

ASML Holding NV

NASDAQ: ASML

ASML Holding NV is a leading supplier of photolithography equipment used in semiconductor manufacturing.

The company specializes in developing advanced Extreme Ultraviolet lithography systems (EUV), enabling the production of smaller, faster, and more energy-efficient microchips for industries like consumer electronics, and AI.

Financials

Current Price : \$675.80

Target Share Price : \$795.53

Stop Loss : Moderate Risk Strategy (15%) -\$574.43

Investment

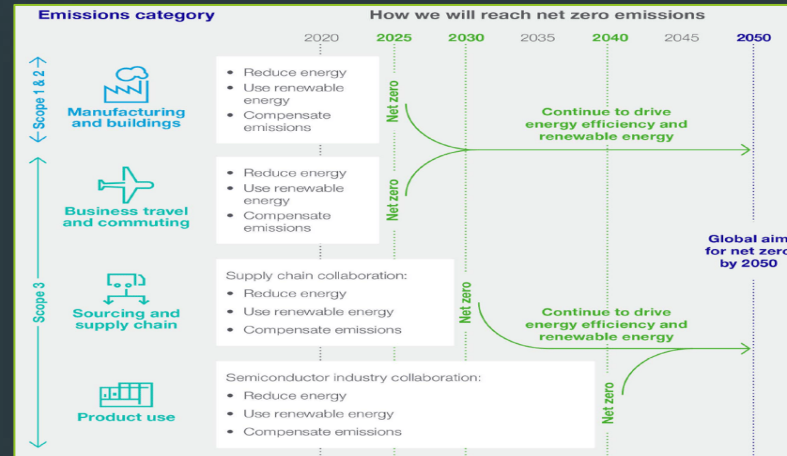
- Main Mechanics Used are:
- Relative Value Investing
- DCF modelling
- Comparative Market Analysis

Investment Amount roughly 3-5 % of the fund

Thesis: ASML's monopoly and unique cutting-edge technology will allow it to further its growth in the coming years and capitalize off current global need for EUV technology.

Monopoly:

- Built a Fortress in the market.
- At least a decade before concerns.
- High priority contracts with 800 suppliers.
- 84% of market made up of Samsung, Intel, and TSMC.



Future Goals:

- Maintain Triple-A ESG rating
- Break technological boundaries with High NA machines.
- Bring energy efficiency to globe

Growth & Stability:

- Their biggest concern is geopolitical issues between China and US.
- They are certain they can carry on strong through anything.
- Samsung and Intel's new advanced chip factories in US.

To Conclude:

- ASML is a titan of a company with a strong year on year return, and a company that aligns with our company goals.

Company Background

Business model Overview

- Businesses - Development & manufacturing of photolithographic machines.
- Has Operations in 60 locations across 16 countries and regions & 40747 workers over 40 years
- €44.30 Billion Assets under administration
- Clients - TSMC, Intel Corporation & Samsung Electronics Co Ltd
- Subsidiaries - Brion Technologies Inc, ASML MaskTools B.V, ASML US Inc

Current Leadership



Christophe Fouquet
President & Chief Executive Officer
2018-2028



Roger Dassen
Executive Vice President & Chief
Financial Officer 2018-2028

Key Financials

| (EUR) | SEP 2024 ⓘ | Y/Y CHANGE |
|--------------------|------------|------------|
| Revenue | 7.47B | ↑ 11.90% |
| Operating expense | 1.35B | ↑ 5.71% |
| Net income | 2.08B | ↑ 9.67% |
| Net profit margin | 27.81 | ↓ -1.97% |
| Earnings per share | 5.28 | ↑ 9.77% |
| EBITDA | 2.68B | ↑ 13.50% |
| Effective tax rate | 17.52% | — |

Everything par net profit Margin increased from 2023-2024
Due to cautious investment stances from customers - although
ASML machines will grow overall

"On October 16th, 2024 ASML announced that an interim dividend of €1.52 per ordinary share will be made payable on November 7, 2024"

