

DELTA OUTCOMES GLOBAL LEADERS / INVESTMENT STORY

Why We Own TSMC: The Foundry Behind the AI Buildout

Before an artificial-intelligence model can answer a question, someone has to build the cleanroom that makes its chips.

At SEMICON Taiwan in September, TSMC's own management described a construction programme without precedent in the company's history. The firm was building thirteen fabs in Taiwan and another five or six overseas. In the past it might have built four or five at a time. Even operating at several times that pace, the company was still struggling to meet customer demand.

That turns the AI boom from an abstract software story into a physical one. It needs precision tools, extraordinary engineering, specialist labour, stable electricity and large volumes of water. It also needs a manufacturer capable of turning the world's most advanced chip designs into billions of reliable components.

That manufacturer is Taiwan Semiconductor Manufacturing Company, better known as TSMC.

Computing is becoming infrastructure

Demand for computing has been growing for decades. Generative AI has accelerated it. Training and running increasingly capable models requires vast numbers of advanced processors, while smartphones, vehicles and industrial systems continue to demand their own specialised chips.

The constraint is no longer simply whether a chip can be designed. It is whether it can be manufactured at scale, with acceptable yields, on time and at a cost customers can bear.

TSMC's July revenue illustrates the pressure. Unaudited monthly revenue reached NT\$467.6 billion, 44.7% higher than a year earlier. Management now expects 2026 revenue to grow slightly above 40% in US-dollar terms. These are remarkable numbers for a company whose factories cost tens of billions of dollars and take years to qualify.

Yet this growth also raises the question at the centre of our Climate Action theme: can the digital economy deliver more useful computing without allowing its demand for power, water and materials to run unchecked?

What TSMC actually does

TSMC pioneered the dedicated semiconductor foundry model. It does not design branded processors for consumers. Instead, it manufactures chips designed by hundreds of customers.

That separation matters. A chip designer can concentrate on architecture and software without building a leading-edge factory. TSMC can spread the immense cost of process development and manufacturing across many customers and products.

Its factories turn silicon wafers into integrated circuits through thousands of tightly controlled steps. At each new process generation, transistors become smaller and more capable.



Advanced packaging then combines chips and memory into systems suitable for demanding applications such as AI accelerators.

Where it fits. TSMC sits primarily within Delta's Climate Action theme because more efficient semiconductor technology is one of the foundations of an increasingly electrified and data-intensive economy. Its chips also enable medical, industrial and scientific applications within Human Advancement. The classification is not a claim that semiconductor manufacturing is environmentally light. It is an investment question about whether TSMC can enable more computing per unit of resource while reducing the footprint of its own operations.

How the advantage becomes earnings

A large market is not enough. The company must have an advantage that converts demand into durable returns.

TSMC's advantage begins with process leadership, manufacturing yield and customer trust. At the leading edge, a technically sound design has little value if it cannot be produced reliably in high volumes. Each successful generation adds engineering knowledge, supplier coordination and customer experience that a competitor cannot quickly replicate.

Scale reinforces the advantage. In 2025 TSMC manufactured 12,682 products for 534 customers and shipped roughly 15 million twelve-inch-equivalent wafers. Its broad customer base helps fund research and factories that individual chip designers would struggle to justify alone. An ecosystem of design tools, intellectual property and packaging services makes it easier for customers to design for TSMC's processes - and more disruptive to move away.

That advantage is visible in the mix. In the second quarter of 2026, technologies of seven nanometres and below produced 77% of wafer revenue. High-performance computing contributed 66% of total revenue, up from 60% a year earlier. The new two-nanometre process was already 3% of wafer revenue during its ramp.

The resulting economics were exceptional. Second-quarter revenue was US\$40.2 billion, up 33.7% year on year. Gross margin reached 67.7% and operating margin 60.3%. Net income was NT\$706.6 billion, 77.4% higher than a year earlier. Management guided to US\$44.6–45.8 billion of third-quarter revenue.

Those margins are not guaranteed. New process ramps are expensive, overseas factories initially dilute profitability, and the investment cycle is intensifying. Free cash flow fell to NT\$287.4 billion in the quarter as capital expenditure rose faster than operating cash flow. Management increased 2026 capital-expenditure guidance to US\$60–64 billion. The financial test is therefore not just revenue growth. It is whether TSMC can continue earning attractive returns after funding the capacity customers require.

