

## TSMC (2330.TW/2330 TT)

### Strong long-term outlook; upside to 2025 guidance

FTSE4Good TIP Taiwan ESG Index stock

#### Outperform · Maintained

Price as of January 16 (NT\$)	1,105
12M target price (NT\$)	1,450
Previous target price (NT\$)	1,450
Unchanged (%)	0.0
Upside (%)	31.2

#### Key message

- 4Q24 margins beat expectations.
- Guidance for 1Q25F sales decline of 2.5-5.5% QoQ.
- The risks posed by US export controls are manageable; confident on AI demand growth.

#### Trading data

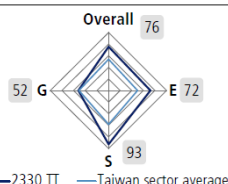
Mkt cap (NT\$bn/US\$mn)	28,656 / 868,039
Outstanding shares (mn)	25,933
Foreign ownership (mn)	19,059
3M avg. daily trading (mn)	29.76
52-week trading range (NT\$)	588 – 1,130

Performance	3M	6M	12M
Absolute (%)	5.7	4.7	90.5
Relative (%)	5.6	8.8	57.8

#### Quarterly EPS

NT\$	1Q	2Q	3Q	4Q
2023	7.98A	7.01A	8.14A	9.21A
2024	8.70A	9.56A	12.55A	14.45F
2025	14.22F	13.59F	15.40F	16.63F

#### ESG score card



Source: Refinitiv

#### Event

TSMC's 4Q24 operating profit was slightly ahead of the company's guidance and our estimate. Guidance of strong sales and AI sales growth over the next five years, and 2025F capex of US\$38-42bn, up by 26-40% YoY, are upside surprises.

#### Impact

**4Q24 margins beat expectations.** 4Q24 sales were NT\$868.5bn, up 14.3% QoQ and 38.8% YoY, above guidance of 10-13% QoQ growth, thanks to robust N3 (smartphone) and N4/ 5 (AI) demand. Gross margin of 59.0% beat our forecast of 58.9%, and reached the higher end of guidance, thanks to a higher UTR and NT-dollar depreciation, partially offsetting N3 dilution. EPS of NT\$14.45, up 15.2% QoQ and 57.0% YoY, was slightly below our forecast due to a higher-than-expected tax rate.

**Guidance for 1Q25F sales decline of 2.5-5.5% QoQ.** TSMC guides 1Q25F sales of NT\$820-846bn, a decline of only 2.5-5.5% QoQ, much less than the typical seasonal decline of 5-6% QoQ, but below our forecast for flat ( $\pm 2\%$ ) sales QoQ. We believe the company is reserving some room to over-achieve guidance, but we slightly adjust down our forecast to a decline of 2% QoQ. For 2025, TSMC guides sales to grow by nearly 25% YoY, compared to industry growth of only 10% YoY, with capex of US\$38-42bn, up 26-40% YoY, higher than our forecast of US\$36bn. It also guides a 2024-29F sales growth CAGR of 20% and an AI sales CAGR in the mid-forties over the same period, despite a high base in 2024. Higher 2025 capex and a strong long-term growth outlook point to TSMC's confidence regarding sales growth, though we see upside to the firm's 1Q25 and 2025 sales guidance, as we believe it has the ability to over-achieve guidance.

**Risks posed by US export controls are manageable; confident on AI demand growth.** TSMC believes US restrictions will be limited to AI-related products, and the impact on non-AI Chinese smartphone and crypto clients will be minimal. The firm may also help to apply for special approval for non-AI products. In addition, TSMC foresees strong AI demand and clarified rumored order cuts from Nvidia (US) and AWS (US), saying it sees upside to AI demand, rather than order cuts.

#### Valuation & Action

TSMC's bullish long-term outlook is underpinned by technological leadership and strong AI demand. Despite potential upside to 1Q25F and 2025F guidance, we believe YoY sales growth will peak in 1Q25F. We fine-tune our 2025-26 forecasts to reflect 4Q24 results and 1Q25 guidance, with an unchanged target price of NT\$1,450, based on 20x 2026F EPS (upcycle average). We maintain Outperform on TSMC's strong technological leadership.

#### Risks

Global macro and geopolitical uncertainties; prolonged inventory corrections.

#### Key financials and valuations

	Dec-22A	Dec-23A	Dec-24F	Dec-25F	Dec-26F
Revenue (NT\$mn)	2,263,891	2,161,736	2,894,308	3,702,096	4,218,272
Gross profit (NT\$mn)	1,348,355	1,175,111	1,624,355	2,125,037	2,516,738
Operating profit (NT\$mn)	1,121,279	921,088	1,322,053	1,752,918	2,092,129
Net profit (NT\$mn)	1,016,530	838,498	1,173,268	1,551,460	1,837,015
EPS (NT\$)	39.20	32.34	45.25	59.84	70.86
Cash DPS (NT\$)	11.00	13.00	16.00	18.00	18.00
EPS growth (%)	70.4	(17.5)	39.9	32.2	18.4
PE (x)	28.2	34.2	24.4	18.5	15.6
PB (x)	9.7	8.3	6.8	5.4	4.3
EV/EBITDA (x)	17.7	18.7	14.0	11.4	9.7
Net debt to equity (%)	Net cash	Net cash	Net cash	Net cash	Net cash
Dividend yield (%)	1.0	1.2	1.4	1.6	1.6
Return on average equity (%)	39.8	26.2	30.6	32.7	30.7

Source: Company data; KGI Research estimates

**Figure 1: Breakdown of 4Q24 results & 1Q25 forecast revisions vs. consensus**

NT\$m	4Q24						1Q25F							
	Actual	KGI forecast	Diff. (%)	QoQ (%)	YoY (%)	Consensus	Diff. (%)	Revision	Previous	Chg. (%)	QoQ (%)	YoY (%)	Consensus	Diff. (%)
Revenue	868,461	861,831	0.8	14.3	38.8	855,342	1.5	850,242	858,362	(0.9)	(2.1)	43.5	809,229	5.1
Gross profit	512,379	507,316	1.0	16.6	54.4	500,298	2.4	493,559	500,520	(1.4)	(3.7)	56.9	460,840	7.1
Operating profit	425,713	420,271	1.3	18.3	63.7	411,423	3.5	410,660	409,963	0.2	(3.5)	64.9	376,970	8.9
Net profit	374,680	380,615	(1.6)	15.2	57.0	369,603	1.4	368,779	365,256	1.0	(1.6)	63.5	337,119	9.4
EPS (NT\$)	14.45	14.68	(1.6)	15.2	57.0	14.28	1.2	14.22	14.09	1.0	(1.6)	63.6	13.07	8.8
Gross margin (%)	59.0	58.9	0.1 ppts	1.2 ppts	6.0 ppts	58.5	0.5 ppts	58.0	58.3	(0.3)ppts	(0.9)ppts	5.0 ppts	56.9	1.1 ppts
OP margin (%)	49.0	48.8	0.3 ppts	1.7 ppts	7.4 ppts	48.1	0.9 ppts	48.3	47.8	0.5 ppts	(0.7)ppts	6.3 ppts	46.6	1.7 ppts
Net margin (%)	43.1	44.2	(1.0)ppts	0.3 ppts	5.0 ppts	43.2	(0.1)ppts	43.4	42.6	0.8 ppts	0.2 ppts	5.3 ppts	41.7	1.7 ppts

