Taiwan Semiconductor Manufacturing Co.

3Q26 earnings preview: steeper 2nm ramp lifting sales upside at resilient margins

Reiterate Rating: BUY | PO: 3,260 TWD | Price: 2,550 TWD

Solid HPC and flagship mobile pipeline solidifies 2H26

TSMC's 3Q26 sales were above street +18% QoQ in NT$ and reached US$46.7bn (vs. its guide of US$44.6-45.8bn) which we believe should be driven by the builds for Apple's mobile SoC and AMD's server CPU on 2nm along with multiple GPU and ASIC product refreshes migrating to 3nm. The mix upgrades could lift 4Q26 sales by +10-15% QoQ, putting it on track to the guidance for 40%+ YoY in '26. While utilization and pricing are favorable, GMs could hold steady in 3Q/4Q26 (BofAe 67.0%/67.8%) rather than expand (recent street 67-68%/68-69%) factoring dilution from 2nm and overseas fab ramps.

Tight supply enables greater value capture and investment

On solid AI demand outlook, TSMC's capex should be on track to its lifted guidance of US$60-64bn in '26 (BofAe US$63bn). The investment could see another surge in '27 (BofAe US$83bn) for further N3, N2, A16 and CoWoS-L expansion and new technologies ramp (e.g. CoPoS and CPO). The tool makers' modest price hike could require TSMC to spend 10% more capex though should be reflected in its value when the capacity starts production in '28 on top of a 5-10% leading edge ASP lift in 1Q27 on supply tightness.

Checkpoints: AI demand, capex & competition/partnership

1) TSMC's view on cloud AI investment amid rate hike + challenging FCF, 2) comment on the market and its growth and capex commitment, 3) update on the competition and collaboration (see Exhibit 29 for our analysis on Terafab/SpaceX) and US investment.

AI-led earnings outlook firmer; valuation should catch up

We lift our 26/27/28 EPS by 2-9% to NT$112/NT$161/NT$203 and keep our Buy rating on TSMC and raise PO to NT$3,260/US$620 on 20x '27E P/E. Its current valuation is undemanding at 16x '27E P/E (vs. its long term 11-21x) backed by its advanced technology leadership.

Estimates (Dec) (NT$)	2024A	2025A	2026E	2027E	2028E
Net Income (Adjusted - mn)	1,173,268	1,717,886	2,916,545	4,184,666	5,276,738
EPS	45.24	66.24	112.46	161.36	203.48
EPS Change (YoY)	39.9%	46.4%	69.8%	43.5%	26.1%
Consensus EPS (Visible Alpha)			107.72	146.40	183.73
Dividend / Share	18.00	21.50	24.00	24.00	24.00
Free Cash Flow / Share	33.55	38.66	69.93	96.56	138.58
ADR EPS (US$)	7.04	10.62	17.61	25.27	31.86
ADR Dividend / Share (US$)	2.80	3.45	3.76	3.76	3.76
Valuation (Dec)					
P/E	56.36x	38.49x	22.67x	15.80x	12.53x
Dividend Yield	0.706%	0.843%	0.941%	0.941%	0.941%
EV / EBITDA*	31.70x	23.98x	15.14x	10.62x	8.61x
Free Cash Flow Yield*	1.32%	1.52%	2.74%	3.79%	5.43%

* For full definitions of *iQmethod*℠ measures, see page 24.

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Refer to important disclosures on page 25 to 28. Analyst Certification on page 22. Price

12 October 2026

Equity

Key Changes

(NT$)	Previous	Current
Price Obj.	3,100.00	3,260.00
2026E EPS	110.20	112.46
2027E EPS	155.85	161.36
2028E EPS	187.89	203.48
2026E EBITDA (m)	4,083,248.5	4,155,258.3
2027E EBITDA (m)	5,745,945.1	5,927,984.9
2028E EBITDA (m)	6,793,119.0	7,307,336.4

Haas Liu >>
Research Analyst
Merrill Lynch (Taiwan)
+886 2 2376 3727
haas.liu@bofa.com

Mike Yang >>
Research Analyst
Merrill Lynch (Taiwan)
+886 2 2376 3729
mike.c.yang@bofa.com

Robert Cheng >>
Research Analyst
Merrill Lynch (Taiwan)
+886 2 2376 3731
robert.cheng@bofa.com

Cathy Hsu >>
Research Analyst
Merrill Lynch (Taiwan)
+886 2 2376 3726
cathy.hsu3@bofa.com

Stock Data

Price (Common / ADR)	2,550 TWD / 453.31 USD
Price Objective	3,260 TWD / 620.00 USD
Date Established	12-Oct-2026 / 12-Oct-2026
Investment Opinion	B-1-7 / B-1-7
52-Week Range	1,375 TWD-2,590 TWD
Market Value (mn)	2,070,984 USD
Market Value (mn)	66,127,544 TWD
Shares Outstanding (mn)	25,932.4 / 5,186.5
Average Daily Value (mn)	1,767 USD
Free Float	92.2%
BofA Ticker / Exchange	TSMWF / TAI
BofA Ticker / Exchange	TSM / NYS
Bloomberg / Reuters	2330 TT / 2330.TW
ROE (2026E)	43.8%
Net Dbt to Eqty (Dec-2025A)	-37.3%

iQprofile℠ Taiwan Semiconductor Manufacturing Co.

