

MITUXA

ASML: China Built a Machine. It Has Not Yet Built a Competitor.

China threatens ASML's local revenue. Valuation remains the more immediate investor risk.

MITUXA

ASML

AN EXCEPTIONAL MOAT UNDER NEW PRESSURE

China built a machine. It has not yet built a competitor.

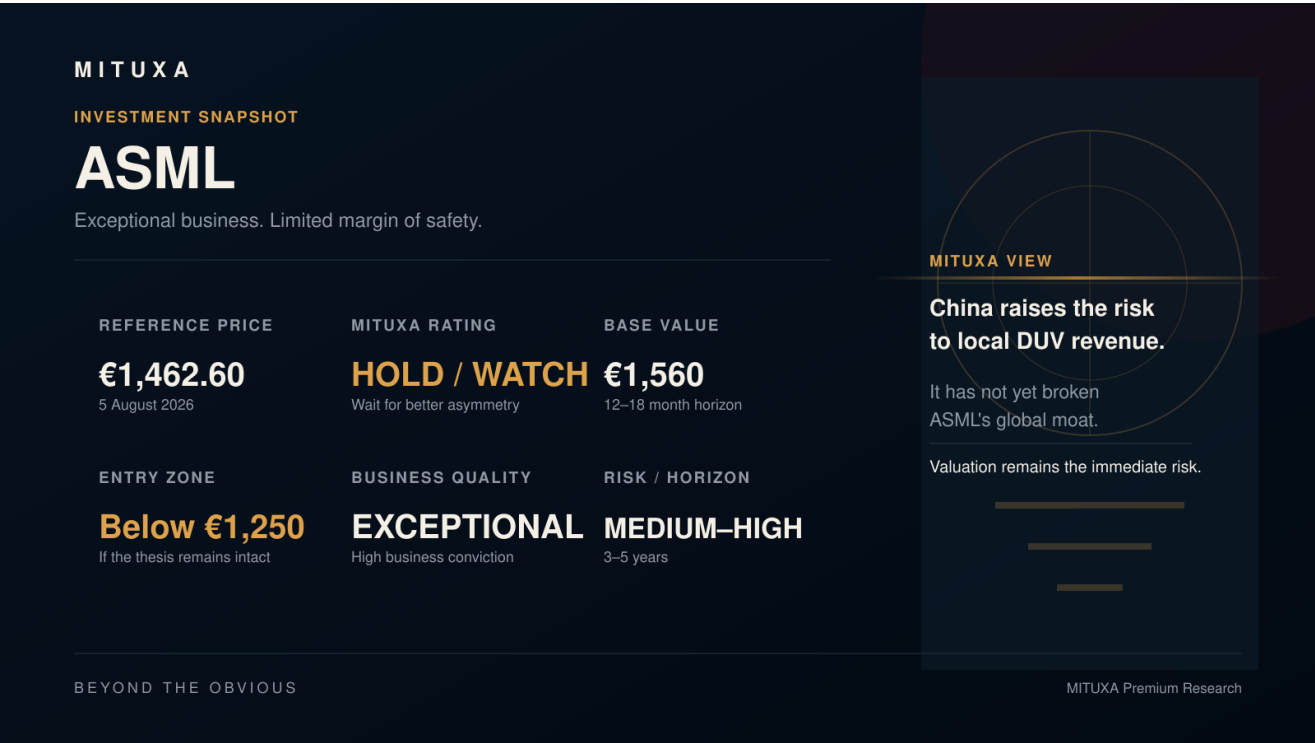
BEYOND THE OBVIOUS

PREMIUM RESEARCH · 5 AUGUST 2026

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Investment Snapshot



	MITUXA View
Reference price	EUR 1,462.60 on 5 August 2026
Rating	HOLD / WATCH
Investment horizon	3-5 years
Business quality	Exceptional
Risk	Medium-high
Conviction in the business	High
Conviction in the stock at the current price	Medium
Base value, 12-18 months	EUR 1,560
Disciplined entry zone	Below EUR 1,250, provided the thesis remains intact

MITUXA verdict: China increases the risk to ASML's domestic Chinese revenue. It does not yet demonstrate a commercially viable alternative for the global semiconductor industry. The more immediate risk for investors remains the price paid for an exceptional business.