Source: Company data; Bloomberg; KGI Research estimates

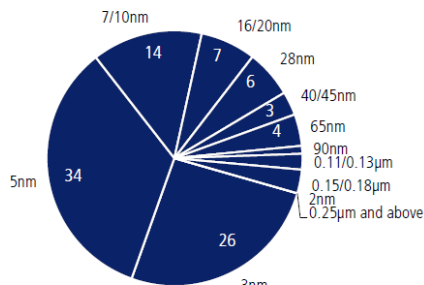
**Figure 2: Breakdown of 2025-26 forecast revisions vs. consensus**

NT\$m	2025F						2026F					
	Revision	Previous	Chg. (%)	YoY (%)	Consensus	Diff. (%)	Revision	Previous	Chg. (%)	YoY (%)	Consensus	Diff. (%)
Revenue	3,702,096	3,737,271	(0.9)	27.9	3,640,921	1.7	4,218,272	4,258,504	(0.9)	13.9	4,284,178	(1.5)
Gross profit	2,125,037	2,157,832	(1.5)	30.8	2,098,809	1.2	2,516,738	2,554,006	(1.5)	18.4	2,474,027	1.7
Operating profit	1,752,918	1,775,311	(1.3)	32.6	1,725,574	1.6	2,092,129	2,125,347	(1.6)	19.4	2,034,797	2.8
Net profit	1,551,460	1,558,627	(0.5)	32.2	1,534,503	1.1	1,837,015	1,853,350	(0.9)	18.4	1,825,802	0.6
EPS (NT\$)	59.84	60.12	(0.5)	32.2	58.84	1.7	70.86	71.49	(0.9)	18.4	70.21	0.9
Gross margin (%)	57.4	57.7	(0.3)ppts	1.3 ppts	57.6	(0.2)ppts	59.7	60.0	(0.3)ppts	2.3 ppts	57.7	1.9 ppts
OP margin (%)	47.3	47.5	(0.2)ppts	1.7 ppts	47.4	(0.0)ppts	49.6	49.9	(0.3)ppts	2.2 ppts	47.5	2.1 ppts
Net margin (%)	41.9	41.7	0.2 ppts	1.4 ppts	42.1	(0.2)ppts	43.5	43.5	0.0 ppts	1.6 ppts	42.6	0.9 ppts

Source: Bloomberg; KGI Research estimates

**Figure 3: TSMC's wafer revenue by node**

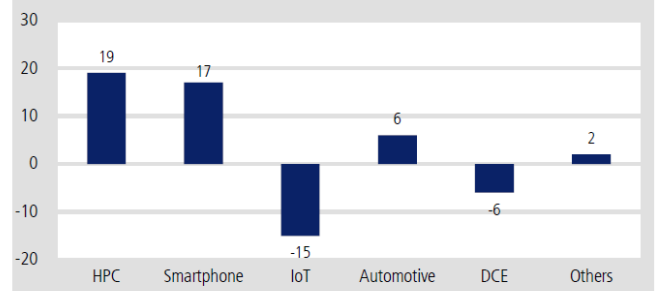
Wafer revenue weighting, percent



Source: Company data; KGI Research

**Figure 4: TSMC's revenue by platform**

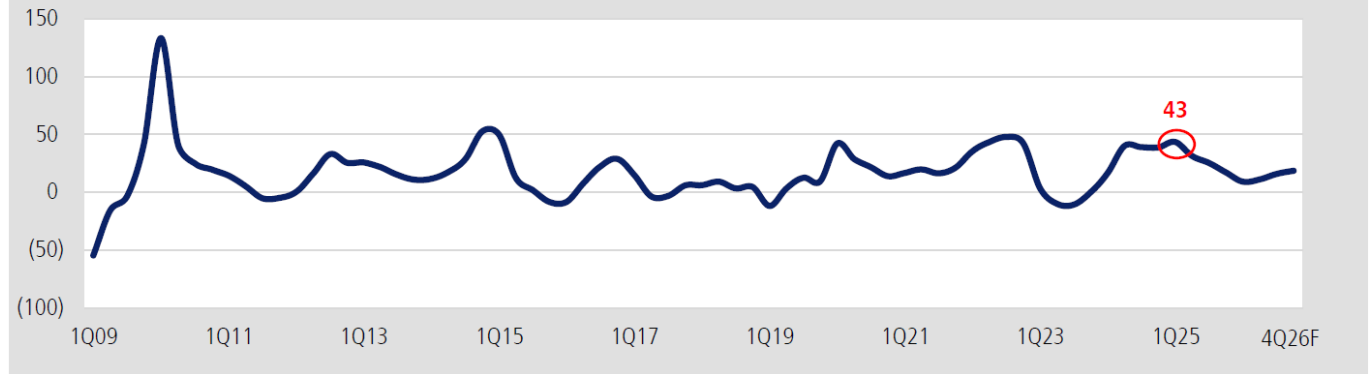
Platform revenue QoQ, percent



Source: Company data; KGI Research

**Figure 5: TSMC's quarterly sales growth YoY**

Quarterly sales growth YoY, percent

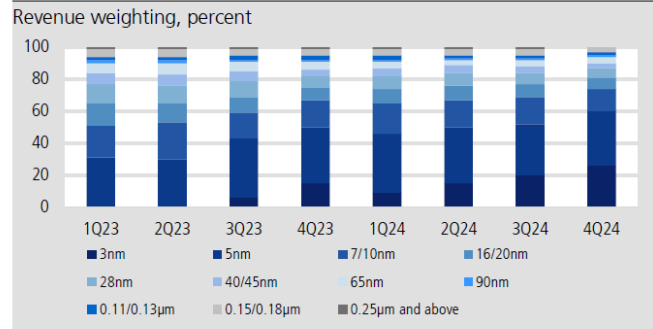


**Figure 6: Company profile**

Taiwan Semiconductor Manufacturing Company (TSMC), the world's largest dedicated semiconductor foundry, has increased its market share in recent years. Capacity exceeded 16mn 8-inch equivalent wafers in 2013. TSMC operates six advanced 300mm wafer fabs, six 8-inch wafer fabs, and one 6-inch wafer fab, and is building a new 300mm wafer fab. The company provides the following services: wafer manufacturing, wafer probing, assembly and testing, mask production, and design services.