A financially strong business, not just a good story

A compelling theme means little if the company behind it cannot fund the scale of investment it now requires, year after year, through a cycle that is far from smooth. Before the AI narrative gets ahead of the numbers, we ask a simpler question: is this a genuinely well-run, profitable company? On the evidence, the answer is clearly yes - though, as with the environmental case above, the record includes a rough patch worth naming plainly rather than smoothing over.



Profitability. TSMC earns a high and rising return on the capital shareholders have invested in the business. Return on shareholders' equity - essentially, how much profit the company generates for every dollar shareholders have put in - has climbed from around 23% in 2023 to nearly 32% in 2025, and is forecast to move higher still as the current investment cycle matures. Operating margin has followed the same path, rising from around 43% to 49% over the same three years, with a broader measure of profitability holding near 68% throughout - levels that few capital-intensive manufacturers anywhere in the world sustain.

Earnings growth. Profit growth has been even more striking than the margin trend alone suggests. After a sharp dip in 2023, when a cyclical downturn in chip demand cut earnings by around a quarter, profit rebounded by 55% in 2024 and a further 38% in 2025 - in both years comfortably outpacing revenue growth of 34% and 32% respectively. That is the marker of a business becoming more profitable as it scales, not simply bigger: each additional dollar of revenue is converting into an even larger share of profit, provided the underlying return on the capital funding that growth holds up.

Shareholder returns. Over the five years to the end of 2025, TSMC's shares delivered a total return - share price growth plus dividends - that compounded at close to 26% a year, a run that has continued into 2026 with a further year-to-date gain above 60%. That average masks real volatility: 2022 alone saw shares fall by more than a quarter as the broader semiconductor sector de-rated, a reminder that this remains a cyclical business even at its most dominant. The recovery since has been driven by fundamentals rather than sentiment alone - profit and cash generation have both grown alongside the share price, not merely ahead of it.

None of this is guaranteed to continue - the risks below matter, and the current investment cycle is the largest in the company's history - but the combination of rising returns on capital, profit growing faster than sales, and a demonstrated ability to compound shareholder value through a full cycle gives us real confidence that TSMC has both the profitability and the financial capacity to keep funding the buildout its impact case depends on.

Leadership we can trust

A good business also needs to be well led, and TSMC's governance record is more nuanced than its financial one - genuinely strong on some fronts, and squarely a matter for ongoing engagement on others.

The strengths are real. TSMC has a single class of ordinary shares, so no shareholder - including the state development fund that holds one board seat - carries outsized voting power over anyone else. The board conducts a genuine annual self-assessment of its own effectiveness and discloses the results publicly, including a recent overall board score of 4.7 out of 5 alongside detail on specific areas such as sustainability oversight - a level of transparency many boards do not offer. Board tenure is genuinely balanced, split roughly evenly across newer, mid-tenure and longer-serving directors following a meaningful refreshment in 2024, and the board's skills, sector experience and international breadth are broad and well matched to a company of this technical complexity. The remuneration and nominating committees are both majority-independent under our own, stricter standard. And capital allocation discipline is excellent by any measure: return on invested capital has run two to three times above the company's cost of capital throughout the historical record and the current forecast period, even as the capital programme underwriting it has grown to among the largest in corporate history.



Two things are worth flagging as engagement priorities rather than settled concerns. First, the roles of Chair and Chief Executive are combined in a single individual, and the board has not designated a lead independent director to convene independent oversight in that structure's absence - a feature that reduces one of the checks and balances we usually look for at the top of a company, even where the director who chairs the audit function does so without any conflict-of-interest concern beyond the length of service itself. Second, senior executive pay is delivered almost entirely as annual cash profit-sharing under Taiwan's statutory compensation framework, rather than through the multi-year vesting equity awards more common among global peers - a structural feature of operating in Taiwan as much as a company-specific choice, but one that leaves incentive pay more closely tied to a single year's results than to sustained, multi-year performance.

Taken together with the company's disciplined and consistently rising capital-allocation record, this gives us reasonable confidence that TSMC's leadership acts in shareholders' long-term interests, while leaving two clear and specific themes for ongoing scrutiny rather than a clean bill of governance health.

The outcome evidence must be honest

Smaller, more advanced chips can deliver more computing performance for a given amount of energy. That is economically important wherever power is constrained. But TSMC manufactures customer designs and says the standard measure of processor efficiency at system level is not applicable to it. We should not turn an engineering direction into a company-level impact number that TSMC does not report.