Key Income Statement Data (Dec)	2024A	2025A	2026E	2027E	2028E
(NT$ Millions)					
Sales	2,894,308	3,809,054	5,551,264	7,790,371	9,656,518
Gross Profit	1,624,354	2,281,294	3,733,064	5,371,382	6,653,851
Sell General & Admin Expense	(96,888)	(99,222)	(110,416)	(131,671)	(145,125)
Operating Profit	1,322,053	1,936,092	3,323,549	4,866,929	6,097,850
Net Interest & Other Income	83,786	105,574	193,432	175,282	261,328
Associates	NA	NA	NA	NA	NA
Pretax Income	1,405,839	2,041,666	3,516,980	5,042,211	6,359,178
Tax (expense) / Benefit	(233,407)	(326,266)	(601,062)	(860,526)	(1,086,199)
Net Income (Adjusted)	1,173,268	1,717,886	2,916,545	4,184,666	5,276,738
Average Fully Diluted Shares Outstanding	25,932	25,933	25,933	25,933	25,933
Key Cash Flow Statement Data					
Net Income	1,173,268	1,717,886	2,916,545	4,184,666	5,276,738
Depreciation & Amortization	662,797	688,096	831,710	1,061,056	1,209,487
Change in Working Capital	(143,010)	(72,100)	(102,100)	(161,737)	(113,049)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	133,123	(58,907)	154,974	77,281	95,310
Cash Flow from Operations	1,826,177	2,274,976	3,801,128	5,161,266	6,468,486
Capital Expenditure	(956,007)	(1,272,411)	(1,987,705)	(2,657,265)	(2,874,767)
(Acquisition) / Disposal of Investments	(58,000)	(37,014)	(42,792)	7,594	475
Other Cash Inflow / (Outflow)	149,164	165,031	76,317	411	2,594
Cash Flow from Investing	(864,843)	(1,144,393)	(1,954,180)	(2,649,259)	(2,871,699)
Shares Issue / (Repurchase)	(9)	(2)	(2)	0	0
Cost of Dividends Paid	(337,129)	(440,855)	(531,614)	(622,377)	(622,377)
Cash Flow from Financing	(346,301)	(440,345)	(564,551)	(624,253)	(622,956)
Free Cash Flow	870,171	1,002,565	1,813,423	2,504,002	3,593,719
Net Debt	(1,403,733)	(2,035,607)	(3,419,363)	(5,306,194)	(8,280,429)
Change in Net Debt	(556,872)	(647,079)	(1,277,442)	(1,889,630)	(2,974,410)
Key Balance Sheet Data					
Property, Plant & Equipment	3,234,980	3,691,841	5,015,572	6,578,562	8,037,977
Other Non-Current Assets	368,606	424,052	481,020	478,736	478,718
Trade Receivables	272,088	281,791	341,182	430,143	481,869
Cash & Equivalents	2,422,020	3,068,595	4,463,340	6,348,294	9,321,950
Other Current Assets	394,245	466,745	527,406	634,603	734,512
Total Assets	6,691,938	7,933,024	10,828,520	14,470,338	19,055,027
Long-Term Debt	958,429	896,062	895,282	892,832	892,526
Other Non-Current Liabilities	145,408	118,147	176,911	209,050	236,572
Short-Term Debt	59,858	136,926	148,695	149,268	148,995
Other Current Liabilities	1,204,667	1,321,094	1,682,008	1,732,227	1,786,768
Total Liabilities	2,368,362	2,472,229	2,902,896	2,983,378	3,064,861
Total Equity	4,323,576	5,460,795	7,925,624	11,486,960	15,990,166
Total Equity & Liabilities	6,691,938	7,933,024	10,828,520	14,470,338	19,055,027
iQmethod℠ **- Bus Performance***					
Return On Capital Employed	23.2%	28.4%	36.3%	38.3%	35.2%
Return On Equity	30.3%	35.4%	43.8%	43.3%	38.5%
Operating Margin	45.7%	50.8%	59.9%	62.5%	63.1%
EBITDA Margin	68.6%	68.9%	74.9%	76.1%	75.7%
iQmethod℠ **- Quality of Earnings***					
Cash Realization Ratio	1.6x	1.3x	1.3x	1.2x	1.2x
Asset Replacement Ratio	1.4x	1.8x	2.4x	2.5x	2.4x
Tax Rate (Reported)	16.6%	16.0%	17.1%	17.1%	17.1%
Net Debt-to-Equity Ratio	-32.5%	-37.3%	-43.1%	-46.2%	-51.8%
Interest Cover	NM	NM	NM	NM	NM

Key Metrics

* For full definitions of *iQmethod*℠ measures, see page 24.