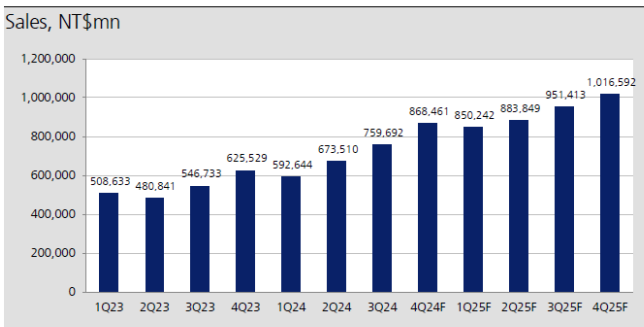
Source: Company data; KGI Research

**Figure 7: TSMC's wafer revenue by node**



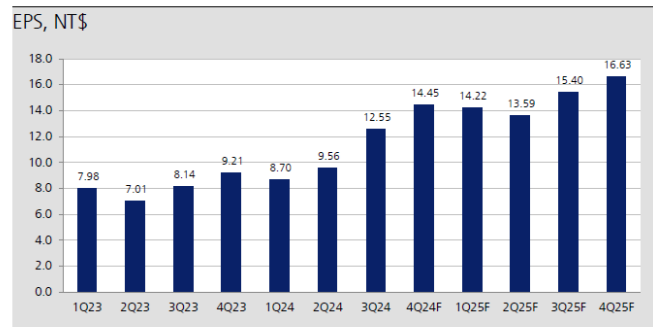
Source: Company data; KGI Research

**Figure 8: Sales**



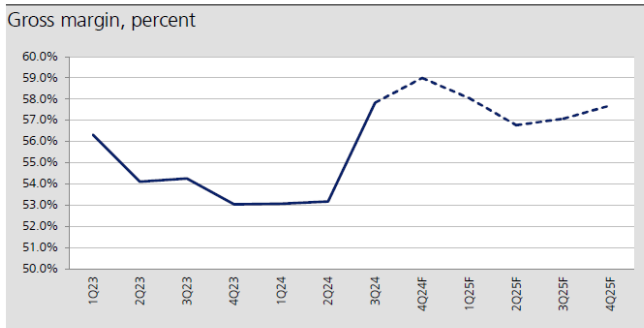
Source: KGI Research

**Figure 9: EPS**



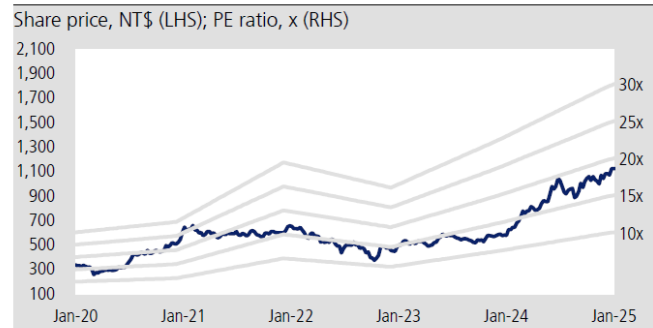
Source: KGI Research

**Figure 10: Gross margin**



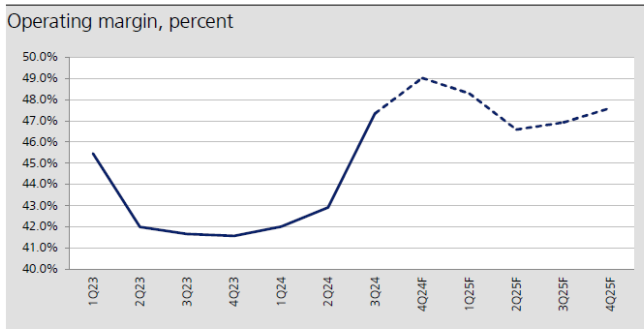
Source: KGI Research

**Figure 11: 12M forward PE band**



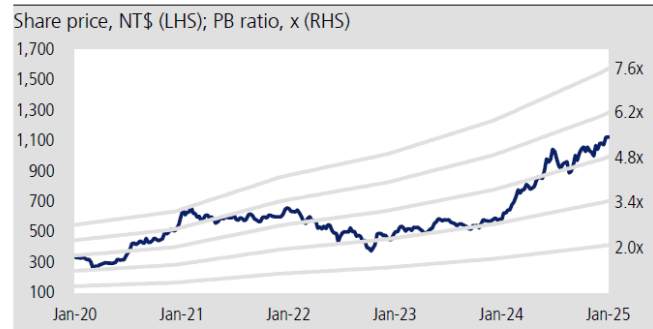
Source: TEJ; KGI Research estimates

**Figure 12: Operating margin**



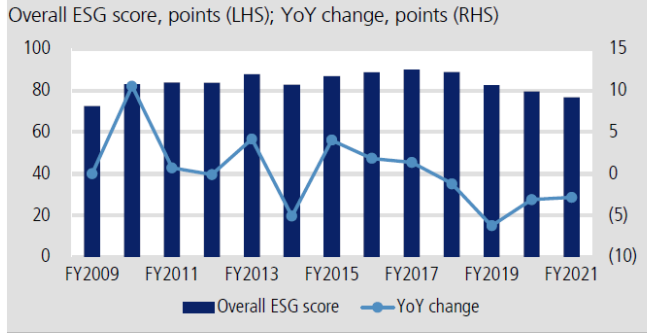
Source: KGI Research

**Figure 13: 12M forward PB band**



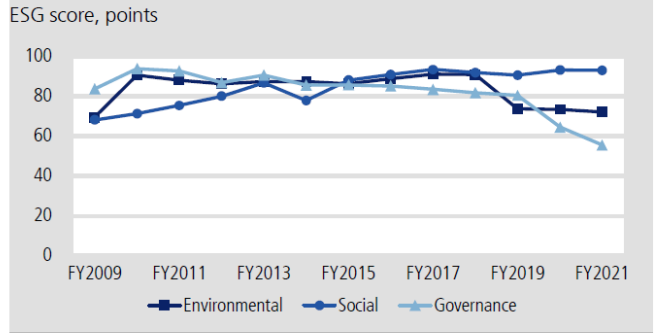
Source: TEJ; KGI Research estimates