Reported, Consensus and MITUXA View

Reported

- ASML generated EUR 32.7 billion in 2025 net sales, a 52.8% gross margin, EUR 9.6 billion in net income and EUR 24.73 in basic EPS.
- Free cash flow reached approximately EUR 9.1 billion, while R&D; spending was EUR 4.7 billion.
- China represented 29.1% of total 2025 sales. Management expects approximately 20% in 2026.
- First-half 2026 net sales reached EUR 18.1 billion.
- Q2 2026 net sales were EUR 9.3 billion, with net income of EUR 2.9 billion.
- ASML now expects EUR 43-45 billion of 2026 sales and a 54-56% gross margin.
- The company plans to increase both low-NA EUV and immersion DUV capacity by approximately 30% in 2027.

Consensus snapshot

The market expects the capacity expansion and AI investment cycle to lift earnings sharply through 2027 and 2028. At the 31 July consensus snapshot used by MITUXA, EPS estimates were approximately EUR 37.9 for 2026, EUR 51.9 for 2027 and EUR 66.8 for 2028.

These are estimates, not company guidance. They make the current valuation look progressively more reasonable only if ASML executes almost flawlessly.

MITUXA View

ASML remains one of the highest-quality industrial technology businesses in the world. The Chinese announcement raises the probability of revenue displacement inside China, but the public evidence is insufficient to conclude that a global competitor has emerged.

The stock is no longer priced at its recent peak, but the current price still offers limited protection against a cyclical, geopolitical or execution disappointment.

How ASML Won Before EUV

ASML was founded in 1984 as a joint venture between Philips and ASM International. It did not begin life as an inevitable monopoly. It had to win customers from better-established Japanese and American competitors.

The decisive architectural breakthrough was TWINSCAN.

Traditional lithography systems measured and positioned a wafer before exposing it. ASML's dual-stage architecture allowed one wafer to be exposed while the next was measured and aligned on a second stage. Instead of making every individual action incrementally faster, ASML allowed two critical operations to occur in parallel.

This mattered because chipmakers do not buy resolution in isolation. They buy production capacity and acceptable cost per functional chip.

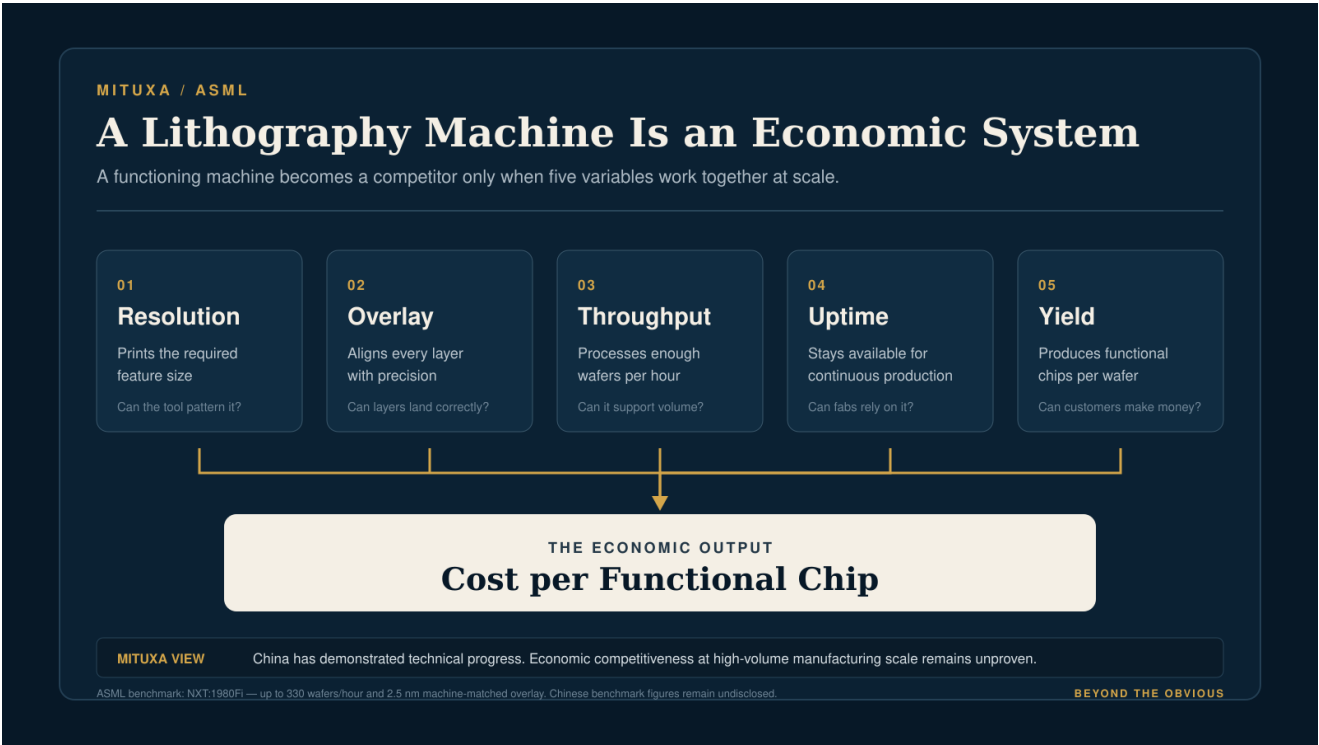
ASML later applied the same economic logic to immersion lithography. Placing ultra-pure water between the final lens and the wafer improved resolution, but the real challenge was controlling the water while the stage moved at high speed. Bubbles, droplets or contamination could reduce yield. Slowing the machine would make the engineering easier but destroy the economics.