Company Sector

Semiconductors

Company Description

TSMC was founded in 1987 and is listed in Taiwan (2330TT) and the US (TSM/NYS).TSMC is the largest and global leader in integrated circuit (IC) manufacturing. As a build-to-order foundry, it provides a wide range of value-add activities: IC manufacturing, mask-making, IC design services, turnkey solutions, and process development. We attribute its success to its proven, winning business model, unparalleled scale advantage, optimized execution, and technology scope and depth. 5 shares = 1 ADR.

Investment Rationale

The ongoing semi content growth in mobile, rise of artificial intelligence (AI), and proliferation of Internet of Things (IoT) should result in sustainable upside in aggregate computing power globally. TSMC, as the leading contract manufacturer of semiconductor chips, is in a good position to capitalize. We are structurally positive on TSMC and expect it to sustain over 15% growth with rising FCF from 2026 onwards.

Stock Data

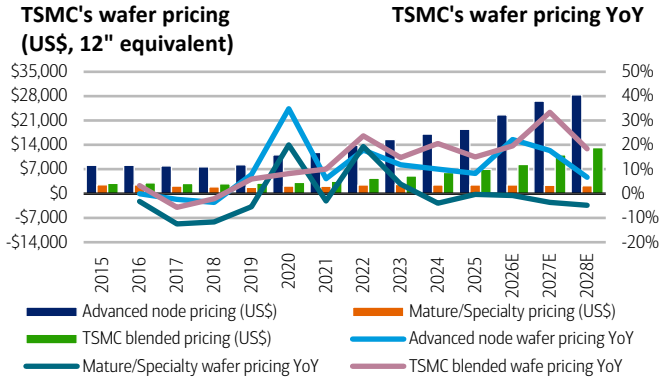
Shares / ADR	5.00
Price to Book Value	8.4x

Key Changes

(US$)	Previous	Current
Price Obj.	590.00	620.00
2026E EPS	17.26	17.61
2027E EPS	24.40	25.27
2028E EPS	29.42	31.86

Focus charts and tables

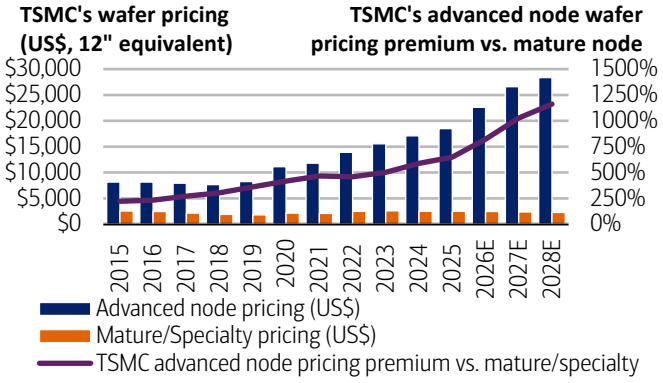
Exhibit 1: TSMC's wafer pricing by advanced vs. mature nodes
TSMC's wafer pricing by advanced vs. mature nodes



Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

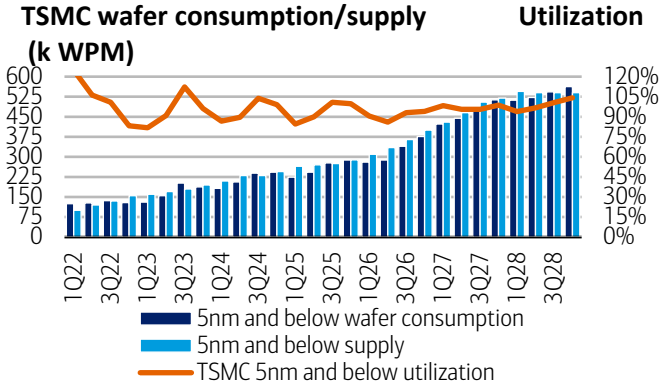
Exhibit 2: TSMC's wafer pricing gap for advanced vs. mature nodes
TSMC's advanced node pricing is now 9x higher than mature ones



Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

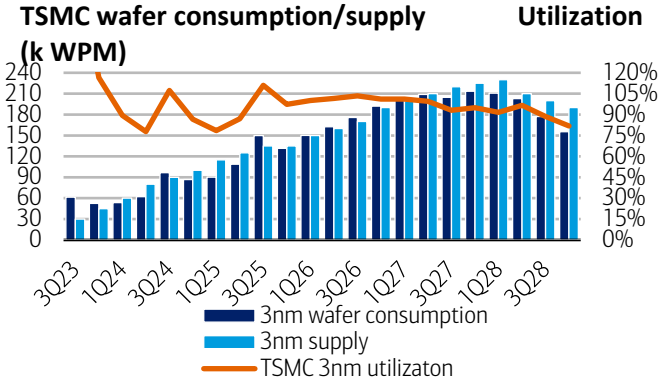
Exhibit 3: TSMC 5nm and below wafer consumption/supply/utilization
Utilization of 5nm and blow to remain high



Source: Company Data, BofA Global Research estimates

BofA GLOBAL RESEARCH

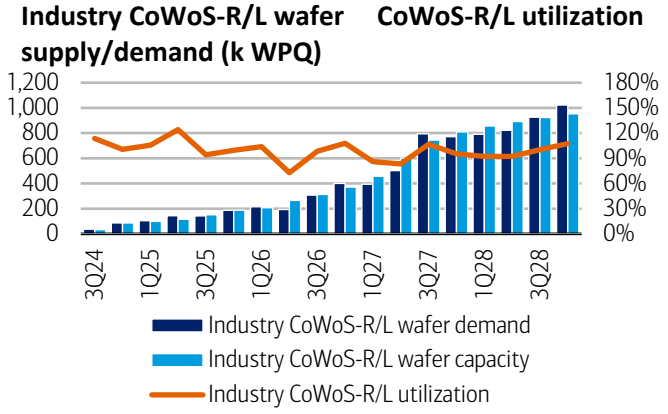
Exhibit 4: TSMC 3nm wafer consumption/supply/utilization
TSMC 3nm to see utilization staying close to full



Source: Company Data, BofA Global Research estimates

BofA GLOBAL RESEARCH

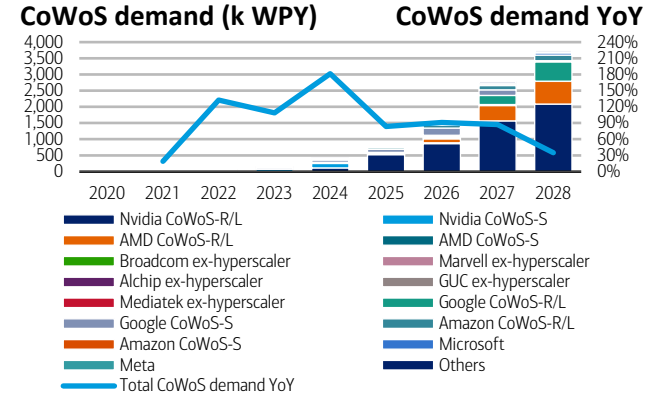
Exhibit 5: Industry CoWoS-R/L supply/demand
CoWoS-R/L utilization should stay at high levels



Source: BofA Global Research estimates

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Exhibit 6: Industry CoWoS demand
CoWoS demand should remain strong through 2028



Source: Global Research estimates

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3Q26 sales topped guidance; GMs tracking well but recent street could be too bullish

We profile our expectation for TSMC's 3Q26 earnings on October 15th. 3Q26 sales were reported +18% QoQ in NT$, above BofAe/street expectations of +14%/+13% QoQ. Based on the average FX of NT$31.99/US$ (vs. its NT$32US$ guide), its sales in US$ term would be US$46.7bn, also above its guidance range of US$44.6-45.8bn. we believe the strength is led by strong ramp on 2nm potentially growing to 11% of its sales in 3Q26 (vs. 3% in 2Q26) for Apple's builds for its product launches and surging demand for AMD's Venice server CPU. These growth drivers on the node are supplemented by the incremental inventory stocking from Mediatek and Qualcomm for their flagship smartphone SoCs albeit at a low base and below seasonal due to weak Android demand.

On top of the 2nm scale up, we expect the utilization for 5nm and 3nm to stay above 100% backed by the continued HPC/AI build strength especially with multiple product upgrades including **1) accelerators** (GPUs and ASICs): strong demand for Nvidia's Rubin GPU, AMD's MI400, AWS's Trainium3 ramp and initial ramp for Google's TPUv8t/i more than offsetting a mild wind down in Google's Ironwood TPU, **2) CPUs:** solid demand for general purpose servers and AI data centers as noted in our deep dive report quantifying CPU demand through '30 across x86 (AMD's Turin CPUs) and ARM based CPUs (e.g. Nvidia's Vera CPU, Google's Axion CPU, AWS Graviton CPU along with incremental contribution from Microsoft Cobalt CPU) and **3) networking switch**: more and faster data transmission in the complex AI data centers requires more advanced networking switch solutions from Nvidia/Mellanox, Broadcom and Marvell.

