 which resulted in a decrease in employee expenses of a EUR 6.5 million and a decrease in rental expenses of EUR 2.7 million.

We expect approximately 75 percent of all these savings to be sustainable during an economic upturn up to a sales level of EUR 800 million per quarter. If the sales level increases above EUR 800 million, cost levels are expected to increase. The actual savings are in line with the savings that the Company anticipated at the end of 2008. These actions resulted in an approximately similar positive effect on cash flows from operating activities.

The following table presents the key performance indicators used by our Board of Management and senior management to measure performance in our monthly operational review meetings.

Year ended December 31	**2007**		**2008**		**2009**	
(in millions, except market share and systems)	EUR		EUR		**EUR**	
Sales						
Market share (based on revenue)	65%		65%		**68%[1]**	
Net sales	3,768		2,954		**1,596**	
Increase (decrease) in net sales	5.2%		(21.6)%		**(46.0)%**	
Net system sales	3,351		2,517		**1,175**	
Sales of systems (in units)	260		151		**70**	
Average selling price of system sales	12.9		16.7		**16.8**	
Value of systems backlog	1,697		755		**1,853**	
Systems backlog (in units)	89		41		**69**	
Average selling price of systems backlog	19.1		18.4		**26.8[2]**	
Immersion systems shipped (in units)	38		56		**36**	
Profitability						
Gross profit	1,550	41.1%	1,016	34.4%	**458**	**28.7%**
Income (loss) from operations	815[3]	21.6%	287	9.7%	**(165)**	**(10.3)%**
Net income (loss)	671[3]	17.8%	322	10.9%	**(151)**	**(9.5)%**
Liquidity						
Cash and cash equivalents	1,272		1,109		**1,037**	
Operating cash flow	701		281		**98**	

1 According to the latest available data up to and including November 2009 as reported by SEMI, an independent semiconductor industry organization.
2 In 2009, the ASP of the systems backlog for new systems amounts to EUR 28.9 million, and the ASP of the systems backlog for used systems amounts to EUR 9.0 million.
3 The 2007 figures for income from operations and net income include a one-off charge of EUR 23 million relating to the Brion acquisition for amortization of in-process R&D.

Sales

Notwithstanding the depth of the financial and economic crisis in 2009, we expect our longer term sales level to grow based on industry analysts IC growth forecasts. Based on these forecasts, our general strategy is to seek to grow net sales to a EUR 5 billion level. The timing of growth to such level depends on three growth drivers: market growth, market share growth and a broadening of our product and services scope.

In 2009, net sales decreased by 46.0 percent to EUR 1,596 million from EUR 2,954 million in 2008 (2007: EUR 3,768 million). The decrease in net sales was caused by the collapse in semiconductor equipment demand. In the first half of 2009, our customers implemented inventory corrections, production capacity adjustments and experienced a lack of capital. In the second half of 2009, non-leading-edge production capacity additions were still delayed. However, demand increased compared to the first half of 2009 as our customers invested in leading-edge immersion technology, with DRAM customers introducing new memory devices and Foundry customers beginning to ramp up 40 nm products.

The ASP of our systems increased by 0.6 percent to EUR 16.8 million in 2009 from EUR 16.7 million in 2008 (2007: EUR 12.9 million). This slight increase was mainly driven by an increased ASP of our leading-edge technology systems due to shipment of our new NXT: 1950i systems, partly offset by the increased number of used systems sold as a percentage of the

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total number of systems sold (2009: 33 percent; 2008: 24 percent; 2007: 10 percent) reflecting our customers response to the financial and economic crisis.

As of December 31, 2009, our systems backlog was valued at EUR 1,853 million and included 69 systems with an ASP of EUR 26.8 million. As of December 31, 2008, the systems backlog was valued at EUR 755 million and included 41 systems with an ASP of EUR 18.4 million. The significantly increased value and number of systems backlog reflects the accelerated technology investments by our customers in the DRAM memory segments and technology and capacity investments by our customers in the Foundry segments after a period of very low capital investment. The increase in ASP of our systems in the systems backlog mainly results from a relatively low proportion of used systems compared to December 31, 2008 and a high number of new immersion systems.

During 2009, we shipped our first TWINSCAN NXT systems with improved overlay and imaging compared to the TWINSCAN XT immersion systems. The NXT platform enables next generations of semiconductors through the so-called Double Patterning technique which requires two exposures per layer on a chip. The systems were shipped on explicit request of our customers, although these TWINSCAN NXT systems did not meet all specifications. For the remaining performance obligations a portion of the sales price has been deferred. Management expects to resolve the remaining performance obligation in the course of 2010.

Profitability

Our general strategy is to seek to achieve income from operations to net sales of 10-15 percent at the downturn point and 20-25 percent at the upturn point over the industry s business cycle. However in exceptional circumstances, as evidenced by the financial and economic crisis, we could see periods with results from operations that are substantially below our minimum target level.

Income from operations decreased from EUR 287 million or 9.7 percent of net sales in 2008 to a loss from operations of EUR 165 million or 10.3 percent of net sales in 2009 (2007: EUR 815 million income from operations or 21.6 percent of net sales). This EUR 452 million decrease was substantially the result of a decrease in sales and the resulting decrease in gross profit of EUR 557 million which was partially offset by a decrease in operating expenses of EUR 105 million.

Gross profit decreased from EUR 1,015.5 million or 34.4 percent of net sales in 2008 to 458.4 million or 28.7 percent of net sales in 2009 (2007: EUR 1,549.6 gross profit or 41.1 percent of net sales). The lower gross profit was mainly attributable to a significant decrease in net sales as a result of the collapse of demand for semiconductor equipment caused by the financial and economic crisis. 2009 gross margin was favorably impacted by the absence of restructuring and impairment charges that were included in 2008 gross margin and the profit on the sale of inventories that had been previously written down. However, this was more than offset by the increased portion of used systems sold, with a lower margin, as a percentage of total systems sold in 2009 compared to 2008 and underutilization of our production facilities, mainly in the first half of 2009.

At the end of 2008, customers in the market segment for Logic technology underestimated the ramp-up of 45 nm technology used in, among others, advanced internet devices and smart phones, which unexpectedly increased demand for our non-leading-edge immersion systems in 2009 (mainly XT:1700i). As a result we made EUR 64.8 million profit on the sale of inventories that had been previously written down.

Operating expenses showed a decrease of EUR 105 million in 2009 compared to 2008 due to a decrease of SG&A costs by EUR 56 million, or 26.2 percent and a decrease of R&D costs net of credits by EUR 49 million, or 9.6 percent. The SG&A and R&D costs were reduced as part of our cost reduction program. While we implemented some operational savings in R&D, these did not impact our spending on any of our strategic programs, in particular immersion, double patterning and EUV, which we believe are necessary to maintain and further develop our position as technology leader.

ASML has a flexible labor model with a mix of payroll and temporary employees, which enables the Company to quickly adapt its costs to the semiconductor market cycles.

Net loss in 2009 amounted to EUR 151 million or 9.5 percent of net sales, representing EUR 0.35 net loss per ordinary share compared with net income in 2008 of EUR 322 million or 10.9 percent of net sales, representing EUR 0.75 net income per ordinary share (2007: net income of EUR 671 million or 17.8 percent of net sales, representing EUR 1.45 net income per ordinary share).

Liquidity

Our general strategy is to seek to maintain our strategic target level of cash and cash equivalents between EUR 1.0 and 1.5 billion. To the extent that our cash and cash equivalents exceeds this target and there are no investment opportunities that we wish to pursue, we will return excess cash to our shareholders.