ASML demonstrated imaging on its TWINSCAN AT:1150i prototype in 2003, announced the XT:1250i pre-production system later that year and moved to volume production with the XT:1700i platform in 2006.

EUV made the moat more visible. It did not create it.

Key takeaway: ASML became dominant by making advanced lithography economically viable, not merely technically possible. Any competitor must cross the same gap.

The Business Model



Where 2025 revenue came from

Economic engine	2025 revenue	Approx. weight	MITUXA interpretation
DUV systems	EUR 12.0bn	37%	Mature but indispensable across advanced and mature nodes
EUV systems	EUR 11.6bn	36%	Monopoly and primary technology-mix driver
Installed Base Management	EUR 8.2bn	25%	Recurring services, parts and upgrades
Metrology and Inspection	EUR 0.8bn	3%	Reinforces process control and system integration

The model contains two reinforcing loops:

- 1
- More installed systems → more services, parts and upgrades → more process knowledge.

- 2 More scale and cash flow → more R&D; → better productivity and precision → greater customer value.

Installed Base Management grew 26% in 2025. Every machine shipped expands the future service opportunity and deepens customer dependence on ASML's software, engineers, spare parts and upgrade roadmap.

The Obvious

The obvious narrative is simple:

China has begun producing immersion DUV scanners. Therefore, ASML has lost technological exclusivity and its moat has started to disappear.

The first sentence reflects a reported development. The conclusion does not yet have sufficient evidence behind it.

Reuters reported that state-backed Shanghai Aishengna Electronic Technology Group is leading the effort, with production targets of approximately five tools in 2026 and twenty in 2027. Initial systems are expected to go to SMIC, Hua Hong and CXMT.

However:

- the core information relies on anonymous sources;
- neither the manufacturer nor the customers have published qualification data;
- the systems still require testing;
- throughput, overlay, uptime, defectivity and production yield remain undisclosed;
- beginning production is not the same as qualifying for high-volume manufacturing.

The announcement proves that China's domestic lithography effort has progressed. It does not prove parity with ASML.

Beyond the Obvious

MITUXA / ASML

China Risk Is Not the Same as Global Moat Risk

The same technological progress can create two very different economic outcomes.

INSIDE CHINA

Revenue moat can erode

- Subsidized domestic tools do not need to match ASML globally to win local demand.
- "Good enough" performance can displace imports in mature-node applications.
- Policy, service access and strategic autonomy can outweigh pure technical superiority.

OUTSIDE CHINA

Global moat remains intact

- No public evidence yet of equivalent throughput, overlay, uptime and yield.
- Leading-edge fabs require a complete installed-base and service ecosystem.
- ASML still controls the critical path for advanced lithography outside China.