The company's better than expected sales in 3Q26 backed by healthy shipment and pricing trend on the advanced nodes should be supportive to its GMs. However, in contrast to the recent aggressive street expectations of 67-68% GMs in 3Q26, we only model it at the high-end of its guidance of 65-67%, balancing more favorable utilization and gradual 3nm depreciation roll off partially offset by a 3-4% GMs dilution from 2nm ramp which we believe is driver for the incremental sales during the quarter.

Exhibit 7: TSMC 3Q26-4Q26 and 2026-27 estimates BofAe vs. street
We lift our EPS estimates for '26/27 to NT$112.47/NT$161.37

	3Q26E			4Q26E			2026E			2027E		
	BofAe	BofA Old	Street	BofAe	Old	Street	BofAe	Old	Street	BofAe	Old	Street
Sales (NT$mn)	$1,494,243	$1,447,447	$1,452,942	$1,652,537	$1,625,222	$1,593,320	$5,551,264	$5,477,153	$5,434,682	$7,790,371	$7,711,575	$7,323,473
Sales QoQ / YoY (%)	17.6%	13.9%	14.4%	10.6%	12.3%	9.7%	45.7%	43.8%	42.7%	40.3%	40.8%	34.8%
Gross profit (NT$mn)	$1,000,465	$961,703	$963,882	$1,120,993	$1,081,275	$1,050,189	$3,733,064	$3,654,584	$3,595,640	$5,371,382	$5,191,137	$4,844,770
GMs (%)	67.0%	66.4%	66.3%	67.8%	66.5%	65.9%	67.2%	66.7%	66.2%	68.9%	67.3%	66.2%
Operating profit (NT$mn)	$891,981	$854,803	$842,101	$1,005,999	$971,167	$922,996	$3,323,549	$3,251,539	$3,154,235	$4,866,929	$4,689,032	$4,232,893
OpMs (%)	59.7%	59.1%	58.0%	60.9%	59.8%	57.9%	59.9%	59.4%	58.0%	62.5%	60.8%	57.8%
Pretax profit (NT$mn)	$924,044	$887,585	$873,964	$1,042,707	$1,008,753	$952,145	$3,516,980	$3,446,566	$3,357,001	$5,042,211	$4,870,519	$4,433,422
Pretax margins (%)	61.8%	61.3%	60.2%	63.1%	62.1%	59.8%	63.4%	62.9%	61.8%	64.7%	63.2%	60.5%
Tax expense (NT$mn)	-$154,691	-$148,588	-$148,114	-$174,556	-$168,872	-$159,351	-$600,435	-$588,648	-$597,694	-$857,545	-$828,896	-$786,143
Tax rate (%)	16.7%	16.7%	16.9%	16.7%	16.7%	16.7%	17.1%	17.1%	17.8%	17.0%	17.0%	17.7%
Net profit (NT$mn)	$769,353	$738,997	$725,850	$868,150	$839,881	$792,794	$2,916,545	$2,857,919	$2,759,307	$4,184,666	$4,041,623	$3,647,279
Net margins (%)	51.5%	51.1%	50.0%	52.5%	51.7%	49.8%	52.5%	52.2%	50.8%	53.7%	52.4%	49.8%
EPS (NT$)	$29.67	$28.50	$28.08	$33.48	$32.39	$30.67	$112.47	$110.21	$107.37	$161.37	$155.85	$140.92

Source: BofA Global Research estimates, Bloomberg

HPC/Apple lifting 4Q26 sales outlook; resilient GM expectation but below street

For 4Q26, based on its slightly above +40% YoY full year sales guide, TSMC's sales could grow 10-15% QoQ (BofAe +11%), better than its 10-year seasonality of 7% QoQ even off a high base from 1Q-3Q26. The blended ASPs strength (BofAe +11% QoQ) should be the key driver for 4Q26 sales as shipment mix continues to shift toward advanced nodes, with revenue from 5nm and below processes representing 75% of the company's sales (vs. 66%/71% in 2Q/3Q26). Specifically, 2nm with 15%+ higher wafer pricing than 3nm could further grow its contribution to 18% of TSMC's sales during the quarter. On the other hand, we model a stable wafer shipment (BofAe +9%/-5% QoQ for advanced/mature nodes), balancing HPC demand strength and Apple's seasonal chipset builds for its new product launches and a modest drop on the specialty process output and effective capacity loss due to equipment movement for the node conversion.