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As of December 31, 2009 our cash and cash equivalents amounted to EUR 1.0 billion.

Our cash and cash equivalents decreased from EUR 1,109 million as of December 31, 2008 to EUR 1,037 million as of December 31, 2009. We generated cash from operations of EUR 98 million in 2009, which was offset by a cash outflow of EUR 73 million from financing activities, reflecting our 2009 dividend payment (EUR 86 million), and EUR 98 million cash used in investing activities mainly related to the completion of the first part of the EUV and NXT production facilities in Veldhoven.

In addition to its existing EUR 500 million credit facility, the Company signed a EUR 200 million loan facility with the European Investment Bank in April 2009 to support the Company s EUV investment efforts. This loan can be drawn in tranches before October 2010. It is repayable in annual installments after four years, with a final repayment seven years after drawdown. No amounts were outstanding under the EUR 500 million credit facility and the EUR 200 million loan facility as of December 31, 2009.

ASML did not repurchase any shares in 2009. The cumulative amount returned to shareholders in the form of share buybacks and capital repayment between May 2006 and December 2009 was EUR 2,137 million. In April 2009, the Company paid a dividend of EUR 0.20 per ordinary share of EUR 0.09 or EUR 86 million in total.

A proposal will be submitted to the Annual General Meeting of Shareholders on March 24, 2010 to declare a dividend for 2009 of EUR 0.20 per ordinary share of EUR 0.09.

A. Operating Results

Critical accounting policies using significant estimates

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of our financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, net sales and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, warranty, long-lived assets, inventories, accounts receivable, provisions, contingencies and litigation, share-based compensation expenses and income tax. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. While we regularly evaluate our estimates and assumptions, actual results may differ from these estimates if these assumptions prove incorrect. To the extent there are material differences between actual results and these estimates, our future results of operations 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.

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. Each system undergoes, prior to shipment, a Factory Acceptance Test in ASML s 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, if any. A system is shipped, and revenue is recognized, only after all specifications are met and customer sign-off is received or waived. 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. Although each system s performance is re-tested upon installation at the customer s site, ASML has never failed to successfully complete installation of a system at a customer s premises.

In connection with future introductions of new technology, we may initially defer revenue recognition until completion of installation and acceptance of the new technology at customer premises. This deferral would continue until we are able to conclude that installation of the technology in question would occur consistently within a predetermined time period and that the performance of the new technology would not reasonably be different from that exhibited in the pre-shipment Factory Acceptance Test. Any such deferral of revenues, however, could have a material effect on ASML s results of operations for the fiscal period in which the deferral occurred and on the succeeding fiscal period. At December 31, 2009 and 2008 we had no deferred revenue from shipments of new technology. During the three years ended December 31, 2009 no revenue from new technology was recorded that had been previously deferred. 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 ten years, has occurred on only one occasion in 1999.

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ASML has no significant repurchase commitments in its general sales terms and conditions. From time to time the Company repurchases systems that it has manufactured and sold and, following refurbishment, resells those systems to other customers. This repurchase decision is driven by market demand expressed by other customers and not by explicit or implicit contractual arrangements relating to the initial sale. The Company considers reasonable offers from any vendor, including customers, to repurchase used systems so that it can refurbish, resell and install these systems as part of its 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, 2009 and 2008 ASML had no repurchase commitments.

A portion of our revenue is derived from contractual arrangements with our customers that have multiple deliverables, such as installation and training services and prepaid extended and enhanced (optic) warranty contracts. The revenue relating to the undelivered elements of the arrangements is deferred at fair value until delivery of these elements. The fair value is determined by vendor specific objective evidence (VSOE) except the fair value of the prepaid extended and enhanced (optic) warranty contracts which is based on the list price. VSOE is determined based upon the prices that we charge for installation and comparable services (such as relocating a system to another customer site) on a stand-alone basis, which are subject to normal price negotiations. Revenue from installation and training services is recognized when the services are completed. Revenue from prepaid extended and enhanced (optic) warranty contracts is recognized over the term of the contract.

The deferred revenue balance from installation and training services as of December 31, 2009 amounted to approximately EUR 3 million (2008: EUR 3 million) and EUR 10 million (2008: EUR 15 million), respectively.

The deferred revenue balance from prepaid extended and enhanced (optic) warranty contracts as of December 31, 2009 amounted to approximately EUR 126 million (2008: EUR 173 million).

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 volume discounts to a limited number of customers. In some instances these volume discounts can be used to purchase field options (system enhancements). The related amount is recorded as a reduction in revenue at time of shipment. From time to time, we offer free or discounted products or services (award credits) to our customers as part of a volume purchase agreement. The sales transaction that gives rise to these award credits is accounted for as a multiple element revenue 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.

Revenues are recognized excluding the taxes levied on revenues (net basis).

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 and optic parts 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 field expenses. Based upon historical service records, we calculate the charge of average service hours and parts per system to determine the estimated warranty charge. On a semi-annual basis, the Company assesses, and updates if necessary, its accounting estimates used to calculate the standard warranty reserve based on the latest actual historical warranty costs and expected future warranty costs. The actual product performance and/or field expense profiles may differ, and in those cases we adjust our warranty reserves accordingly. Future warranty costs may exceed our estimates, which could lead to an increase in our cost of sales. In 2009, the reassessments of the warranty reserve, and resulting change in accounting estimate, did not have a material effect. For 2008, the impact of the change in accounting estimate on the consolidated statements of operations and per-share amounts was as follows:

Year Ended December 31	**2008**	
(in thousands, except per share data)	EUR	**%**
Income from operations	33,409	**11.6%**
Net income	24,890	**7.7%**
Basic net income per ordinary share	0.06	**8.0%**
Diluted net income per ordinary share	0.06	**8.1%**

Evaluation of long-lived assets for impairment and costs associated with exit or disposal activities
Long-lived assets include goodwill, other intangible assets and property, plant and equipment.

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Goodwill is tested for impairment annually on September 30 and whenever events or changes in circumstances indicate that the carrying amount of the goodwill may not be recoverable. Goodwill is tested for impairment based on a two-step approach for each reporting unit in which goodwill has been recorded. First, recoverability is tested by comparing the carrying amount of the reporting unit including goodwill with the fair value of the reporting unit, being the sum of the discounted future cash flows. 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 over 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.

All of ASML s goodwill as of December 31, 2009 relates to the acquisition of Brion in March 2007. For the purpose of impairment testing, goodwill is allocated to the reporting unit Brion. The fair value of the reporting unit Brion is calculated based on the discounted cash flow method (income approach). These calculations use after-tax discounted cash flow projections based on a strategic plan approved by management.

The material assumptions used by management for the fair value calculation of the reporting unit are:

- Cash flow projections for the first six years are based on a significant growth scenario, reflecting the start-up nature of Brion. Projections are built bottom-up, using estimates for revenue, gross profit, R&D costs and SG&A costs. Brion would reach maturity in the final year of this six year start-up period and grow at a weighted average growth rate of three percent, which Management believes is a reasonable estimate that does not exceed the long-term historical average growth rate for the lithography business in which Brion operates.
- A discount rate of 14.7 percent representing Brion s weighted average cost of capital (WACC), was determined using an adjusted version of the Capital Asset Pricing Model. Since Brion is not financed with debt, WACC was assumed to equal Brion s cost of equity. The discount rate increased compared to the prior year reflecting the increased market uncertainty.

Management believes that the fair value calculated reflects the amount a market participant would be willing to pay. Based on this analysis management believes that the fair value of the reporting unit substantially exceeded its carrying value and that, therefore, goodwill was not impaired as of December 31, 2009 and December 31, 2008.