**Figure 14: Overall ESG score**



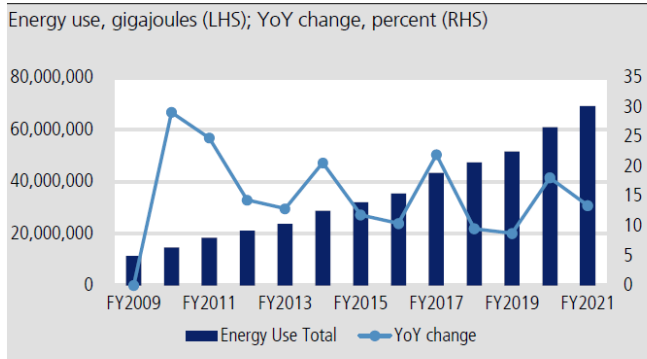
Source: Refinitiv; Company data

**Figure 15: ESG score by category**



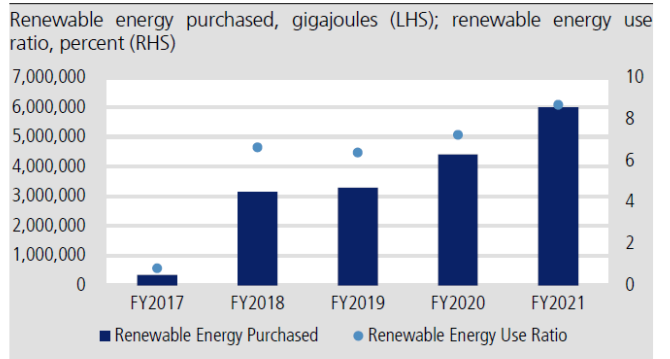
Source: Refinitiv; Company data

**Figure 16: Energy use**



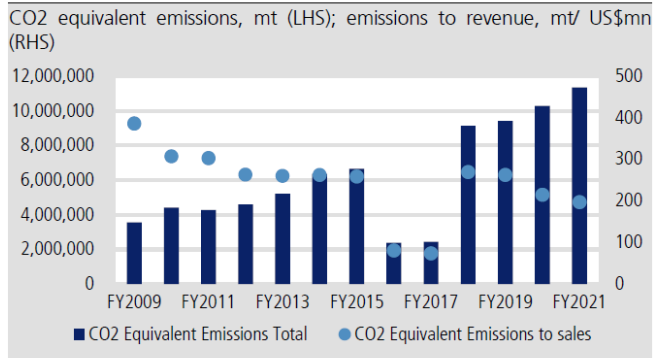
Source: Refinitiv; Company data

**Figure 17: Renewable energy**



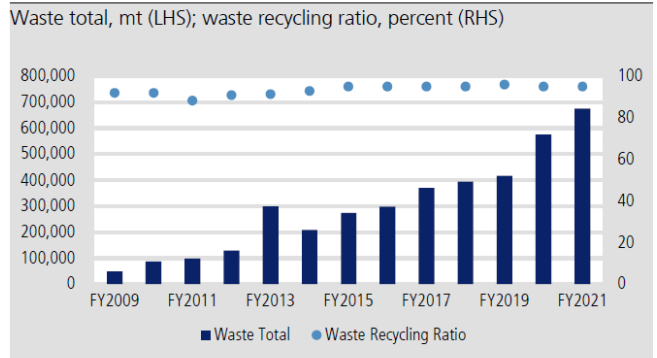
Source: Refinitiv; Company data

**Figure 18: CO2 equivalent emissions**



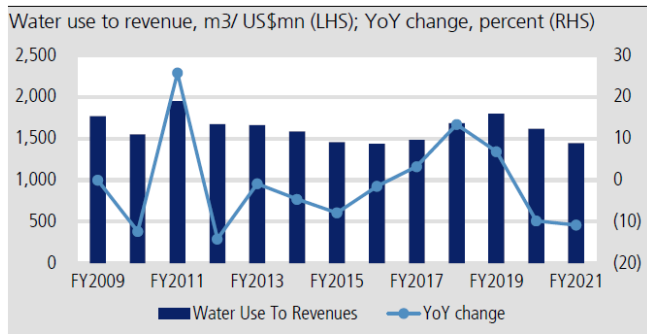
Source: Refinitiv; Company data

**Figure 19: Waste total**



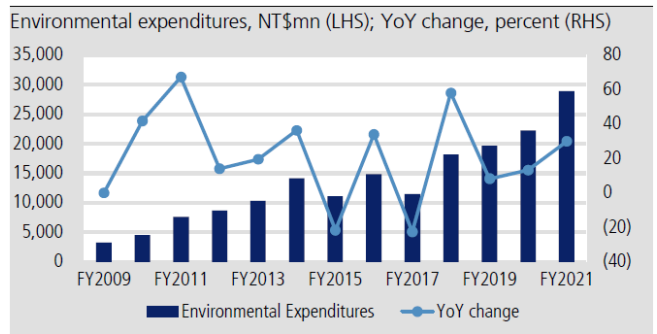
Source: Refinitiv; Company data

**Figure 20: Water use to revenue**

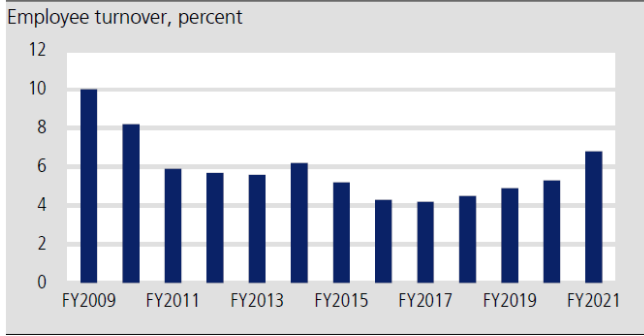


Source: Refinitiv; Company data

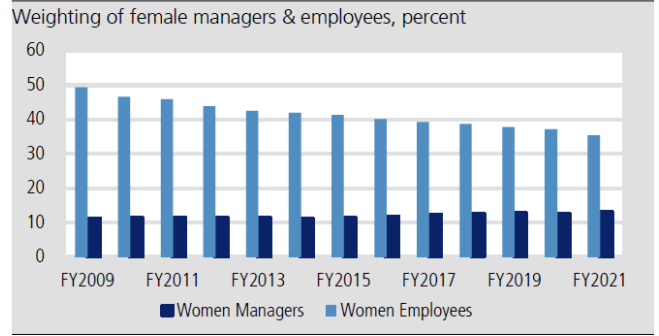
**Figure 21: Environmental expenditures**