MITUXA VIEW

The first damage is likely to be geographic revenue loss—not the collapse of ASML's global technological monopoly.

Assessment based on publicly available evidence as of 5 August 2026. Chinese production benchmarks remain undisclosed.

BEYOND THE OBVIOUS

Inside China, economic logic is different

Outside China, a new supplier must compete with an entire production ecosystem. Leading chipmakers have spent years qualifying processes around ASML equipment. Their fabs rely on ASML software, metrology, field engineers, upgrades, spare parts and accumulated process knowledge.

Inside China, supply security changes the equation.

For a manufacturer exposed to export controls, the relevant cost is no longer just cost per wafer:

Relevant cost = cost per wafer + foreign supply-interruption risk + strategic value of autonomy.

A less productive domestic tool can be economically rational if the alternative is losing access to foreign machines, parts, software updates or technical support. Subsidies, guaranteed demand and national policy can keep an inferior platform alive long enough for it to improve.

This creates the central distinction:

Outside China, Aishengna is not yet a credible competitor. Inside China, it may not need to match ASML to take revenue from it.

China does not need to defeat ASML globally. It only needs a tool that is good enough for customers operating under political and supply constraints.

The Moat Is a System, Not a Patent

Moat layer	Why it is difficult to replicate	MITUXA durability
Dual-stage architecture	Measurement and exposure in parallel	High

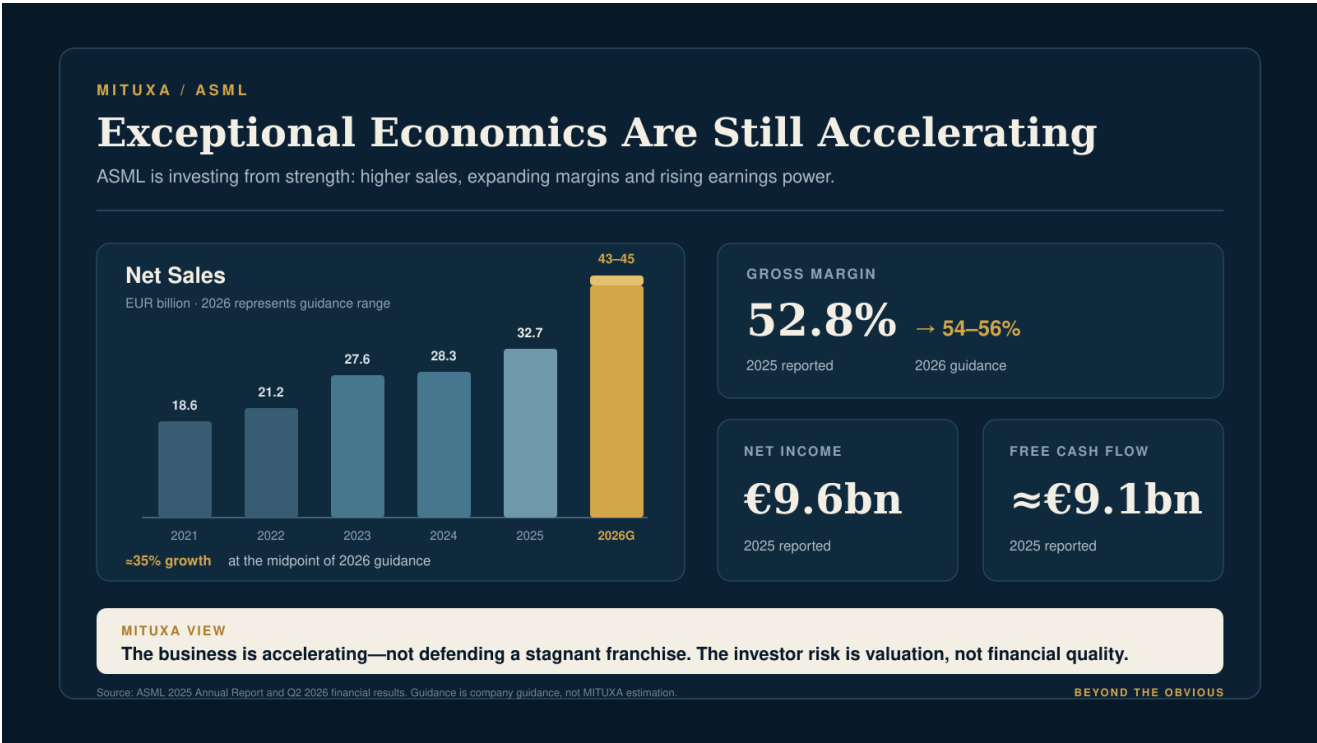
Moat layer	Why it is difficult to replicate	MITUXA durability
Optics and light sources	Highly specialised ZEISS, Cymer and supplier ecosystem	Very high
Overlay and process control	Decades of calibration, software and fab learning	Very high
Customer qualification	Production processes are optimised around each tool	High outside China
Installed base and service	Data, parts, upgrades and continuous support	High, but sanction-exposed
R&D; scale	EUR 4.7bn invested in 2025	High
EUV	Only commercial supplier at scale	Exceptional