ASML performed sensitivity analyses on each of these assumptions and concluded that any reasonably likely change in these assumptions would not have caused the carrying amount of Brion to exceed its fair value. A discussion of the sensitivity analysis is set out below:

- Estimated cash flows associated with Brion s initial six year start-up period accounted for approximately 35 percent of the reporting unit s estimated fair value. These estimated cash flows could be reduced by up to 52 percent without causing the fair value of Brion to decrease below its carrying amount of EUR 155.5 million. Management does not believe that such a decline is reasonably likely based on historical evidence of the reliability of the estimated cash flows and management s future expectations on the development of these cash flows.
- Estimated cash flows associated with Brion s operations after the initial six year period accounted for approximately 65 percent of the reporting unit s estimated fair value, based on the assumed three percent growth rate. Assuming Management s estimate of cash flows for the initial six year period is unchanged; growth in subsequent years could reduce to zero percent without Brion s estimated fair value falling below its carrying amount of EUR 155.5 million. Management does not believe, however, that such a long-term no growth scenario is reasonably likely, given that the

long-term historical growth rate of the lithography industry exceeds three percent.
The discount rate used in the fair value calculation could increase from 14.7 percent to 19.2 percent without causing the fair value of Brion to decrease below its carrying amount. Management does not believe such an increase is reasonably likely.

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. Other intangible assets and property, plant and equipment are tested for impairment based on a two-step approach. First the recoverability is tested by comparing the carrying amount of the other intangible assets and property, plant and equipment with the fair value being the sum of the undiscounted future cash flows. Secondly, if the carrying amount of the other intangible assets and property, plant and equipment is lower than the fair value the assets are considered to be impaired. The impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the asset.

In determining the fair value of a reporting unit or an asset, the Company makes estimates about future cash flows. These estimates are based on the financial plan updated with the latest available projection of the semiconductor market conditions and our sales 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 Weighted Average Cost of Capital (WACC) and future inflation rates.

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It is possible that the outcome of the plans, estimates and assumptions used may differ from our estimates, which may require impairment of certain long-lived assets, including goodwill. Future adverse changes in market conditions may also require impairment of certain long-lived assets, including goodwill.

During 2009, we recorded impairment charges of EUR 15.9 million in property, plant and equipment of which we recorded EUR 2.1 million in cost of sales, EUR 9.1 million in R&D costs and EUR 4.7 million in SG&A costs. We did not record any impairment charges in other intangible assets. The impairment charges of EUR 15.9 million mainly relate to certain non-leading-edge systems and machinery and equipment that have ceased to be used or will cease to be used during the expected economic life, and which management no longer believes can be sold because of lack of demand for these products. The impairment charges were determined based on the difference between the assets estimated fair value (being EUR 7.0 million) and their carrying amount.

Inventories

Inventories, including spare parts and lenses, are stated at the lower of cost (first-in, first-out method) or market value. Costs include 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 and are reviewed on a quarterly basis. Our methodology involves matching our on-hand and on-order inventory with our requirements based on the manufacturing forecast. In determining inventory allowances, we evaluate inventory in excess of our forecasted needs on both technological and economical criteria and make appropriate provisions to reflect the risk of obsolescence. This methodology is significantly affected by our forecasted needs for inventory. If actual requirements were to be lower than estimated, additional inventory allowances for excess or obsolete inventory may be required, which could have a material adverse effect on our business, financial condition and results of operations. At the end of 2008, customers in the market segment for Logic technology underestimated the ramp-up of 45 nm technology used in, among others, advanced internet devices and smart phones, which unexpectedly increased demand for our non-leading-edge immersion systems in 2009 (mainly XT:1700i). As a result we made EUR 64.8 million profit on the sale of inventories that had been previously written down.

As of December 31, 2009, the allowance for inventory obsolescence amounted to EUR 225.3 million (2008: EUR 189.9 million). The increase in the allowance for inventory obsolescence is mainly due to a reassessment by the Company in 2009 of expected future demand based on the unexpected customers response to the financial and economic crisis. This resulted in an increase in allowance for inventory obsolescence for different types of non-leading-edge systems compared to prior year and additional parts which management believes cannot be sold.

Accounts receivable

A majority of our accounts receivable are derived from sales to a limited number of large multinational semiconductor manufacturers throughout the world. In order to monitor potential credit losses, we perform ongoing credit evaluations of our customers financial condition. An allowance for doubtful accounts is maintained for potential credit losses based upon management s assessment of the expected collectability of all accounts receivable. The allowance for doubtful accounts is reviewed periodically to assess the adequacy of the allowance. In making this assessment, management takes into consideration (i) any circumstances of which we are aware regarding a customer s inability to meet its financial obligations; and (ii) our judgments as to potential prevailing economic conditions in the industry and their potential impact on the Company s customers. Where we deem it prudent to do so, we may require some form of credit enhancement, such as letters of credit, down payments and retention of ownership, before shipping systems to

certain customers. Retention of ownership enables ASML to recover the systems in the event a customer defaults on payment. We have not incurred any material accounts receivable credit losses during the past three years. Our three largest customers (based on net sales) accounted for 44.0 percent of accounts receivable at December 31, 2009, compared to 42.2 percent at December 31, 2008. A business failure of one of our main customers could result in a substantial credit loss in respect to amounts owed to the Company by that customer, which could adversely affect our business, financial condition and results of operations.

Provisions

Employee contract termination benefits are payable when employment is terminated before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. ASML recognizes employee contract termination benefits when ASML is demonstrably committed to either terminating the employment of current employees according to a detailed formal plan where there is no possibility of withdrawal, or when ASML provides termination benefits as a result of an offer made to encourage voluntary redundancy. The timing of recognition and measurement of the provision for employee contract termination benefits depends on whether employees are required to render service until their employment is terminated in order to receive the termination benefits. If this period of continued employment extends beyond the minimum retention period, the provision shall be determined at the communication date based on the fair value as of the termination date and is recognized ratably over the future service period. As of December 31, 2009, the provision for contract termination benefits was fully utilized.

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Provisions for lease contract termination costs are recognized when costs will continue to be incurred under a contract for its remaining term without economic benefit to the Company and the Company ceases using the rights conveyed by the contract. The provisions are measured at fair value which is determined based on the remaining lease payments reduced by the estimated sublease payment that could be reasonably obtained for the building.

As of December 31, 2009, the provision for lease contract termination costs amounts to EUR 15.2 million (2008: EUR 17.9 million) and relates to an operating lease contract for a building for which no economic benefits are expected.

The restructuring in 2008 resulted in cost savings of EUR 9.2 million in 2009, consisting of a EUR 2.7 million decrease in rental expenses and EUR 6.5 million decrease in employee expenses. The actual savings are in line with the savings that the Company anticipated at the end of 2008. These actions resulted in an approximately similar positive effect on cash flows from operating activities.

Contingencies and litigation

We are party to various legal proceedings generally incidental to our business, as disclosed in Note 17 to the consolidated financial statements. In connection with these proceedings and claims, management evaluated, based on the relevant facts and legal principles, the likelihood of an unfavorable outcome and whether the amount of the loss could be reasonably estimated. In each case, management determined that either a loss was not probable or was not reasonably estimable. As a result, no estimated losses were recorded as a charge to our consolidated statements of operations in 2007, 2008 and 2009. 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, even where we believe that we would ultimately prevail, we may agree to settle or to terminate a claim or proceeding where we believe that doing so, when taken together with other relevant commercial considerations, is more cost-effective than engaging in expensive and protracted litigation, the outcome of which is uncertain.

We accrue legal costs related to litigation in our consolidated statements of operations at the time when the related legal services are actually provided to us.