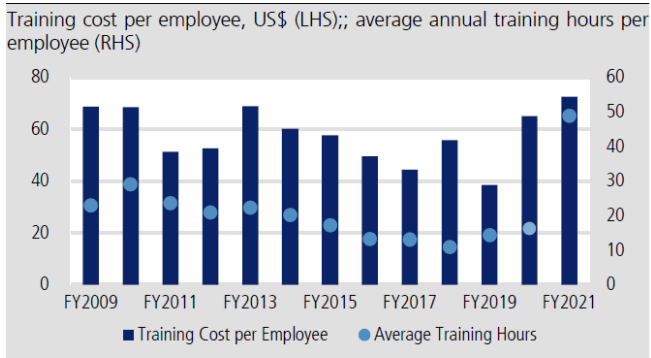
Source: Refinitiv; Company data

**Figure 22: Employee turnover**


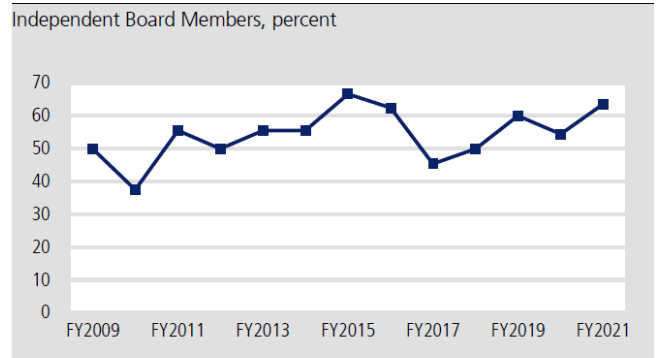
Source: Refinitiv; Company data

**Figure 23: Gender diversification**


Source: Refinitiv; Company data

**Figure 24: Employee training**


Source: Refinitiv; Company data

**Figure 25: Independent Board Members**


Source: Refinitiv; Company data

**ESG chart definition**

Item	Definition	Remarks
Energy use	<p>Total direct and indirect energy consumption in gigajoules.</p> <ul style="list-style-type: none"> <li>- the total amount of energy that has been consumed within the boundaries of the company's operations</li> <li>- total energy use = total direct energy consumption + indirect energy consumption</li> <li>- purchased energy and produced energy are included in total energy use</li> <li>- for utilities, transmission/ grid loss as part of its business activities is considered as total energy consumed and data does not consider electricity produced to answer energy use (utility company produces to sell)</li> <li>- for utilities, raw materials such as coal, gas or nuclear used in the production of energy are not considered under 'total energy use'</li> </ul>	
Renewable energy purchased	<p>Total primary renewable energy purchased in gigajoules.</p> <ul style="list-style-type: none"> <li>- energy consumed by the company from various sources and among the purchased energy, how much energy is renewable in nature (solar, wind, hydro, biomass, geothermal) are in scope</li> <li>- if there is no evidence that renewable energy is produced by the company, then we consider the reported energy figure as renewable energy purchased</li> </ul>	
Renewable energy use ratio	Renewable energy to total energy used	
CO2 equivalent emissions	<p>Direct CO2 and CO2 equivalent emissions in metric tons.</p> <ul style="list-style-type: none"> <li>- direct emissions from sources that are owned or controlled by the company (scope 1 emissions)</li> <li>- following gases are relevant: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorinated compound (PFCS), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3)</li> </ul>	
CO2 equivalent emissions to sales	<p>Direct CO2 and CO2 equivalent emissions (metric tons) to sales (NT\$m)</p> <ul style="list-style-type: none"> <li>- direct emissions from sources that are owned or controlled by the company (scope 1 emissions)</li> <li>- following gases are relevant: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorinated compound (PFCS), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3)</li> </ul>	
Waste total	<p>Total amount of waste produced in metric tons.</p> <ul style="list-style-type: none"> <li>- total waste = non-hazardous waste + hazardous waste</li> <li>- only solid waste is taken into consideration, exceptionally if liquid waste is reported in metric tons, then we do the summation to derive total including liquid waste</li> <li>- for sectors like mining, oil &amp; gas, waste generation like tailings, waste rock, coal and fly ash are also considered</li> </ul>	
Waste recycling ratio	<p>The waste recycling ratio as reported by the company.</p> <ul style="list-style-type: none"> <li>- waste recycling ratio = waste recycled/total waste*100</li> <li>- waste to energy or waste incinerated with energy recovery are considered as waste recycled</li> <li>- waste recovered via composting is considered as recycled waste</li> </ul>	
Water withdrawal total	<p>Total water withdrawal in cubic meters.</p> <ul style="list-style-type: none"> <li>- the total volume of water withdrawn from any water source that was either withdrawn directly by the reporting organization or through intermediaries such as water utilities</li> <li>- different sources of water like wells, town/utility/municipal water, river water, and surface water are considered</li> </ul>	
Environmental expenditures	<p>Total amount of environmental expenditures.</p> <ul style="list-style-type: none"> <li>- all environmental investment &amp; expenditures for environmental protection or to prevent, reduce, control environmental aspects, impacts, and hazards. It also includes disposal, treatment, sanitation, and clean-up expenditures</li> </ul>	
Turnover of employees	<p>Percentage of employee turnover.</p> <ul style="list-style-type: none"> <li>- includes employees who left the company for any reason (voluntary or involuntary), such as resignations, retirement, natural departure/death, medical incapacitation, redundancy, layoffs, restructuring, dismissal, retrenchment or end of a fixed-term contract</li> <li>- employees turnover rate = (employees leaving/average number of employees)*100</li> <li>- where the average number of employees = (employees at the end of the current year + employees at the end of the previous year)/2</li> <li>- employees at the end of the current fiscal year = employees at the end of the previous fiscal year + new employees - employees leaving</li> </ul>	
Women managers	<p>Percentage of women managers.</p> <ul style="list-style-type: none"> <li>- percentage of women managers among total managers of the company</li> <li>- if there is a breakdown by category in percentage, such as top, senior, middle, and junior management, then we consider the percentage of middle women managers</li> <li>- percentage of women managers = number of women managers/total number of managers*100</li> </ul>	
Women employees	<p>Percentage of women employees.</p> <ul style="list-style-type: none"> <li>- percentage of women employees to the total number of employees of the company</li> <li>- percentage of women employees = number of women/total number of employees*100</li> </ul>	
Training hours total	<p>Total training hours performed by all employees.</p> <ul style="list-style-type: none"> <li>- consider only employee training hours</li> <li>- includes all types of training given to general employees (such as health &amp; safety, environmental, emergency response, skills &amp; career development training)</li> <li>- if the value is given in days, multiply by 8, assuming that 1 day = 8 hours worked</li> </ul>	
Training hours per employee	Training hours per employee per year	