The Chinese threat would become economically credible when a supplier demonstrates all of the following:

- sustained volume production rather than prototypes;
- throughput approaching current ASML systems;
- proven overlay, uptime and yield;
- reliable operation inside an independent high-volume fab;
- a service and spare-parts network;
- orders from customers outside a protected domestic market.

Until then, the development represents technological progression, not economic parity.

Financial Quality



Year	Sales	Gross margin	Operating margin	Basic EPS
2021	EUR 18.6bn	52.7%	36.3%	EUR 14.36
2022	EUR 21.2bn	50.5%	30.7%	EUR 14.14
2023	EUR 27.6bn	51.3%	32.8%	EUR 19.91
2024	EUR 28.3bn	51.3%	31.9%	EUR 19.25
2025	EUR 32.7bn	52.8%	34.6%	EUR 24.73
2026 guidance	EUR 43-45bn	54-56%	-	-

The numbers show a business accelerating rather than defending a stagnant franchise.

- Revenue at the midpoint of 2026 guidance would rise by approximately 35%.
- Gross margin is expected to improve despite the normalisation of Chinese sales.
- Strong AI-related logic and memory demand has increased customer commitments.
- Capacity expansion improves visibility but raises the cost of being wrong if the investment cycle slows.
- Services and upgrades reduce dependence on new-system shipments, but they do not eliminate cyclicity.

ASML has exceptional economics. Investors must still distinguish business quality from investment value.

A Second Risk: What If AI Needs Less Capital?

The Chinese machine is only one part of the debate. A deeper risk is that algorithmic efficiency reduces the amount of leading-edge hardware required for each unit of AI capability.

The bearish transmission mechanism is straightforward:

More efficient models → less compute per task → fewer advanced wafer starts → fewer fabs and lithography tools.

But efficiency can also increase total demand. Lower-cost intelligence can expand from hyperscale data centres into phones, vehicles, robots, factories and millions of enterprise workflows.

The bullish mechanism is therefore:

Lower cost per task → more users and applications → higher aggregate compute demand.

MITUXA View

- Bear case: efficiency improves faster than usage expands, weakening semiconductor capital expenditure.
- Base case: efficiency lowers cost, while wider adoption offsets most hardware savings.
- Bull case: a rebound effect causes total inference and device demand to grow faster than efficiency.

Beyond the Obvious: ASML can remain technologically indispensable while becoming less economically indispensable at the margin. Investors must analyse both possibilities separately.

China Exposure: Material, but Frequently Misstated

China represented 29.1% of ASML's total 2025 net sales, approximately EUR 9.5 billion. This group figure should not be confused with the higher percentage sometimes cited for system-sales geography alone.

Management expects China to represent approximately 20% of 2026 sales, as other regions accelerate and Chinese demand normalises.

The mix matters. EUV is already excluded from China, while advanced immersion DUV is subject to export controls. The business at greatest structural risk is therefore Chinese DUV, not ASML's global EUV monopoly.

One common 2030 argument assumes China will fall to 8-10% of group revenue and then removes half of that share. The arithmetic is simple; the underlying assumption is not.