Share-based compensation expenses

The cost of employee services received (compensation expenses) in exchange for awards of equity instruments are recognized based upon the grant date fair value of stock options and stock. 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 stock 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 a Euro government bond with a life equal to the expected life of the equity-settled share-based payments. The fair value of stock is determined based on the closing price of the Company s ordinary shares on Euronext Amsterdam by NYSE Euronext (Euronext Amsterdam) on the

grant date.

The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Company s estimate of equity instruments that will eventually vest. At each balance sheet date, the Company revises its 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 equity.

We make quarterly assessments of the adequacy of the (hypothetical) tax pool to determine whether there are tax deficiencies that require recognition in the consolidated statements of operations. We have selected the alternative transition method (under Accounting Standards Codification (ASC) 718) in order to calculate the tax pool.

Our current share-based payment plans do not provide for cash settlement of options and stock.

Income taxes
We operate in various tax jurisdictions in Europe, Asia and the United States and must comply with the tax laws and regulations of each of these jurisdictions.

We use the asset and liability method in accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for tax consequences attributable to differences between the balance sheet carrying amounts of existing assets and liabilities and their respective tax bases. Furthermore tax assets are recognized for the tax effect of incurred net operating losses.

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If it is more likely than not that the carrying amounts of deferred tax assets will not be realized, a valuation allowance is recorded to reduce the carrying amounts of those assets.

We continuously assess our ability to realize our deferred tax assets resulting, among others, from net operating loss carry-forwards. The total amount of tax effect of the loss carry-forwards as of December 31, 2009 was EUR 107.1 million, which resides with ASML Holding N.V. and Netherlands based subsidiaries of ASML Holding NV and ASML US, Inc. and US based subsidiaries of ASML US Inc. We believe that all losses will be offset by future taxable income before our ability to utilize those losses expires. This analysis takes into account our projected future taxable income from operations and possible tax planning alternatives available to us.

On January 1, 2007 the Company adopted the provisions of FIN 48 Accounting for Uncertainty in Income Taxes after codification included in ASC 740. ASC 740 clarifies the accounting for income taxes, by prescribing a minimum recognition threshold a tax position is required to meet, before being recognized in the financial statements. ASC 740 also provides guidance on derecognition, measurement, classification, interest and penalties, accounting in interim periods and disclosure regarding income taxes.

Consistent with the provisions of ASC 740, we classified the liability for unrecognized tax benefits as of December 31, 2009, amounting to EUR 133.3 million (2008: EUR 124.2 million) as non-current liabilities because at year end payment of cash was uncertain within one year. These non-current income tax liabilities are recorded in deferred tax and other tax liabilities in the consolidated balance sheets. The total liability for unrecognized tax benefits, if reversed, would have a favorable effect on the Company s effective tax rate.

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 of December 31, 2009, amounted to EUR 28.5 million (2008: EUR 23.6 million). The balance of accrued interest and penalties recorded in the consolidated statements of operations of 2009 amounted to EUR 4.9 million (2008: EUR 2.1 million; 2007: EUR 21.5 million) and are included under (provision for) benefit from income taxes.

A reconciliation of the beginning and ending balance of the liability for unrecognized tax benefits is as follows:

	2008	**2009**
(in millions)	EUR	**EUR**
Balance, January 1	110.3	**124.2**
Gross increases tax positions in prior period	13.0	**6.4**
Gross decreases tax positions in prior period	(6.5)	**(1.8)**
Gross increases tax positions in current period	15.2	**10.6**
Settlements	(5.0)	**(4.3)**
Lapse of statute of limitations	(2.8)	**(1.8)**
Balance, December 31	124.2	**133.3**

For the year ended December 31, 2009, there were no material changes compared to 2008 related to the liability for unrecognized tax benefits that impacted the Company s effective tax rate.

The Company estimates that the total liability of unrecognized tax benefits will decrease by EUR 8.5 million within the next 12 months. The estimated changes to the liability for unrecognized tax benefits within the next 12 months are mainly due to expected settlements and expiration of statute of limitations.

In the course of 2008, we reached agreement in principle with the Netherlands tax authorities on determination of the tax benefits resulting from application of the so-called Royalty Box , a Netherlands tax measure intended to stimulate innovation. The Royalty Box mechanism partly exempts income attributable to research efforts and protected by patents from taxation, resulting in taxation of so called patent income at an effective corporate income tax rate of 10 percent instead of a nominal tax rate of 25.5 percent. This agreement in principle covered the Royalty Box for the year 2007 and the years thereafter. However, the Royalty Box benefit calculation technique includes a benefits threshold to be surpassed before the effective tax rate on these benefits is reduced to 10 percent. The threshold is required to be exceeded each financial year, and when not exceeded - the remainder of the threshold rolls over to future years resulting in a cumulating threshold. In a loss year, the threshold will not be exceeded. In addition, a loss for the year itself will increase the threshold for future years. As 2008 and 2009 are loss years for the relevant Netherlands entities, the threshold for the years 2008 and 2009 will roll over to 2010 and beyond. For 2010 and future years, the Royalty Box has been replaced under Netherlands law by the Innovation Box, and the effective tax rate on Innovation Box income

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has been reduced from 10 percent to 5 percent. Based on our calculations, a clean start of the Innovation Box (which under Netherlands law replaces the Royalty Box as of January 1, 2010) in 2010 will result in a higher cumulative benefit for ASML. In the light of this analysis, in 2009, the Company has decided to forego the 2007 Royalty Box benefit in lieu of a fresh start of the Innovation Box as per 2010. The reversal of the 2007 Royalty Box benefit has resulted in a tax charge of approximately EUR 43 million including interest, which has an unfavorable impact on the tax rate during 2009 of approximately 25 percent.

Results of Operations

The following discussion and analysis of results of operations should be viewed in the context of the risks affecting our business strategy, described in Item 3.D. Risk Factors .

Set out below our consolidated statements of operations data for the three years ended December 31, 2009:

Year ended December 31	**2007**	**2008**	**2009**
(in millions)	EUR	EUR	**EUR**
Total net sales	3,768.2	2,953.7	**1,596.1**
Cost of sales	2,218.5	1,938.2	**1,137.7**
Gross profit on sales	1,549.7	1,015.5	**458.4**
Research and development costs[1]	486.1	516.1	**466.8**
Amortization of in-process research and development costs	23.2		
Selling, general and administrative costs	225.7	212.3	**156.6**
Income (loss) from operations	814.7	287.1	**(165.0)**
Interest income (expense), net	33.5	22.6	**(6.5)**
Income (loss) from operations before income taxes	848.2	309.7	**(171.5)**
(Provision for) benefit from income taxes	(177.2)	12.7	**20.6**
Net income (loss)	671.0	322.4	**(150.9)**

1 As of January 1, 2009, R&D credits are presented as part of R&D costs. The comparative figures for 2007 and 2008 have been adjusted accordingly.

Set out below are our consolidated statements of operations from operations data for the three years ended December 31, 2009, expressed as a percentage of our total net sales:

Year ended December 31			
(as percentage of net sales)	**2007**	**2008**	**2009**
Total net sales	100.0	100.0	**100.0**
Cost of sales	58.9	65.6	**71.3**
Gross profit on sales	41.1	34.4	**28.7**
Research and development costs[1]	12.9	17.5	**29.2**

Amortization of in-process research and development costs	0.6		
Selling, general and administrative costs	6.0	7.2	**9.8**
Income (loss) from operations	21.6	9.7	**(10.3)**
Interest income (expense), net	0.9	0.8	**(0.4)**
Income (loss) from operations before income taxes	22.5	10.5	**(10.7)**
(Provision for) benefit from income taxes	(4.7)	0.4	**1.2**
Net income (loss)	17.8	10.9	**(9.5)**

1 As of January 1, 2009, R&D credits are presented as part of R&D costs. The comparative figures for 2007 and 2008 have been adjusted accordingly.