Source: Refinitiv, KGI Research

**Income statement**

	Quarterly								Annually		
	Mar-24A	Jun-24A	Sep-24A	Dec-24F	Mar-25F	Jun-25F	Sep-25F	Dec-25F	Dec-24F	Dec-25F	Dec-26F
<b>Income statement (NT\$m)</b>											
<b>Revenue</b>	<b>592,644</b>	<b>673,510</b>	<b>759,692</b>	<b>868,461</b>	<b>850,242</b>	<b>883,849</b>	<b>951,413</b>	<b>1,016,592</b>	<b>2,894,308</b>	<b>3,702,096</b>	<b>4,218,272</b>
Cost of goods sold	(278,139)	(315,386)	(320,346)	(356,082)	(356,683)	(382,059)	(408,376)	(429,942)	(1,269,953)	(1,577,059)	(1,701,534)
<b>Gross profit</b>	<b>314,505</b>	<b>358,124</b>	<b>439,346</b>	<b>512,379</b>	<b>493,559</b>	<b>501,790</b>	<b>543,037</b>	<b>586,651</b>	<b>1,624,355</b>	<b>2,125,037</b>	<b>2,516,738</b>
Operating expenses	(65,487)	(69,022)	(79,578)	(86,666)	(82,899)	(89,976)	(96,568)	(102,676)	(302,301)	(372,119)	(424,610)
<b>Operating profit</b>	<b>249,018</b>	<b>289,103</b>	<b>359,767</b>	<b>425,713</b>	<b>410,660</b>	<b>411,814</b>	<b>446,469</b>	<b>483,975</b>	<b>1,322,053</b>	<b>1,752,918</b>	<b>2,092,129</b>
Depreciation of fixed assets	(156,697)	(162,929)	(165,915)	(133,335)	(143,235)	(151,507)	(159,780)	(153,575)	(618,876)	(608,097)	(614,302)
Amortisation of intangible assets	(2,326)	(2,237)	(2,313)	(2,546)	(2,850)	(2,980)	(3,405)	(2,933)	(9,423)	(12,169)	(12,283)
<b>EBITDA</b>	<b>408,041</b>	<b>454,269</b>	<b>527,996</b>	<b>561,594</b>	<b>556,746</b>	<b>566,302</b>	<b>609,654</b>	<b>640,483</b>	<b>1,950,353</b>	<b>2,373,184</b>	<b>2,718,713</b>
Interest income	19,359	20,979	22,602	21,750	21,750	21,750	21,750	21,750	84,690	87,000	87,000
Investment income	950	1,355	1,286	1,200	1,200	1,200	1,200	1,200	4,791	4,800	4,800
Other non-op income	0	(0)	316	135	-	-	-	-	451	-	-
<b>Non-operating income</b>	<b>20,309</b>	<b>22,335</b>	<b>24,203</b>	<b>23,085</b>	<b>22,950</b>	<b>22,950</b>	<b>22,950</b>	<b>22,950</b>	<b>89,932</b>	<b>91,800</b>	<b>91,800</b>
Interest expense	(2,698)	(2,638)	(2,636)	-	-	-	-	-	(7,972)	-	-
Investment loss	-	-	-	-	-	-	-	-	-	-	-
Other non-op expenses	(86)	58	1,853	-	-	-	-	-	1,826	-	-
<b>Non-operating expenses</b>	<b>(2,784)</b>	<b>(2,580)</b>	<b>(783)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(6,147)</b>	<b>-</b>	<b>-</b>
<b>Pre-tax profit</b>	<b>266,543</b>	<b>308,858</b>	<b>383,188</b>	<b>448,798</b>	<b>433,610</b>	<b>434,764</b>	<b>469,419</b>	<b>506,925</b>	<b>1,405,839</b>	<b>1,844,718</b>	<b>2,183,929</b>
Current taxation	(41,322)	(58,649)	(59,107)	(74,329)	(65,042)	(82,605)	(70,413)	(76,039)	(233,406)	(294,098)	(347,754)
Minorities	264	184	177	210	210	210	210	210	835	840	840
<b>Normalised net profit</b>	<b>225,485</b>	<b>250,393</b>	<b>324,259</b>	<b>374,680</b>	<b>368,779</b>	<b>352,369</b>	<b>399,216</b>	<b>431,096</b>	<b>1,173,268</b>	<b>1,551,460</b>	<b>1,837,015</b>
Extraordinary items	(0)	(2,547)	999	-	-	-	-	-	-	-	-
<b>Net profit</b>	<b>225,485</b>	<b>247,846</b>	<b>325,258</b>	<b>374,680</b>	<b>368,779</b>	<b>352,369</b>	<b>399,216</b>	<b>431,096</b>	<b>1,173,268</b>	<b>1,551,460</b>	<b>1,837,015</b>
EPS (NT\$)	8.70	9.56	12.55	14.45	14.22	13.59	15.40	16.63	45.25	59.84	70.86
<b>Margins (%)</b>											
Gross profit margin	53.1	53.2	57.8	59.0	58.0	56.8	57.1	57.7	56.1	57.4	59.7
Operating margin	42.0	42.9	47.4	49.0	48.3	46.6	46.9	47.6	45.7	47.3	49.6
EBITDA margin	68.9	67.4	69.5	64.7	65.5	64.1	64.1	63.0	67.4	64.1	64.5
Pretax profit margin	45.0	45.9	50.4	51.7	51.0	49.2	49.3	49.9	48.6	49.8	51.8
Net profit margin	38.0	36.8	42.8	43.1	43.4	39.9	42.0	42.4	40.5	41.9	43.5
<b>Sequential growth (%)</b>											
Revenue growth	(5.3)	13.6	12.8	14.3	(2.1)	4.0	7.6	6.9			
Gross profit growth	(5.2)	13.9	22.7	16.6	(3.7)	1.7	8.2	8.0			
Operating profit growth	(4.3)	16.1	24.4	18.3	(3.5)	0.3	8.4	8.4			
EBITDA growth	(0.7)	11.3	16.2	6.4	(0.9)	1.7	7.7	5.1			
Pretax profit growth	(4.2)	15.9	24.1	17.1	(3.4)	0.3	8.0	8.0			
Net profit growth	(5.5)	9.9	31.2	15.2	(1.6)	(4.4)	13.3	8.0			
<b>YoY growth (%)</b>											
Revenue growth	16.5	40.1	39.0	38.8	43.5	31.2	25.2	17.1	33.9	27.9	13.9
Gross profit growth	9.8	37.6	48.1	54.4	56.9	40.1	23.6	14.5	38.2	30.8	18.4
Operating profit growth	7.7	43.1	57.9	63.7	64.9	42.4	24.1	13.7	43.5	32.6	19.4
EBITDA growth	19.5	39.4	40.8	36.7	36.4	24.7	15.5	14.0	34.2	21.7	14.6
Pretax profit growth	9.1	43.9	58.6	61.3	62.7	40.8	22.5	13.0	43.6	31.2	18.4
Net profit growth	8.9	36.3	54.2	57.0	63.5	42.2	22.7	15.1	39.9	32.2	18.4