If Chinese revenue remained close to EUR 9.5 billion:

ASML group sales	China weight
EUR 44bn	21.6%

ASML group sales	China weight
EUR 60bn	15.8%
EUR 80bn	11.9%
EUR 95bn	10.0%
EUR 119bn	8.0%

For China to fall to 8-10% without an absolute decline in Chinese revenue, ASML would need EUR 95-119 billion of group sales. That is well above the last official 2030 framework of EUR 44-60 billion, which ASML plans to update at its Capital Markets Day on 10 June 2027.

The prudent approach is to assign a much lower terminal value to new Chinese immersion DUV sales while preserving only part of service revenue and less advanced tools that remain legally accessible.

Valuation



What the current price requires

At EUR 1,462.60, ASML trades at approximately:

Estimate	EPS	Implied P/E
2026e	EUR 37.9	38.6x
2027e	EUR 51.9	28.2x
2028e	EUR 66.8	21.9x

The 2026 multiple is demanding. The 2027 multiple becomes defensible if ASML absorbs its additional capacity and sustains a gross margin above 55%. The market is paying in advance for that execution.

MITUXA scenarios - 12 to 18 months

Scenario	Probability	Main assumption	2027 EPS	Multiple	Value
Bear	25%	China restrictions, AI capex digestion, EUV delays	EUR 42	25x	EUR 1,050
Base	55%	2027 capacity absorbed, China contained, strong margins	EUR 52	30x	EUR 1,560
Bull	20%	AI and memory surprise, near-flawless execution	EUR 60	35x	EUR 2,100

Probability-weighted value: approximately EUR 1,540 per share.

This is only about 5% above the reference price before dividends. That expected return does not adequately compensate for a bear-case value near EUR 1,050.

Below EUR 1,250, an investor would pay approximately 24 times base-case 2027 earnings and obtain a more suitable margin of safety for a cyclical and geopolitically exposed asset.

Risks and Early Indicators

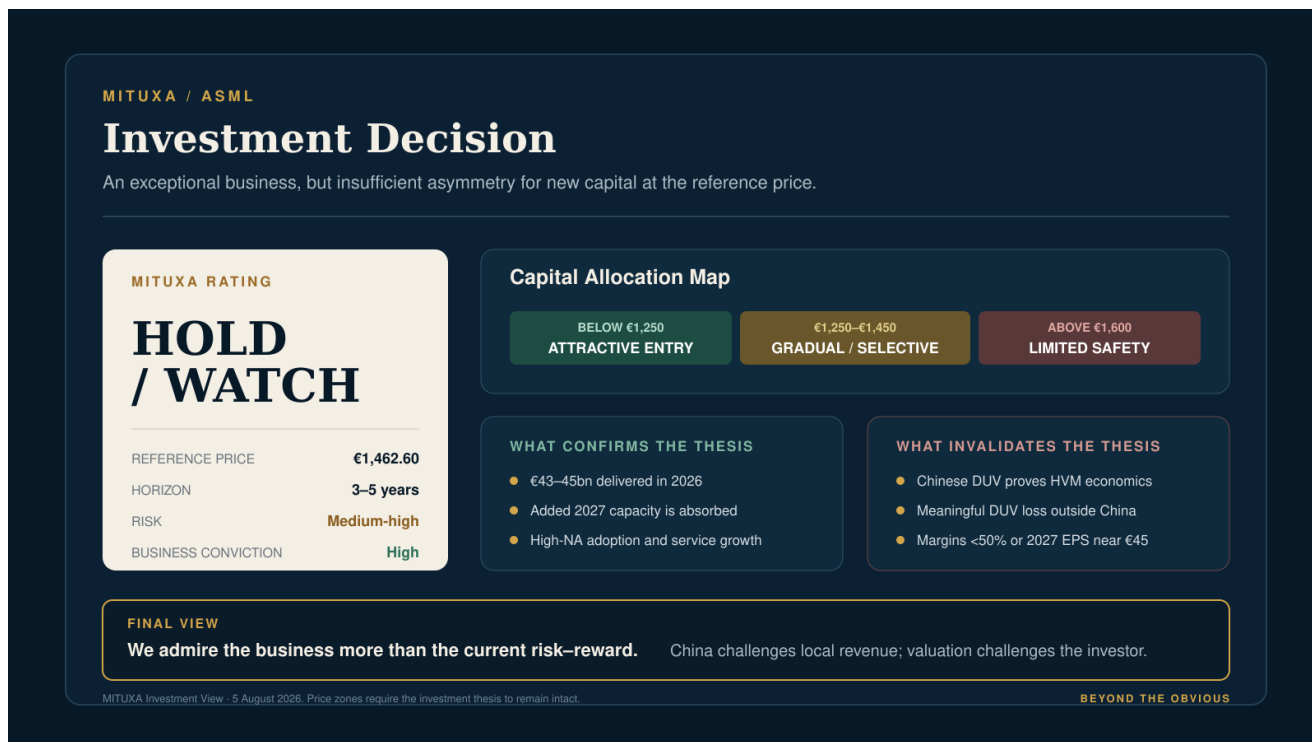
Risk	Probability	Impact	Early indicator
Additional China controls	Medium-high	High for Chinese DUV	Final legislation, Dutch licences and service restrictions
Chinese DUV qualified at scale	Medium	High in China; initially low elsewhere	Throughput, overlay, uptime, yield and fab utilisation
AI capex slowdown	Medium	High	TSMC, Samsung, Intel, SK Hynix and Micron plans
Valuation compression	High	High for shareholder return	Forward P/E and dependence on continual upgrades
Customer concentration	Medium	High	Fab delays and changes to node roadmaps
Critical-supplier constraints	Medium	High	ZEISS capacity, light sources and lead times
Alternative lithography paradigm	Low	Very high	Proven commercial process outside ASML's ecosystem