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Results of operations 2009 compared with 2008

Net sales and gross profit

The following table shows a summary of sales (revenue and units sold), gross profit on sales and ASP data on an annual and semi-annual basis for the years ended December 31, 2008 and 2009.

	2008			2009		
	First half year	Second half year	Full year	First half year	Second half year	Full year
Net sales (EUR million)	1,763	1,191	2,954	**460**	**1,136**	**1,596**
Net system sales (EUR million)	1,546	971	2,517	**284**	**891**	**1,175**
Net service and field option sales (EUR million)	217	220	437	**176**	**245**	**421**
Total sales of systems (in units)	89	62	151	**21**	**49**	**70**
Total sales of new systems (in units)	74	41	115	**11**	**36**	**47**
Total sales of used systems (in units)	15	21	36	**10**	**13**	**23**
Gross profit as a percentage of net sales	40.3	25.6	34.4	**10.2**	**36.2**	**28.7**
ASP of system sales (EUR million)	17.4	15.7	16.7	**13.5**	**18.2**	**16.8**
ASP of new system sales (EUR million)	20.0	21.2	20.4	**20.1**	**21.5**	**21.1**
ASP of used system sales (EUR million)	4.6	4.9	4.8	**6.3**	**9.1**	**7.9**

Net sales decreased by EUR 1,358 million or 46.0 percent from EUR 2,954 million in 2008 to EUR 1,596 million in 2009. The decrease in net sales mainly relates to a decrease in net system sales of EUR 1,342 million or 53.3 percent from EUR 2,517 million in 2008 to EUR 1,175 million in 2009 mainly attributable to a lower number of systems shipped. Net service and field option sales decreased from EUR 437 million in 2008 to EUR 421 million in 2009.

The number of systems shipped decreased by 53.6 percent from 151 systems in 2008 to 70 systems in 2009. The year 2009 was characterized by the financial and economic crisis which has led to lower overall semiconductor end-demand. Against this background, in the first half of 2009, our customers implemented inventory corrections, production capacity adjustments and experienced a lack of capital. In the second half of 2009, non-leading-edge production capacity additions were still delayed. However, demand increased compared to the first half of 2009 as our customers invested in leading-edge immersion technology, with DRAM customers introducing new memory devices and Foundry customers beginning to ramp up 40 nm products.

The ASP of our systems increased by 0.6 percent to EUR 16.8 million in 2009 from EUR 16.7 million in 2008. This slight increase was mainly driven by an increased ASP of our leading-edge technology systems sold due to shipment of our new TWINSCAN NXT systems, partly offset by the increased number of used systems sold compared to total number of systems sold (2009: 33 percent; 2008: 24 percent) reflecting our customers response to the financial and economic crisis.

From time to time, ASML repurchases systems that it has manufactured and sold and, following factory-rebuild or refurbishment, resells those systems to other customers. This repurchase decision is mainly driven by market demand for capacity expressed by other customers and not by explicit or implicit contractual arrangements relating to the initial sale. The number of used systems sold in 2009 decreased to 23 from 36 in 2008. The ASP for used systems increased from EUR 4.8 million in 2008 to EUR 7.9 million in 2009, reflecting a further shift from our older PAS family to our newer TWINSCAN family.

Through 2009, 18 of the top 20 chipmakers worldwide, in terms of semiconductor capital expenditure, were our customers. In 2009, sales to our largest customer accounted for EUR 349 million, or 21.9 percent of our net sales. In 2008, sales to our largest customer accounted for EUR 754 million, or 25.5 percent of our net sales.

Gross profit decreased from EUR 1,016 million or 34.4 percent of net sales in 2008 to 458 million or 28.7 percent of net sales in 2009. The lower gross profit was mainly attributable to a significant decrease in net sales as a result of the collapse of demand for semiconductor equipment caused by the financial and economic crisis. 2009 gross margin was favorably impacted by the absence of restructuring and impairment charges that were included in 2008 gross margin and the profit on the sale of inventories that had been previously written down. However, this was more than offset by the increased portion of used systems sold, with a lower margin, as a percentage of total systems sold in 2009 compared to 2008 and underutilization of our production facilities, mainly in the first half of 2009.

We started 2009 with a systems backlog of 41 systems. In 2009, we booked orders for 108 systems, received order cancellations or push-outs beyond 12 months for 10 systems and recognized sales for 70 systems. This resulted in a systems backlog of 69 systems as of December 31, 2009. The total value of our systems backlog as of December 31, 2009 amounted to

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EUR 1,853 million with an ASP of EUR 26.8 million, compared with a systems backlog of EUR 755 million with an ASP of EUR 18.4 million as of December 31, 2008.

The significantly increased value and number of systems backlog reflects the accelerated technology investments by our customers in the DRAM memory segments and technology and capacity investments by our customers in the Foundry segments after a period of very low capital investment. The increase in ASP of our systems in the systems backlog mainly results from a relatively low proportion of used systems compared to December 31, 2008 and a high number of new immersion systems included.

Research and development costs

R&D costs (net of credits) decreased by EUR 49 million or 9.6 percent from EUR 516 million in 2008, or 17.5 percent of net sales, to EUR 467 million in 2009, or 29.2 percent of net sales. This decrease reflects the operational savings in R&D, and is limited because we continued strategic investment in technology leadership in 2009 through investments in the development and enhancement of the next generation TWINSCAN^{tm} systems based on immersion, double patterning and EUV.

Selling, general and administrative costs

SG&A costs decreased by EUR 55.7 million or 26.2 percent from EUR 212.3 million in 2008, or 7.2 percent of net sales, to EUR 156.6 million in 2009, or 9.8 percent of net sales, as a result of our cost savings program.

Interest income (expense), net

Net interest decreased from EUR 23 million income in 2008 to EUR 7 million expense in 2009. Our interest income relates to interest earned on our cash and cash equivalents. In 2009 interest income decreased as a result of a lower average cash balance and significant lower interest rates. Interest income was more than offset by net interest expense on our outstanding debt. While operating cash flows remained positive, the average cash balance decreased mainly as a result of the dividend paid in 2009 and cash used for capital expenditures.

Income taxes

The effective tax rate was 12.0 percent of loss before taxes in 2009, compared to -4.1 percent of income before taxes in 2008. In 2008, ASML recognized tax income of approximately EUR 70 million or approximately 22 percent of net income attributable to three main items on which it reached agreement with the Netherlands tax authorities. These items were the treatment of taxable income related to ASML s patent portfolio (application of the Royalty Box) in 2007, the valuation of intellectual property rights acquired in the past against historical exchange rates, and the treatment of taxable income related to a temporarily depreciated investment in ASML s United States subsidiary, all of which had a favorable impact on the effective tax rate for 2008. In 2009, ASML recognized tax expense including interest of approximately EUR 43 million or approximately 25 percent of loss before taxes attributable to the reversal of the 2007 Royalty Box benefit, which had an unfavorable impact on the effective tax rate for 2009. In 2009, based on a tax law change effective January 1, 2010, ASML decided to reverse the Royalty Box benefits of 2007 as management expects that a clean start of the Innovation Box (which under Netherlands law replaces the Royalty Box as of January 1, 2010) in 2010 and beyond will result in a higher cumulative benefit for ASML.