The company's own footprint is large and growing. Its 2025 sustainability data show Scope 1 emissions of about 2.20 million tonnes of carbon-dioxide equivalent, up from 1.83 million tonnes in 2024. Energy use rose to 111.6 million gigajoules, with 93% coming from grid electricity. Renewable energy reached 18.66% of consumption. Water withdrawn increased to 149.9 million cubic metres.

This is not a footnote. Advanced processes and new capacity can make each computation more efficient while increasing absolute resource use because the world demands vastly more chips.

TSMC is investing in renewable power and water recycling, but plans should remain plans until delivered. In Arizona, its current US\$265 billion programme includes six fabs, two advanced-packaging facilities and an R&D centre. The company says a water-reclamation plant expected in 2028 should enable recycling of at least 90% of water. That target is useful; it is not yet an outcome.

For us, the right test is two-sided: measure what TSMC's technology enables and measure what its manufacturing consumes. A credible Climate Action case must improve on both sides over time.

Value, decision, and tension

We own TSMC because three things line up: a genuinely structural source of demand as computing becomes physical infrastructure that only a handful of foundries in the world can build; a demonstrably high-quality, well-run business behind it, with rising returns on capital



and a strong record of converting that demand into profit and shareholder value; and a leadership team we can trust on capital allocation and disclosure, even as we continue to press two specific and unresolved governance questions rather than treat the picture as settled.

We do not own it on the assumption that every dollar of AI infrastructure spending will find a paying customer, that today's exceptional margins are permanent, or that the current investment cycle will end as smoothly as it began. The central tension is a familiar one: the strongest end markets attract the most competition and the most optimistic expectations, and a wonderful business can still be a poor investment if its price already assumes flawless execution through a capital programme this large. Valuation discipline - not enthusiasm for the AI theme - is what ultimately governs how much of the portfolio we are willing to commit.

What could break the chain

- Demand and execution risk. AI infrastructure spending could outrun its economic returns. Customers may pause orders after building too much capacity, leaving TSMC with factories designed for demand that arrives later than expected.
- Concentration risk. TSMC's largest customer represented 19% of 2025 revenue and its second largest 17%; the top ten represented 78%. Process leadership provides bargaining power, but a small number of customers drive a large share of demand.
- Geopolitical risk. Most leading-edge production remains in Taiwan. Overseas expansion improves resilience but costs more and may reduce margins. Water, power, permitting, skilled labour, export controls and cross-strait tension can all affect capacity and returns.
- Financial-quality durability risk. The exceptional margins and returns documented above have been earned in an unusually favourable up-cycle. Gross margin is already guided lower for the third quarter of 2026 as the two-nanometre ramp accelerates, inventory days have risen, and free cash flow fell quarter on quarter as capital spending outpaced operating cash flow - a reminder that funding the buildout, not just winning the demand behind it, is the ongoing test.
- Impact-case risk. Efficiency gains at the chip level could be overwhelmed by growth in absolute resource consumption, and water-recycling and renewable-energy targets remain plans rather than delivered outcomes.
- Valuation risk. A wonderful business can still be a poor investment if its price already assumes flawless growth through the largest capital programme in the company's history.

The thesis would weaken materially if order growth failed to convert into cash and returns on capital, if the governance questions above hardened into evidence of misaligned decision-making rather than remaining structural features to monitor, or if valuation left no margin of safety against a slower AI investment cycle than is currently priced in.

The ownership test

TSMC earns its place in the portfolio because it is difficult to replace at the point where advanced chip designs become physical products - and because the business behind that position is, by the numbers, one of the most profitable and best-capitalised manufacturers in

the world, overseen by leadership whose capital discipline we trust even as we continue to press on specific points of board structure and pay design.

The structural demand is more computing. The advantage is process technology, yield, scale and trust. The earnings mechanism is a rising share of leading-edge manufacturing and packaging, converting into rising returns on capital and shareholder value, provided returns survive the enormous capital programme now under way. The outcome question is whether better chips enable useful work with less energy per computation while TSMC brings down the absolute burden of making them.

That is a demanding ownership test on all three fronts - impact, financial quality and governance. It should be. TSMC sits at the centre of one of the largest infrastructure buildouts of our time. Owning it means trusting the company to keep turning engineering necessity into durable cash flows, funded by real financial strength and overseen by leadership we hold to account - not owning it for the theme alone.

Disclaimer: This document has been prepared by Delta Outcomes Limited for informational purposes only and does not constitute investment advice or a recommendation to buy, hold or sell any security. Information is derived from public sources believed to be reliable. Delta Outcomes Limited accepts no responsibility for errors or omissions. Past performance is not indicative of future results.