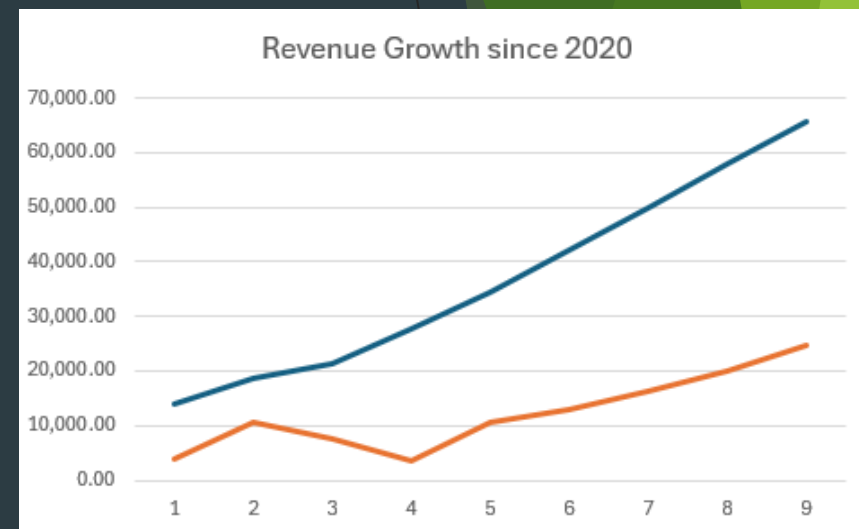
DCF evaluation & financials

| Implied Share Price Calculation | |
|---|-----------------|
| Sum of PV of FCF | 83895.86 |
| Growth Rate | 3.00% |
| WACC | 9.20% |
| TERMINAL Value | 352930.3 |
| PV of Terminal Value | 227287.6 |
| Enterprise Value | 311183.5 |
| (+) Cash | 7004.7 |
| (-) Debt | 4631.6 |
| (-) Minority Interest | 37.7 |
| Equity Value | 313518.9 |
| Diluted Shares Outstanding (mm) | 394.1 |
| Implied Share Price | 795.5312 |
| Current Share Price | 679.9 |
| % Change | 17.01% |
| Financial Modelling Prep | 716.95 |
| ASML - DCF model.xlsx | |
| Market Watch | 893.29 |
| https://www.marketwatch.com/investing/stock/asi | |

- Average Implied Share Price of: \$795.53 with a high of \$837.17 and low of \$769.61
- This follows the sector standard of ~15% increase over 5 years
- This is with basic DCF simple approximations following sector Trends e.g AI boom and company growth.
- I did quite a modest approach to my approximation

| | | Growth Rate | | | | |
|------|----------|-------------|----------|----------|----------|----------|
| | | 2.00% | 2.50% | 3.00% | 3.50% | 4.00% |
| wacc | 795.5312 | | | | | |
| | 7.70% | 837.1696 | 837.1696 | 837.1696 | 837.1696 | 837.1696 |
| | 8.20% | 822.9063 | 822.9063 | 822.9063 | 822.9063 | 822.9063 |
| | 8.70% | 809.0309 | 809.0309 | 809.0309 | 809.0309 | 809.0309 |
| | 9.20% | 795.5312 | 795.5312 | 795.5312 | 795.5312 | 795.5312 |
| | 9.70% | 782.3953 | 782.3953 | 782.3953 | 782.3953 | 782.3953 |
| | 10.20% | 769.6118 | 769.6118 | 769.6118 | 769.6118 | 769.6118 |

Consistent growth in both UFCF and Revenue from 2020-2028



All Company comparable suggest ASML Holding's position in the market it strong with high investor confidence and great potential for company growth

| Company Comparables | | Semiconductor Equipment | Semiconductors |
|---------------------------|-------|-------------------------|----------------|
| enterprise value to sales | 10.1 | 5.24 | 10.6 |
| Price to earnings | 38.39 | 27.25 | 35.46 |
| price to book | 16.43 | 8.1 | 7.38 |
| price to sales | 10.12 | 5.08 | 10.2 |