Results of operations 2008 compared with 2007

Net sales and gross profit

The following table shows a summary of sales (revenue and units sold), gross profit on sales and ASP data on an annual and semi-annual basis for the years ended December 31, 2007 and 2008.

	2007			2008		
	First half year	**Second half year**	**Full year**	**First half year**	**Second half year**	**Full year**
Net sales (EUR million)	1,879	1,889	3,768	**1,763**	**1,191**	**2,954**
Net system sales (EUR million)	1,673	1,678	3,351	**1,546**	**971**	**2,517**
Net service and field option sales (EUR million)	206	211	417	**217**	**220**	**437**
Total sales of systems (in units)	146	114	260	**89**	**62**	**151**
Total sales of new systems (in units)	131	104	235	**74**	**41**	**115**
Total sales of used systems (in units)	15	10	25	**15**	**21**	**36**
Gross profit as a percentage of net sales	41.3	41.0	41.1	**40.3**	**25.6**	**34.4**
ASP of system sales (EUR million)	11.5	14.7	12.9	**17.4**	**15.7**	**16.7**
ASP of new system sales (EUR million)	12.5	15.6	13.8	**20.0**	**21.2**	**20.4**
ASP of used system sales (EUR million)	2.8	5.5	3.9	**4.6**	**4.9**	**4.8**

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Net sales decreased by EUR 814 million or 21.6 percent from EUR 3,768 million in 2007 to EUR 2,954 million in 2008. The decrease in net sales mainly relates to a decrease in net system sales of EUR 834 million, from EUR 3,351 million in 2007 to EUR 2,517 million in 2008 mainly attributable to a lower number of systems shipped (-41.9 percent), partly offset by an increased ASP (+29.5 percent). Net service and field option sales increased from EUR 417 million in 2007 to EUR 437 million in 2008.

The number of systems shipped decreased by 41.9 percent from 260 systems in 2007 to 151 systems in 2008. The year 2008 was characterized by significant overall economic uncertainty fuelled by the financial and economic crisis. This led to lower overall semiconductor end-demand. Against this background our customers started to re-assess their strategic alliances and their investments to match production capacity to end-demand, resulting in a delay of non-leading-edge production capacity additions. While lithography equipment buyers reduced standard production capacity, their willingness to invest in leading-edge immersion technology, however, remained strong as this technology enables lithography equipment buyers to reduce their costs aggressively.

The ASP of our systems increased by 29.5 percent from EUR 12.9 million in 2007 to EUR 16.7 million in 2008. This increase was mainly driven by a change in product mix reflecting the continued shift in market demand to our leading-edge technology systems (as customers continued their ramp-up of volume manufacturing with our leading-edge immersion systems for 45 nm Flash and 55 nm DRAM) with higher ASPs driven by the shrink roadmaps of our customers.

From time to time, ASML repurchases systems that it has manufactured and sold and, following factory-rebuild or refurbishment, resells those systems to other customers. This repurchase decision is mainly driven by market demand for capacity expressed by other customers and not by explicit or implicit contractual arrangements relating to the initial sale. The number of used systems sold in 2008 increased to 36 from 25 in 2007, reflecting increased demand for older systems to produce less complex ICs following the lower overall semiconductor end-demand than anticipated. The ASP for used systems increased from EUR 3.9 million in 2007 to EUR 4.8 million in 2008, reflecting a further shift from our older PAS 2500 towards our newer PAS 5500 family and TWINSCAN family.

Through 2008, 17 of the top 20 chipmakers worldwide, in terms of semiconductor capital expenditure, were our customers. In 2008, sales to the largest customer accounted for EUR 754 million, or 25.5 percent of our net sales. In 2007, sales to the largest customer accounted for EUR 818 million, or 21.7 percent of our net sales.

Gross profit decreased from EUR 1,550 million or 41.1 percent of net sales in 2007 to 1,016 million or 34.4 percent of net sales in 2008. Gross margin was negatively impacted by restructuring and impairment charges (-4.6 percent), by capacity losses consistent with lower production levels (-4.3 percent) and by a changed product mix (-0.8 percent) partly offset by increased ASPs (1.7 percent) and decreased cost of goods (1.9 percent) reflecting the results of our continuous cost-of-goods reduction programs.

We started 2008 with a systems backlog of 89 systems. In 2008, we booked orders for 115 systems, received order cancellations or push-outs beyond 12 months of 12 systems and recognized sales for 151 systems. This resulted in a systems backlog of 41 systems as of December 31, 2008. The total value of our systems backlog as of December 31,

2008 amounted to EUR 755 million with an ASP of EUR 18.4 million, compared with a systems backlog of EUR 1,697 million with an ASP of EUR 19.1 million as of December 31, 2007.

Research and development costs

R&D costs (net of credits) increased by EUR 30 million or 6.2 percent from EUR 486 million in 2007 to EUR 516 million in 2008. This increase reflects continued investment in technology in 2008 through investments in the development of enhancements of the next generation TWINSCAN systems based on immersion, double patterning and EUV.

Amortization of in-process R&D costs of EUR 23 million in 2007 relates to a one-off charge related to the Brion acquisition.

Selling, general and administrative costs

SG&A costs decreased by 5.9 percent from EUR 226 million in 2007 to EUR 212 million in 2008. In anticipation of the lower sales level we reduced SG&A costs.

Net interest income

Net interest income decreased from EUR 33 million in 2007 to EUR 23 million in 2008. Our interest income relates to interest earned on our cash and cash equivalents. In 2008 interest income decreased mainly as a result of a lower average cash balance and slightly lower interest rates. While operating cash flows remained positive, the average cash balance decreased mainly as a result of the share buyback programs implemented in the fourth quarter of 2007 and in the first quarter of 2008, the dividend paid in 2008 and cash used for capital expenditures.

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Income taxes

Income taxes represented -4.1 percent of income before taxes in 2008, compared to 20.9 percent in 2007. The decrease in income taxes in 2008 is mainly related to three main items on which we reached agreement with the Netherlands tax authorities. These items are the treatment of taxable income related to ASML s patent portfolio, the valuation of intellectual property rights acquired in the past against historical exchange rates, and the treatment of taxable income related to a temporarily depreciated investment in ASML s United States subsidiary, all of which had a favorable impact on the Company s effective tax rate. As a result of these three items, ASML recognized exceptional tax income of approximately EUR 70 million in 2008.

Foreign Exchange Management

See Item 3.D. Risk Factors, Fluctuations in Foreign Exchange Rates Could Harm Our Results of Operations , Item 11 Quantitative and Qualitative Disclosures About Market Risk and Note 3 to our consolidated financial statements.

New U.S. GAAP Accounting Pronouncements

In June 2009, the FASB issued ASC 105 Generally Accepted Accounting Principles . ASC 105 establishes the FASB Accounting Standards Codification (Codification) as the single source of authoritative generally accepted accounting principles recognized by the FASB to be applied by nongovernmental entities. All of its content carries the same level of authority, effectively superseding FASB Statement 162 and modifying the GAAP hierarchy to include only two levels of GAAP: authoritative and non-authoritative. The Codification is effective for financial statements issued for interim and annual periods ending after September 15, 2009. The adoption of ASC 105 did not have any impact on our consolidated financial statements, but resulted in the update of all references to accounting guidance in this Form 20-F to refer to the new Codification.

In 2009 ASML has adopted ASC 820, Fair Value Measurements . The ASC defines fair value, provides guidance on how to measure assets and liabilities using fair value and expands disclosures about fair value measurements. The adoption of ASC 820 did not have any impact on our consolidated statements of operations, but resulted in additional disclosures to the Company s consolidated financial statements; see Note 2, Fair Value Measurements for more information.