While the blended pricing is even more favorable and utilization on the advanced and mature nodes in general stay healthy, we model a relatively stable GMs only up to ~67.8% levels in 4Q26 (vs. recent street and investors' expectations at 68-69%). The key factors we consider as mildly negative offset would be 1) higher depreciation: +25-30% HoH in 2H26 due to more overseas and 2nm capacity ramp and 2) 2nm still going through yield learning curve and could see more meaningful impact in 4Q26 (vs. its 3-4% GMs dilution guide in 2H26) as the sales contribution grows.

Exhibit 8: Our 2026-28E earnings are 5-15% above consensus as we model a higher sales growth
TSMC 2026-28 estimates BofAe vs. Street

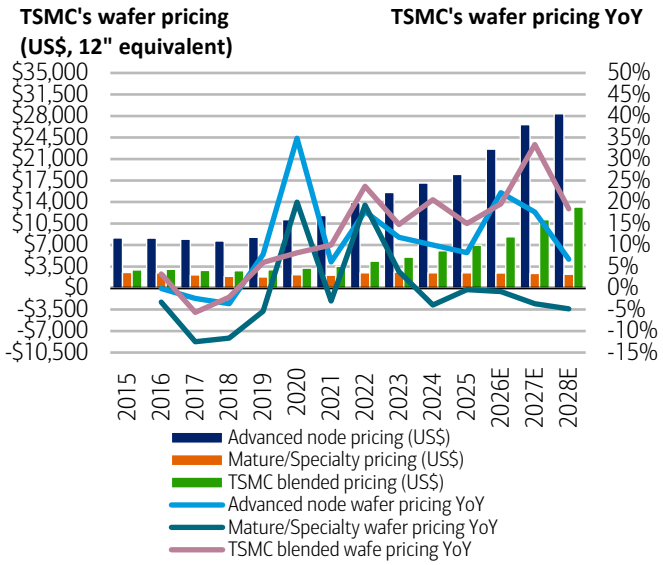
	2026E			2027E			2028E		
	BofAe	**Street**	**vs. street**	**BofAe**	**Street**	**vs. street**	**BofAe**	**Street**	**vs. street**
Sales (NT$mn)	$5,551,264	$5,434,682	2%	$7,790,371	$7,323,473	6%	$9,656,518	$9,152,144	6%
Sales QoQ / YoY (%)	**45.7%**	**42.7%**		**40.3%**	**34.8%**		**24.0%**	**25.0%**	
Gross profit (NT$mn)	$3,733,064	$3,595,640	4%	$5,371,382	$4,844,770	11%	$6,653,851	$6,033,826	10%
GMs (%)	**67.2%**	**66.2%**	**1%**	**68.9%**	**66.2%**	**3%**	**68.9%**	**65.9%**	**3%**
Operating profit (NT$mn)	$3,323,549	$3,154,235	5%	$4,866,929	$4,232,893	15%	$6,097,850	$5,255,681	16%
OpMs (%)	**59.9%**	**58.0%**	**2%**	**62.5%**	**57.8%**	**5%**	**63.1%**	**57.4%**	**6%**
Pretax profit (NT$mn)	$3,516,980	$3,357,001	5%	$5,042,211	$4,433,422	14%	$6,359,178	$5,553,349	15%
Pretax margins (%)	63.4%	61.8%	2%	64.7%	60.5%	4%	65.9%	60.7%	5%
Tax expense (NT$mn)	-$600,435	-$597,694	0%	-$857,545	-$786,143	9%	-$1,082,440	-$998,175	8%
Tax rate (%)	17.1%	17.8%	-1%	17.0%	17.7%	-1%	17.0%	18.0%	-1%
Net profit (NT$mn)	$2,916,545	$2,759,307	6%	$4,184,666	$3,647,279	15%	$5,276,738	$4,555,174	16%
Net margins (%)	52.5%	50.8%	2%	53.7%	49.8%	4%	54.6%	49.8%	5%
EPS (NT$)	**$112.47**	**$107.37**	**5%**	**$161.37**	**$140.92**	**15%**	**$203.48**	**$176.56**	**15%**

Source: BofA Global Research estimates, Bloomberg

2026-27 sales and margins outlook solidified by healthy AI demand

Factoring in stronger CPU and AI GPU/ASIC demand outlook as noted in our Semicon Taiwan takeaways report where we updated our industry models, we are lifting our US$ sales expectation for TSMC in '26/'27 to +42%/+40% YoY respectively (vs. BofA prior +41%/+40% YoY). More importantly, with utilization staying tighter for longer along with inflationary cost pass through (e.g. equipment and consumables), TSMC should raise its advanced node and packaging pricing by 5-10% in the beginning of 2027 to reflect its value. This along with a mild 3-5% price hike on the mature nodes where the utilization is back to 90-95% as it optimizes the product mix following the strategic 6"/8" capacity retirement should lift its GMs to 67%/69% in 2026/27 (vs. BofA prior 67%/67%).