Source: Company data; KGI Research estimates

**Balance sheet**

NTSmn	Dec-22A	Dec-23A	Dec-24F	Dec-25F	Dec-26F
<b>Total assets</b>	<b>4,964,779</b>	<b>5,532,371</b>	<b>6,493,683</b>	<b>7,615,746</b>	<b>9,006,761</b>
<b>Current assets</b>	<b>2,052,897</b>	<b>2,194,033</b>	<b>2,704,719</b>	<b>3,141,520</b>	<b>3,985,956</b>
Cash & ST securities	1,561,486	1,687,644	1,980,834	2,293,234	3,026,521
Inventory	221,149	250,997	318,875	385,017	421,696
Accounts receivable	231,340	201,938	341,555	399,813	474,283
Other current assets	38,922	53,453	63,456	63,456	63,456
<b>Non-current assets</b>	<b>2,911,882</b>	<b>3,338,338</b>	<b>3,788,964</b>	<b>4,474,226</b>	<b>5,020,805</b>
LT investments	68,928	129,442	128,532	133,332	138,132
Net fixed assets	2,693,837	3,064,475	3,467,619	4,148,080	4,689,860
Other assets	149,117	144,421	192,813	192,813	192,813
<b>Total liabilities</b>	<b>2,004,290</b>	<b>2,049,108</b>	<b>2,252,601</b>	<b>2,289,873</b>	<b>2,310,541</b>
<b>Current liabilities</b>	<b>944,227</b>	<b>913,583</b>	<b>1,189,265</b>	<b>1,226,536</b>	<b>1,247,205</b>
Accounts payable	56,522	57,293	89,398	107,941	118,224
Interest bearing ST liabilities	19,314	9,293	58,805	58,805	58,805
Other current liabilities	868,391	846,997	1,041,062	1,059,790	1,070,175
<b>Non-current liabilities</b>	<b>1,060,063</b>	<b>1,135,525</b>	<b>1,063,337</b>	<b>1,063,337</b>	<b>1,063,337</b>
Long-term debt	839,096	918,283	921,227	921,227	921,227
Other L-T liabilities	191,203	188,560	127,174	127,174	127,174
<b>Total equity</b>	<b>2,960,489</b>	<b>3,483,263</b>	<b>4,241,082</b>	<b>5,325,873</b>	<b>6,696,220</b>
Share capital	259,304	259,321	259,327	259,327	259,327
Retained earnings reserve	2,323,223	2,846,884	3,877,461	4,962,252	6,332,599
Minority interests	14,836	24,349	31,903	31,903	31,903
Preferred shareholders funds	-	-	-	-	-

**Key ratios**

	Dec-22A	Dec-23A	Dec-24F	Dec-25F	Dec-26F
<b>Growth</b>					
Revenue growth	42.6%	(4.5%)	33.9%	27.9%	13.9%
Operating profit growth	72.5%	(17.9%)	43.5%	32.6%	19.4%
EBITDA growth	45.3%	(6.8%)	34.2%	21.7%	14.6%
Net profit growth	70.4%	(17.5%)	39.9%	32.2%	18.4%
EPS growth	70.4%	(17.5%)	39.9%	32.2%	18.4%
<b>Profitability</b>					
Gross profit margin	59.6%	54.4%	56.1%	57.4%	59.7%
Operating margin	49.5%	42.6%	45.7%	47.3%	49.6%
EBITDA margin	68.8%	67.2%	67.4%	64.1%	64.5%
Net profit margin	44.9%	38.8%	40.5%	41.9%	43.5%
Return on average assets	23.4%	16.0%	19.5%	22.0%	22.1%
Return on average equity	39.8%	26.2%	30.6%	32.7%	30.7%
<b>Stability</b>					
Gross debt to equity	29.0%	26.6%	23.1%	18.4%	14.6%
Net debt to equity	Net cash	Net cash	Net cash	Net cash	Net cash
Interest coverage (x)	98.4	82.6	177.3	-	-
Interest & ST debt coverage (x)	1.0	1.0	1.0	1.0	1.0
Cash flow interest coverage(x)	137.1	103.5	214.1	-	-
Cash flow/int. & ST debt (x)	51.8	58.3	25.6	35.4	40.3
Current ratio (x)	2.2	2.4	2.3	2.6	3.2
Quick ratio (x)	1.9	2.1	2.0	2.2	2.9
Net debt (NT\$m)	(484,404)	(537,852)	(719,982)	(1,032,383)	(1,765,669)
<b>Per share data</b>					
EPS (NT\$)	39.20	32.34	45.25	59.84	70.86
CFPS (NT\$)	62.12	47.90	65.82	80.22	91.35
BVPS (NT\$)	113.60	133.38	162.34	204.20	257.05
Adj BVPS (NT\$)	113.60	133.40	162.34	204.20	257.05
SPS (NT\$)	87.31	83.37	111.63	142.79	162.70
EBITDA/share (NT\$)	60.11	56.05	75.22	91.54	104.86
Cash DPS (NT\$)	11.00	13.00	16.00	18.00	18.00
<b>Activity</b>					
Sales / avg assets	0.52	0.41	0.48	0.52	0.51
Days receivable	37.3	34.1	43.2	39.4	41.0
Days inventory	88.2	92.9	91.9	89.1	90.5
Days payable	22.5	21.2	25.8	25.0	25.4
Cash cycle	102.9	105.8	109.3	103.5	106.1