In April 2009, the FASB issued ASC 820-10-65-4, Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly . This ASC provides guidelines for making fair value measurements more consistent with the principles presented in ASC 820, Fair Value Measurements . The ASC relates to determining fair values when there is no active market or where the price inputs being used represent distressed sales. It reaffirms the objective of fair value measurement to reflect how much an asset would be sold for in an orderly transaction (as opposed to a distressed or forced transaction) at the date of the financial statements under current market conditions. Specifically, it reaffirms the need to use judgment to ascertain if a formerly active market has become inactive and in determining fair values when markets have become inactive. The ASC is effective for financial statements issued for fiscal years and interim periods beginning after June 15, 2009 and should be applied prospectively. We are currently assessing the impact that this ASC may have on the Company s consolidated financial statements.

In June 2009, the FASB issued ASC 810 (Statement 167, Amendments to FASB Interpretation No. 46(R)). This ASC changes the way in which a company determines whether or not an entity that is insufficiently capitalized or is not controlled through voting (or similar rights) should be consolidated. The determination of whether a company is required to consolidate an entity is based on, among other things, an entity s purpose and design and its ability to direct the activities of the entity that most significantly impact the entity s economic performance. This ASC is effective for fiscal years and interim periods beginning after November 15, 2009. We are currently assessing the impact that this ASC may have on the Company s consolidated financial statements.

In September 2009, the EITF reached final consensus on Accounting Standards Update (ASU) 2009-13, Revenue Arrangements with Multiple Deliverables . ASU 2009-13 amends the current guidance on arrangements with multiple deliverables (ASC 605-25) to (1) eliminate the separation criterion that requires entities to establish objective and reliable evidence of fair value for undelivered elements, (2) establish a selling price hierarchy to help entities allocate arrangement consideration to the separate units of account (i.e. separate elements of the sales agreement), (3) require the relative selling price allocation method for all arrangements (i.e., eliminate the residual method), and (4) significantly expand required disclosures. The final consensus is effective for financial years beginning after June 15, 2010. We are currently assessing the impact that ASU 2009-13 will have on the Company s consolidated financial statements.

In September 2009, the EITF reached final consensus on ASU 2009-14, Certain Revenue Arrangements that include Software elements. ASU 2009-14 amends the scoping guidance for software arrangements (ASC 985-605) to exclude tangible products that contain software elements and non-software elements that function together to interdependently deliver the product s essential functionality. ASU 2009-14 also provides considerations and examples for entities applying this guidance.

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This issue will be effective prospectively for new or materially modified agreements entered into in financial years beginning on or after June 15, 2010. We are currently assessing the impact that ASU 2009-14 will have on the Company s consolidated financial statements.

B. Liquidity and Capital Resources

ASML generated cash from operating activities of EUR 701 million, EUR 281 million and EUR 98 million in 2007, 2008 and 2009, respectively. The primary components of cash provided by operating activities in 2009 were cash inflows reflecting the net loss of EUR 151 million which was more than offset by non-cash expense items such as depreciation (EUR 140 million), inventory obsolescence (EUR 87 million) and cash inflows as a result of changes in assets and liabilities (EUR 36 million). The changes in assets and liabilities relate to higher income taxes payable of EUR 71 million, lower accounts receivable of EUR 98 million, lower other assets of EUR 5 million, higher accounts payable of EUR 10 million and higher accrued liabilities of EUR 10 million, which are partly offset by higher inventories of EUR 158 million.

ASML used EUR 98 million for investing activities in 2009 and EUR 260 million in 2008 (2007: EUR 362 million). The majority of the 2009 and 2008 expenditures were attributable to the finalization of the first part of the construction of the new production facilities in Veldhoven. Further, the 2008 expenditures also included the finalization of the construction of ACE. The 2007 expenditures included EUR 188 million for the Brion acquisition.

Net cash used in financing activities was EUR 73 million in 2009 compared to EUR 184 million in 2008 (2007: EUR 715 million). In 2009 net cash used in financing activities included EUR 86 million as a result of the dividend payment and EUR 11 million cash inflow from the issuance of shares in connection with the exercise and purchase of employee stock options. In 2008, cash used by financing activities mainly included EUR 108 million for our dividend payment, EUR 88 million for share buyback programs and EUR 11 million cash inflow from the issuance of shares in connection with the exercise and purchase of employee stock options. In 2007, cash used in financing activities included EUR 1,372 for share buyback programs, partly offset by EUR 594 million of net proceeds from the issuance in June 2007 of a Eurobond.

ASML s principal sources of liquidity consist of EUR 1,037 million of cash and cash equivalents as of December 31, 2009, EUR 700 million of available credit facilities as of December 31, 2009 and expected future cash-flows from operations.

The EUR 700 million of available credit facilities consist of two separate facilities: a EUR 500 million credit facility and a EUR 200 million loan facility. The EUR 500 million credit facility contains a restrictive covenant that the Company maintains a minimum financial condition ratio, calculated in accordance with a contractually agreed formula. ASML was in compliance with the covenant as of December 31, 2009 and December 31, 2008. The EUR 200 million loan facility is related to the Company s EUV investment efforts, and was entered into in 2009 with the European Investment Bank. This loan can be drawn in tranches until October 2010. It is repayable in annual installments four years after drawdown, with final repayment seven years after drawdown. This facility contains a covenant that restricts the maximum indebtedness. ASML was in compliance with the covenant as of December 31, 2009. ASML does not expect any difficulty in continuing to meet these covenant requirements. For further details of our credit facilities, see Note 14 to our consolidated financial statements.

In addition to cash and available credit facilities, from time to time we may raise additional capital in debt and equity markets. Our liquidity needs are affected by many factors, some of which are based on the normal ongoing 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 the liquidity provided by existing cash balances, are sufficient to satisfy our requirements in the foreseeable future.

We expect that our capital expenditures (purchases of property, plant and equipment) in 2010 could be approximately EUR 100 million, in line with 2009 capital expenditures. Capital expenditures in 2010 will mainly consist of investments in capacity expansions. We expect to finance 2010 capital expenditures out of our cash flow from operations and available cash and cash equivalents.

As general strategy we seek to maintain our strategic target level of cash and cash equivalents between EUR 1.0 and 1.5 billion. To the extent that our cash and cash equivalents exceed this target and there are no investments opportunities that we wish to pursue, we will consider returning excess cash to our shareholders, through share buybacks, dividends or capital repayment.

We have repayment obligations in 2017, amounting to EUR 600 million, on our 5.75 percent senior notes due 2017. We currently intend to fund any future repayment obligations primarily with cash on hand and cash generated through operations. A description of our senior bond and lines of credit is provided in Note 14 to our consolidated financial statements.

See Notes 3 and 14 to our consolidated financial statements for discussion of our funding, treasury policies and our long-term debt.

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C. Research and Development, Patents and Licenses, etc.

Research and Development
See Item 4.B. Business Overview, Research and Development and Item 5.A. Operating Results .

Intellectual Property Matters
See Item 3.D. Risk Factors, Defending Against Intellectual Property Claims by Others Could Harm Our Business and Item 4.B. Business Overview, Intellectual Property .

D. Trend Information
Despite the financial and economic crisis, which has led to lower overall semiconductor end-demand, 2009 ended with improved sales and strong bookings, as the semiconductor business recovers, driven by technology buys from the DRAM memory market segments and technology and capacity buys from major Foundry customers.

The following table sets forth our systems backlog as of December 31, 2008 and 2009.