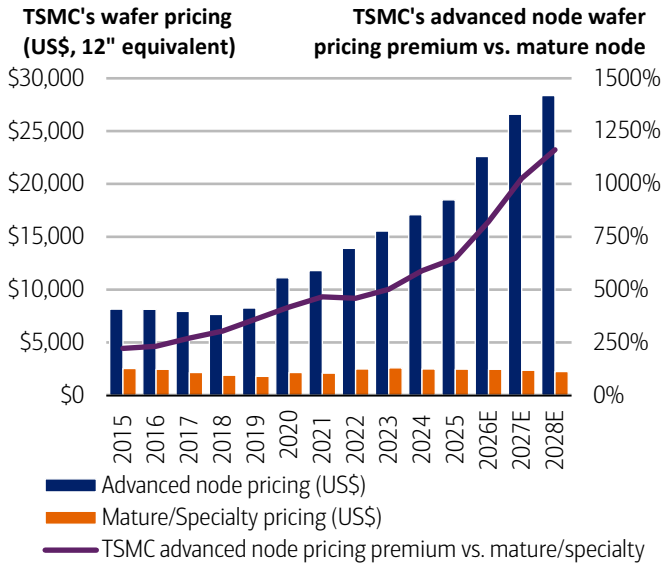
Exhibit 9: TSMC's wafer pricing by advanced vs. mature nodes
TSMC's wafer pricing by advanced vs. mature nodes



Source: BofA Global Research estimates

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Exhibit 10: TSMC's wafer pricing gap for advanced vs. mature nodes
TSMC's advanced node pricing is now 9x higher than mature ones



Source: BofA Global Research estimates

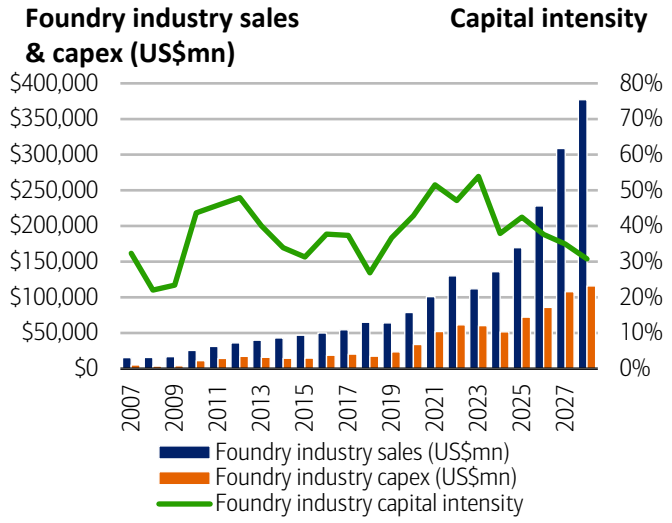
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Capex on track for lifted guide for 2026 and will grow 20%+ CAGR from '26-28

We lifted our front-end foundry industry capex growth expectation to 19%/26% YoY for '26/27 to US$86bn/US$108bn, supporting a CAGR of 16% from '26-28. This is mostly led by our higher expectation on TSMC's capex on stronger wafer demand on N3 and N2 from GPUs, ASICs, CPUs, networking switches and HBM base dies and initial ramp of A16, along with incremental spending reacceleration from tier 2 foundries.

Separately, we also raised the back-end packaging and testing industry spending estimates from 66%/36% YoY to 82%/21% YoY for '26/27 to US$27bn/US$33bn, supporting a CAGR of 15% from '26-28. The upward revision is driven by our higher expectation of TSMC's more aggressive capacity addition on CoWoS-R/L to accommodate more demand from its customers amid growing level of chipset complexity and reticle size and higher level of capacity readiness of SoIC for higher 3D packaging adoption for logic and memory dies integration and CPO. The more aggressive spending from ASE is set to grow by another 30-50% YoY in 2027 off a high base in 2026 on its own FoCoS capacity ramp and TSMC's CoWoS licensing.

