MASTERPOINT GROUP OF FUNDS

Research Report
Nov - 28 - 2024
ASML Holding N.V.: ASML

Name	ASML Holding N.V.
CEO	Mr. Christophe D. Fouquet
Website	www.asml.com
Sector	Semiconductors and Semiconductor Equipment
Year Founded	1984

Profile	
Market Cap	$280.53B
EV	$280.22B
Shares Out	393.03M
Revenue	€26.24B
Employees	42,372
Margins	
Gross	51.15%
EBITDA	33.79%
Operating	30.72%
Pre-Tax	31.52%
Net	26.4%
FCF	10.94%
Returns (5Yr Avg)	
ROA	18.84%
ROTA	59.85%
ROE	53.93%
ROCE	35.08%
ROIC	23.26%

Valuation (TTM)	
P/E	38.54
P/B	16.5
EV/Sales	10.1
EV/EBITDA	29.89
P/FCF	92.4
EV/Gross Profit	19.75
Valuation (NTM)	
Price Target	$921.94
P/E	29.17
PEG	-9.61
EV/Sales	8.23
EV/EBITDA	23.27
P/FCF	31.39
Financial Health	
Cash	€4,984.5M
Net Debt	-€292.3M
Debt/Equity	0.29
EBIT/Interest	52.78

Growth (CAGR)	
Rev 3Yr	13.64%
Rev 5Yr	19.15%
Rev 10Yr	15.5%
Dil EPS 3Yr	10.01%
Dil EPS 5Yr	26.98%
Dil EPS 10Yr	17.4%
Rev Fwd 2Yr	8.29%
EBITDA Fwd 2Yr	10.18%
EPS Fwd 2Yr	8.23%
EPS LT Growth Est	17.37%
Dividends	
Yield	0.91%
Payout	9.94%
DPS	€2
DPS Growth 3Yr	-19.46%
DPS Growth 5Yr	-11.09%
DPS Growth 10Yr	11.11%
DPS Growth Fwd 2Yr	11.38%

- YTD: -11.4%
- 52w Low: 645.45
- 52w High: 1110.09
- 5y High: 1110.09 (ATH)

Investment strategy category: Value in compounding power
Position goal: Buy & hold for renewed growth
Buy trades: Hold at current level, buy on improved bookings and revenue
Sell trades: Cautious if break 564-645, cautious if bookings worsen

Opportunity

This year ASML stock has seen a 35% correction from its high, sending valuations to much lower levels than recent years' average. While the chips industry is experiencing consolidation, the Company remains a monopoly in supplying the must-have machines to produce advance chips, and to gain a competitive advantage in an AI spending boom. The Company is also launching its next generation EUV machines, further cementing its technological edge. **It is expected that revenue and bookings shall improve after current consolidation period, and be reflected significantly in 2H25 and in 2026**.

Risk Factors

1. **China**: The United States on 2nd Dec launched its third clampdown in three years on China's semiconductor industry. The Company expects sales from China to fall from highs of 50% this year to 20% in 2025. There is also concern that if restrictions tightens further under the new administration, alternatives could emerge in China and become structural competition to ASML in the long term.
2. **Bifurcation**: The chips industry is experiencing bifurcation between the AI domain prospering, and everything else slowing down. Demand has centralized around Nvdia's offerings, while the rest of the industry has not seen meaningful uptick in sales in 2024. The trend could continue in the near term.
3. **Slower Outlook**: The Company cut 2025 financial guidance in mid-Oct, citing weakness in markets other than AI, and delayed orders. There is general difficulties in chips manufacturers to fulfil capacity, and before the rest of the industry comes up with new solutions to match offerings to demand, and in doing so enter the next phase of CapEx, demand for equipment could remain sluggish near term.
4. **Litigation**: The Company is being sued by shareholders for misleading statements to the market. *Cont'd*

Main investment assumptions

1. **Continued monopolistic advantage: *It is expected that the Company's monopoly in EUV lithography shall continue, and demand shall continue to center around its technology.***

- ASML is the world's only company that owns the technology Extreme Ultraviolet (EUV) lithography.
- The Company is the sole supplier of EUV lithography machines, effectively owns 100% of the market.
- It also has about 90% market share of the older Deep Ultraviolet (DUV) lithography segment.
- The Company is also developing next generation EUV lithography 'High NA' systems (EXE), and expects the EXE platform to "support high-volume chip manufacturing in 2025-2026".
- It has shipped its first High NA system to Intel in Dec 2023, and the second High NA system has been completely assembled in October this year, and expects revenue recognition for two systems in 24Q4.
- The Company states that it has also received another 10 to 20 orders for the High NA system, with TSMC to receive delivery by end of 2024 and Samsung to receive delivery by 25Q1.
- Given continued demand for EUV machines (albeit slower) and documented demand for next generation High NA EUV systems, it is believed that the Company's monopolistic advantage shall continue, and will be well positioned for the next growth phase of AI induced demand.