Year ended December 31	2008	2009
New systems backlog (in units)	33	**62**
Used systems backlog (in units)	8	**7**
Total systems backlog (in units)	41	**69**
Value of new systems backlog (EUR million)	719	**1,790**
Value of used systems backlog (EUR million)	36	**63**
Total value of systems backlog (EUR million)	755	**1,853**
ASP of new systems backlog (EUR million)	21.8	**28.9**
ASP of used systems backlog (EUR million)	4.5	**9.0**
ASP of total systems backlog (EUR million)	18.4	**26.8**

Our systems backlog includes only system orders for which written authorizations have been accepted and shipment dates within 12 months have been assigned. Historically, orders have been subject to cancellation or delay by the customer. Due to possible customer changes in delivery schedules and to cancellation of orders, our systems backlog at any particular date is not necessarily indicative of actual sales for any succeeding period.

The significant increase in the total value of the systems backlog reflects accelerated technology investments in the DRAM memory and Foundry segments after a nine month period ended June 28, 2009 of very low capital spending. This recovery mainly supports new IC product introductions instead of an overall significant wafer capacity increase. Of our backlog, 49 units are for new immersion systems, including 17 advanced NXT:1950i scanners.

We expect that shipments will continue to grow in the first half of 2010, with the first quarter somewhat restricted, due to long equipment industry production lead times and new product introduction challenges, followed by a much higher second quarter. ASML expects first quarter 2010 net sales of approximately EUR 700 million, and gross margin of approximately 40 percent. R&D expenditures are expected to be approximately EUR 120 million net of credits and SG&A costs are expected to be approximately EUR 40 million.

As a result of our continued investments in R&D, we have been able to ramp up our new mid- and top-range platforms, respectively the XT:1950Hi and the NXT:1950i scanners. In parallel, we are progressing with our next generation EUV technology, as system integration and source performance development confirms shipments of the first pre-production systems in the second half of 2010.

We ended a challenging year, having generated cash from operations, set up a more efficient cost structure and built a strong product portfolio.

The trends discussed in this Item 5.D. Trend information are subject to risks and uncertainties. See Part I Special Note Regarding Forward Looking Statements .

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E. Off-Balance Sheet Arrangements

We have various contractual obligations, some of which are required to be recorded as liabilities in our consolidated financial statements, including long- and short-term debt. Other contractual arrangements, namely operating lease commitments and purchase obligations, are not generally required to be recognized as liabilities on our consolidated balance sheets but are required to be disclosed.

Variable interest entities

In December 2003, the FASB issued ASC 810 Consolidation of Variable Interest Entities . Under this ASC, an enterprise must consolidate a variable interest entity if that enterprise has a variable interest (or combination of variable interests) that will either absorb a majority of the entity s expected losses if they occur, or receive a majority of the entity s expected residual returns if they occur.

In 2003, ASML moved to its current Veldhoven headquarters. We lease these headquarters for a period of 15 years from an entity (the lessor) that was incorporated by a syndicate of three banks (shareholders) solely for the purpose of leasing this building. The lessor s shareholders equity amounts to EUR 1.9 million. The shareholders each granted a loan of EUR 11.6 million and a fourth bank granted a loan of EUR 12.3 million to the lessor. ASML provided 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 pre-determined price of EUR 24.5 million, or during the lease at the book value of the assets. The total assets of the lessor entity amounted to approximately EUR 54 million at inception of the lease.

ASML believes that it holds a variable interest in this entity and that the entity is a variable interest entity (VIE) because it is subject to consolidation in accordance with the provisions of paragraph 5 of ASC 810. The total equity investment at risk is approximately 3.6 percent of the lessor s total assets and is not considered and cannot be demonstrated, qualitatively or quantitatively, to be sufficient to permit the lessor to finance its activities without additional subordinated financial support provided by any parties, including the shareholders.

ASML has determined that it is not appropriate to consolidate the VIE as it is not the primary beneficiary. To make this determination, the expected losses and expected residual returns of the lessor were allocated to each variable interest holder based on their contractual right to absorb expected losses and residual returns. The analysis of expected losses and expected residual returns involved determining the expected negative and positive variability in the fair value of the lessor s net assets exclusive of variable interests through various cash flow scenarios based upon the expected market value of the lessor s net assets. Based on this analysis, ASML determined that other variable interest holders will absorb the majority of the lessor s expected losses, and as a result, ASML is not the primary beneficiary.

ASML s maximum exposure to the lessor s expected losses is estimated to be approximately EUR 5.4 million.

The resulting lease obligation is included in the line Operational Lease Obligations in the table of Item 5.F. Tabular Disclosure of Contractual Obligations .

F. Tabular Disclosure of Contractual Obligations

Our contractual obligations as of December 31, 2009 can be summarized as follows:

Payments due by period (In thousands)	Total EUR	Less than 1 year EUR	1-3 years EUR	3-5 years EUR	After 5 years EUR
Long Term Debt Obligations, including interest expenses[1]	**939,102**	34,514	69,000	69,000	766,588
Operating Lease Obligations	**130,374**	33,077	43,150	27,912	26,235
Purchase Obligations	**1,431,247**	1,388,902	40,985	788	572
Unrecognized Tax Benefits	**133,270**	8,535	41,544	35,699	47,492
Total Contractual Obligations	**2,633,993**	1,465,028	194,679	133,399	840,887

1 See Note 14 to the consolidated financial statements for the amounts excluding interest expenses.

Long-term debt obligations relate to interest payments and the redemption of the principal amount of the Eurobond. See Note 14 to the consolidated financial statements.

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Operating lease obligations include leases of equipment and facilities. Lease payments recognized as an expense were EUR 46 million, EUR 43 million and EUR 39 million for the years ended December 31, 2007, 2008 and 2009, respectively.

Several operating leases for our buildings contain purchase options, exercisable at the option of the Company at the end of the lease, and in some cases, during the term of the lease. The amounts to be paid if ASML should exercise these purchase options at the end of the lease can be summarized as of December 31, 2009 as follows:

Purchase options due by period	**Total**	**Less than 1 year**	**1-3 years**	**3-5 years**	**After 5 years**
(In thousands)	**EUR**	EUR	EUR	EUR	EUR
Purchase options	**55,736**		8,250	8,999	38,487

Purchase obligations include purchase commitments with vendors 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. If not, the general terms and conditions of the agreements relating to the major part of the Company s purchase commitments as of December 31, 2009 contain clauses that enable ASML 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 ASML has agreed with its supply chain partners give ASML additional flexibility to adapt its purchase obligations to its requirements in light of the inherent cyclicality of the industry in which the Company operates. The Company establishes a provision for cancellation fees when it is probable that the liability has been incurred and the amount of cancellation fees is reasonably estimable.

Unrecognized tax benefits relate to a liability for uncertain tax positions. See Note 18 to the consolidated financial statements.

G. Safe Harbor

See Part I Special Note Regarding Forward-Looking Statements .

Item 6 Directors, Senior Management and Employees

A. Directors and Senior Management

The members of our Supervisory Board and our Board of Management are as follows:

Name	Title	Year of Birth	Term Expires
Arthur P.M. van der Poel[1,3,4]	Chairman of the Supervisory Board	1948	2012
Jos W.B. Westerburgen[2, 3]	Member of the Supervisory Board	1942	2011
Fritz W. Fröhlich[1]	Member of the Supervisory Board	1942	2012
Ieke C.J. van den Burg[2]	Member of the Supervisory Board	1952	2013
OB Bilous[3,4]	Member of the Supervisory Board	1938	2012
William T. Siegle[4]	Member of the Supervisory Board	1939	2011
Pauline F.M. van der Meer Mohr[2]	Member of the Supervisory Board	1960	2013

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