Source: Company data; KGI Research estimates

**Profit & loss**

NTSmn	Dec-22A	Dec-23A	Dec-24F	Dec-25F	Dec-26F
<b>Revenue</b>	<b>2,263,891</b>	<b>2,161,736</b>	<b>2,894,308</b>	<b>3,702,096</b>	<b>4,218,272</b>
Cost of goods sold	(915,536)	(986,625)	(1,269,953)	(1,577,059)	(1,701,534)
<b>Gross profit</b>	<b>1,348,355</b>	<b>1,175,111</b>	<b>1,624,355</b>	<b>2,125,037</b>	<b>2,516,738</b>
Operating expenses	(227,076)	(254,022)	(302,301)	(372,119)	(424,610)
<b>Operating profit</b>	<b>1,121,279</b>	<b>921,088</b>	<b>1,322,053</b>	<b>1,752,918</b>	<b>2,092,129</b>
<b>Non-operating income</b>	<b>31,168</b>	<b>65,429</b>	<b>89,932</b>	<b>91,800</b>	<b>91,800</b>
Interest income	22,422	60,294	84,690	87,000	87,000
Investment income	8,065	5,119	4,791	4,800	4,800
Other non-op income	681	16	451	-	-
<b>Non-operating expenses</b>	<b>(8,256)</b>	<b>(7,723)</b>	<b>(6,147)</b>	-	-
Interest expense	(11,750)	(11,999)	(7,972)	-	-
Investment loss	-	-	-	-	-
Other non-op expenses	3,494	4,276	1,826	-	-
<b>Pre-tax profit</b>	<b>1,144,191</b>	<b>978,794</b>	<b>1,405,839</b>	<b>1,844,718</b>	<b>2,183,929</b>
Current taxation	(127,290)	(141,404)	(233,406)	(294,098)	(347,754)
Minorities	(370)	730	835	840	840
Extraordinary items	-	377	-	-	-
<b>Net profit</b>	<b>1,016,530</b>	<b>838,498</b>	<b>1,173,268</b>	<b>1,551,460</b>	<b>1,837,015</b>
<b>EBITDA</b>	<b>1,558,533</b>	<b>1,453,279</b>	<b>1,950,353</b>	<b>2,373,184</b>	<b>2,718,713</b>
EPS (NT\$)	39.20	32.34	45.25	59.84	70.86

**Cash flow**

NTSmn	Dec-22A	Dec-23A	Dec-24F	Dec-25F	Dec-26F
<b>Operations cash flow</b>	<b>1,610,599</b>	<b>1,241,967</b>	<b>1,706,626</b>	<b>2,079,796</b>	<b>2,368,319</b>
Net profit	1,016,530	838,498	1,173,268	1,551,460	1,837,015
Depreciation & amortisation	437,254	532,191	628,299	620,266	626,584
Decrease in working capital	(53,286)	324	(175,389)	(105,857)	(100,866)
Other operating cash flow	210,100	(129,046)	80,449	13,928	5,586
<b>Investing cash flow</b>	<b>(1,190,928)</b>	<b>(906,121)</b>	<b>(1,084,824)</b>	<b>(1,300,728)</b>	<b>(1,168,364)</b>
Sale of ST investment	(128,838)	(55,781)	(21,441)	-	-
New investments	-	-	-	-	-
Capital expenditure	(1,082,672)	(949,817)	(1,125,958)	(1,300,728)	(1,168,364)
Others investing cashflow	20,582	99,478	62,575	-	-
<b>Free cash flow</b>	<b>289,078</b>	<b>361,461</b>	<b>420,086</b>	<b>674,968</b>	<b>1,104,064</b>
<b>Financing cash flow</b>	<b>(200,244)</b>	<b>(204,894)</b>	<b>(401,089)</b>	<b>(466,668)</b>	<b>(466,668)</b>
Increase in short term debt	(111,960)	-	-	-	-
Increase in long term loans	195,983	68,204	52,456	-	-
New ordinary shares issued	-	-	-	-	-
Ordinary dividends paid	(285,234)	(291,722)	(414,841)	(466,668)	(466,668)
Other financing cashflow	1,839	18,623	(35,615)	-	-
<b>Forex effects</b>	<b>58,397</b>	<b>(8,339)</b>	<b>13,874</b>	-	-
<b>Total cash generated</b>	<b>277,824</b>	<b>122,614</b>	<b>234,587</b>	<b>312,400</b>	<b>733,286</b>

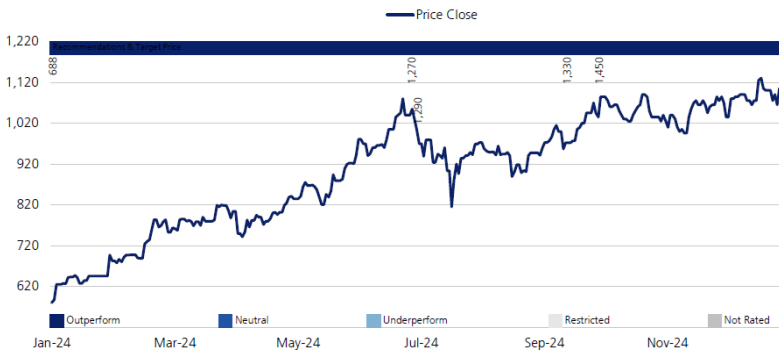
**ROIC**

	Dec-22A	Dec-23A	Dec-24F	Dec-25F	Dec-26F
1 - COGS/revenue	-	-	-	-	-
- Operating exp./revenue	10.0%	11.8%	10.4%	10.1%	10.1%
<b>= Operating margin</b>	<b>49.5%</b>	<b>42.6%</b>	<b>45.7%</b>	<b>47.3%</b>	<b>49.6%</b>
1 / (Working capital/revenue	(0.2)	(0.2)	(0.1)	(0.1)	(0.1)
+ Net PPE/revenue	1.2	1.4	1.2	1.1	1.1
+ Other assets/revenue)	0.0	0.0	0.1	0.1	0.0
<b>= Capital turnover</b>	<b>1.0</b>	<b>0.8</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>
Operating margin	49.5%	42.6%	45.7%	47.3%	49.6%
x Capital turnover	1.0	0.8	0.9	0.9	0.9
x (1 - tax rate)	88.9%	85.6%	83.4%	84.1%	84.1%
<b>= After-tax ROIC</b>	<b>43.9%</b>	<b>29.4%</b>	<b>33.9%</b>	<b>36.6%</b>	<b>37.8%</b>

Source: Company data; KGI Research estimates



**TSMC – Recommendation & target price history**



Date	Rating	Target	Price
2025-01-06	Outperform	1,450	1,125
2024-11-08	Outperform	1,450	1,090
2024-10-17	Outperform	1,450	1,035
2024-10-01	Outperform	1,330	972
2024-08-21	Outperform	1,290	958
2024-07-18	Outperform	1,290	1,005
2024-07-15	Outperform	1,270	1,040
2024-01-18	Outperform	688	588
2024-01-10	Outperform	688	584
2023-10-19	Outperform	703	546

Source: TEJ; KGI Research

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