2. **Continued CapEx from biggest spenders: It is expected that big tech will continue to spend big on AI infrastructure, having seen successful monetization of AI applications.**

- This AI induced boom has real applications, and the tech industry is racing to invest to stay ahead.
- Signs of returns from AI is emerging, with Amazon reporting triple-digit percentages growth in generative AI YoY, and "growing 3x faster" at similar stage of evolution than its fast growing AWS.
- Microsoft also reports that its AI business is on track to contribute about US$10 bn to its annual revenue, and become "the fastest business in our history to reach this milestone".
- Alphabet reported a 35% increase in cloud revenue to US$11.4 bn, and program requests to its generative AI app Gemini increasing 14x.
- According to S&P data, in 24Q3, Amazon grew CapEx 44% YoY, Alphabet grew CapEx 35% YoY, Microsoft grew CapEx 34% YoY, and Meta grew CapEx 21% YoY. Overall CapEx from the four big tech totaled US$58.86 bn in 24Q3, up from US$36.95 bn a year earlier.
- According to Bloomberg Intelligence, big tech collective capital spending is expected to reach US$200 bn in 2025, up from US$165 bn in 2024, and up from an average of US$100 bn in 2021-2023.
- While big tech do not purchase directly from ASML, the company's technological advancement will be indirectly crucial to big tech's aspirations to improve AI infrastructure and output.
- The Company earlier reported that all leading manufacturers of logic chips (including TSMC, Samsung, Intel) and memory (Micron, Samsung, SK Hynix) have placed orders for the newer High NA system.

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Main investment assumptions (cont'd)

3. **A bigger pie: As AI applications grow, the need for chips grow (not shrink), and as an upstream (monopoly) manufacturer, it is expected that the Company's revenue shall grow along.**

- Data centers, warehouse automation, EVs, full self-driving, humanoid robots, AI laptops and phones etc., the world is expected to move towards more AI applications, and will need more chips.
- According to Fortune Business Insights, the global semiconductor market size was valued at US$ 611 bn in 2023, and is projected to grow from US$ 681 bn in 2024 to US$ 2062 bn by 2032 (CAGR 14.9%).
- Chipmakers who need to produce sub-10 nm chips can only purchase or use equipment from ASML.
- While the industry undergoes a period of consolidation, as a whole chipmakers will continue to spend on CapEx, and it's estimated that about a quarter of chipmakers' spending on equipment goes to ASML.
- The Company also generates close to a quarter of revenue from recurring 'installed base management sales', that is servicing and maintaining their machines, which can only be performed by the Company.
- The Company estimates that 95% of all lithography systems sold in the past 30 years are still active, with cumulative installed units growing from about 1,000 units in 2000 to more than 5,000 units in 2023.
- The Company projects that its installed base management sales will double by 2030 (CAGR 13%).

4. **Valuation: This year's roughly 40% correction from highs has lowered valuations to below recent years' average, and it is expected that this opens up an opportunity to invest in a market leading monopolistic franchise with mid-teens compounding power over time.**

- While the Company lowered 2025 guidance in mid-Oct, management reiterated annual sales projection to reach between €44 bn and €60 billion in 2030 (CAGR 7.2% - 12.9%), up from €27.6 bn in 2023, and about €28 bn in 2024.
- Gross margin is projected to increased from current 51% level to between 56% and 60% in 2030.
- Consensus EPS estimate is €23.298 for 2025 and €29.488 for 2026, with respective forward P/E to be about 27.4x and 21.7x. At this year's high the respective forward P/E was 45.4x and 35.9x.
- Average P/E for last 10 years was 34.1x and for last 5 years was 41.8x.
- With fundamentals converging with management's projection for higher revenue, and with management projecting a slight uptick in gross margin, earnings could be expected to move in line and higher.
- Using a modest 31x P/E would represent a 2026 target price of about $960, CAGR of about 19.7%.

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