Conditions that would invalidate the thesis

MITUXA would reconsider the thesis if one or more of the following occurred:

- 1 A Chinese system demonstrates competitive throughput, overlay, uptime and yield in high-volume manufacturing.
- 2 ASML loses meaningful immersion DUV share outside China.
- 3 Multiple leading customers broadly delay EUV orders.
- 4 Gross margin falls below 50% for two quarters without a clearly temporary explanation.
- 5 New restrictions remove both sales and service revenue in China without capacity being absorbed elsewhere.
- 6 2027 EPS moves toward EUR 45 or below, making the present valuation excessive again.

Investment Decision



Rating: HOLD / WATCH

For existing shareholders: Hold, provided the position is not oversized and the investment horizon is three to five years. The Chinese announcement alone does not justify selling a company with an EUV monopoly, accelerating growth and exceptional cash generation.

For new capital: Wait for better asymmetry. Below EUR 1,250, the margin of safety becomes more attractive. Between EUR 1,250 and EUR 1,450, gradual purchases may be defensible only for investors with high tolerance for volatility. Above EUR 1,600, the margin of safety largely disappears without further earnings upgrades.

Catalysts

- Delivery of EUR 43-45 billion in 2026 revenue.
- Evidence that added 2027 capacity is fully absorbed.
- Commercial adoption of High-NA EUV.
- Continued Installed Base Management growth.
- Proof that Chinese competition remains confined to the domestic market.

Final View

The market reaction was greater than the likely near-term earnings impact. Five planned Chinese machines in 2026 do not compete with a platform combining 330 wafers per hour, nanometre precision, decades of process data and a global service network.

But dismissing the news would also be a mistake. China has capital, guaranteed demand, strategic motivation and the willingness to accept lower initial productivity. Its domestic DUV market is structurally at risk to ASML, whether through local substitution or decisions made in Washington and The Hague.

The MITUXA conclusion is therefore two-sided:

- 1 The Chinese competitor does not yet threaten ASML's global moat.
- 2 ASML's exceptional quality does not eliminate the risk of paying too much for its shares.

That is why the rating is HOLD / WATCH, not BUY. We admire the business more than the current risk-reward.

Sources

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- [ASML 2025 Annual Report](#)
- [ASML FY2025 results](#)
- [ASML Investor Day 2024](#)
- [ASML NXT:1980Fi specifications](#)
- [ASML history](#)
- [ASML - How immersion lithography saved Moore's Law](#)
- [Reuters - China starts production of home-grown immersion DUV tools](#)
- [Reuters - China's chip-tool push shows ASML caught in US-China squeeze](#)
- [Dutch government - advanced semiconductor equipment export controls](#)
- [H.R. 8170 - MATCH Act](#)

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