Risks & Mitigations

SWOT ANALYSIS

Strengths - Market Edge Over EUV systems, Technological Edge and Long-Term customer relationships

Weaknesses - Customer Concentration (Intel) , High operating Costs , Dependence on EUV systems & limited Product Diversification

Opportunities - growth of semiconductor technology, Governmental investment opportunities and Emerging markets

Threats - Geopolitical risks between US & China, Competitors such as Nikon and Canon, Economic downturns reducing spending on semiconductor equipment and supply shocks

| Target 2025 | Performance indicator | 2021 | 2022 | 2023 |
|------------------------|---|-------------------|-------------------|--------------------------|
| Net zero | Scope 1 – Direct emissions from fossil fuels in our operations (kt) | 19.3 | 17.3 | 19.2 |
| Net zero | Scope 2 – Indirect emissions from energy consumption (kt) [market-based] ² | 20.1 | 20.8 | 15.9 |
| Net zero (2040) | Scope 3 – Indirect emissions from total value chain (kt) ³ | 11,426.2 | 11,936.3 | 15,025.2 |
| | Total footprint (in kt)¹ | 11,465.6 | 11,974.4 | 15,060.3 |
| No target | Scope 3 CO ₂ e emissions intensity (per €m revenue) ³ | 0.61 | 0.56 | 0.55 |
| 1.016 | Scope 3 CO ₂ e emissions intensity (per €m gross profit) ³ | 1.165 | 1.116 | 1.060 |
| No target | Reduction in GHG emissions from projects (kt) | n/a | 2.6 | 1.6 |
| 5.1 | Products – NXE energy use per wafer pass (in kWh) | 8.3 (NXE:3600D) | 8.3 (NXE:3600D) | 7.7 (NXE:3600D) |
| No target | Products – NXT energy use per wafer pass (in kWh) ⁴ | 0.56 (NXT:1980E) | 0.55 (NXT:2100i) | 0.52 (NXT:1980Fi) |
| No target | Energy consumption (in TJ) | 1,689 | 1,633 | 1,729 |
| 100 TJ | Energy savings worldwide through projects (in TJ) ⁵ | 12.7 | 31.7 | 47.3 |
| 100% | Renewable electricity (of total electricity purchased) | 92% | 91% | 91% |
| (10)% | Energy consumption (NXE) (reduction in % of baseline 2018 1.4 MW) | (6)% (NXE:3600D) | (6)% (NXE:3600D) | (12)% (NXE:3600D) |
| No target | Throughput (in wph) (NXE) | 160 (NXE:3600D) | 160 (NXE:3600D) | 160 (NXE:3600D) |
| (60)% | Energy use per wafer pass (NXE) (reduction in % of baseline 2018) ⁶ | (35)% (NXE:3600D) | (35)% (NXE:3600D) | (40)% (NXE:3600D) |

Porter's 5 Forces

Threat of new Entries : Low

- High barrier of entry via R&D, capital and experience
- Dominance of current players (ASML's near-monopoly)
- Economics of scale from ASML make it hard for companies to beat on cost or efficiency

Bargaining Power of suppliers : Moderate

- Specialized Components are required such as lenses and precision machinery
- High Supplier dominance from companies like Carl Zeiss which provide EUV lenses and have considerable impact on ASML
- Mitigated through long term relationships/agreements with suppliers

Bargaining Power of Buyers : Moderate/High

- ASML has very few, large customers.
- While ASML control the EUV market, some customers have alternative high-end lithography systems
- High switching costs due to how deep rooted ASML's systems are integrated into their production process.

Threat of substitutes : Low

- No viable substitutes due to how advanced their tech is competitors focus on older tech DUV
- Unique technology and innovative pipeline solidify it's position against substitutes

Industry Rivalry : Low/Moderate

- Little direct competition due to large technological lead
- ASML's customers deeply rely on their systems
- Industry growth allows for competitors due to large space

ASML annual report 2023 Climate action and Energy efficiency

Questions

► Any questions?