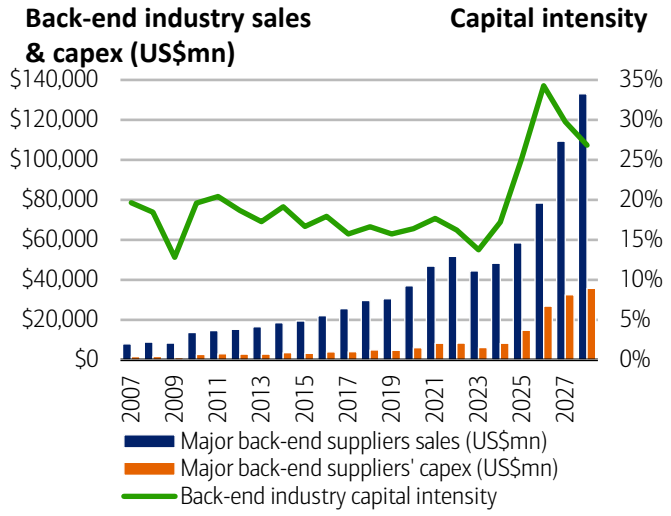
Exhibit 11: Front-end sales, capex, and capital intensity
Front-end capex should reach US$86bn/US$108bn in '26/27



Source: Company Data, BofA Global Research estimates, Bloomberg

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Exhibit 12: Back-end sales, capex, and capital intensity
Back-end capex should reach US$27bn/US$33bn in '26/27



Source: Company Data, BofA Global Research estimates, Bloomberg

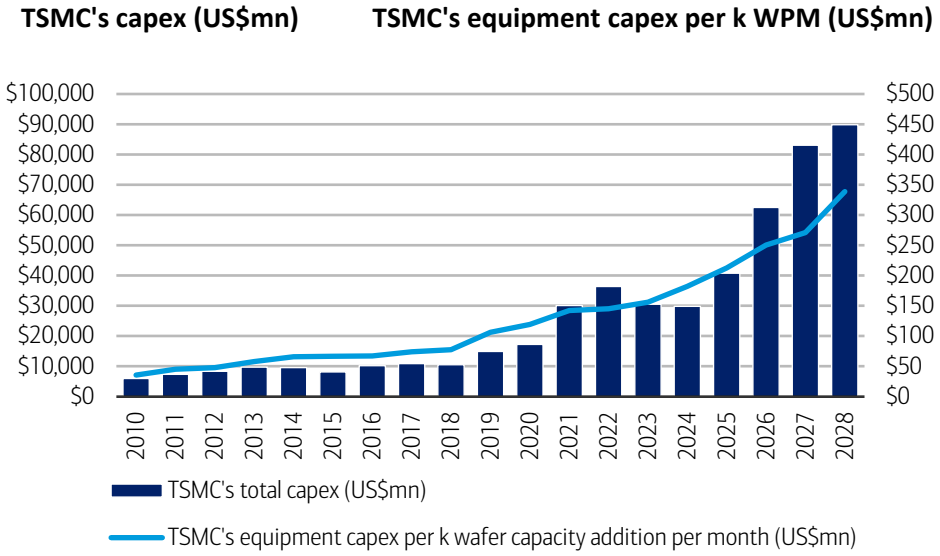
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Specifically on TSMC, based on our bottom up capacity analysis across front-end manufacturing and back-end packaging, TSMC's capex spending is tracking to US$63bn for 2026 (vs. its latest guidance of US$60-64bn) mostly skewed toward advanced front-end manufacturing including 55-60k WPM 3nm capacity addition, 60k WPM 2nm capacity ramp, initial 3-5k WPM A16 capacity installation. The back-end packaging investment should be largely driven by its CoWoS capacity growth while the spending on the equipment pull-in for CPO and CoPoS remains limited as most of the equipment are still under sampling process for qualification and meaningful shipment will be in 2027-28.

In addition to the earlier tool pull-in schedule due to tighter equipment supply with memory makers expanding, the fast-growing capex should reflect the rising cost per 1k WPM on the advanced nodes vs. mature nodes, with the equipment cost per 1k WPM advanced wafer capacity expansion has grown from US$156mn in 2023 to US$241mn in 2025. Even factoring in more common use of equipment on the advanced nodes, the capex/1k WPM advanced capacity could further rise by 20% to US$289mn in 2027 with the technology architecture upgrade.

On top of the investment in the core front-end manufacturing, we expect the company to slightly outspend in the back-end packaging and estimate it is at the upper half of its guidance for 10-20% total capex, mainly for more aggressive capacity expansion to meet its customers' demand amid growing competition from Intel's EMIB-T solution and technology innovation. On the other hand, the maintenance capex could be reduced for specialty technologies as the company gradually retires the equipment.

Exhibit 13: TSMC's total Capex vs. equipment spending per k WPM capacity addition
TSMC spend 1-2x more on 1k WPM expansion due to its shift to advanced nodes in recent years

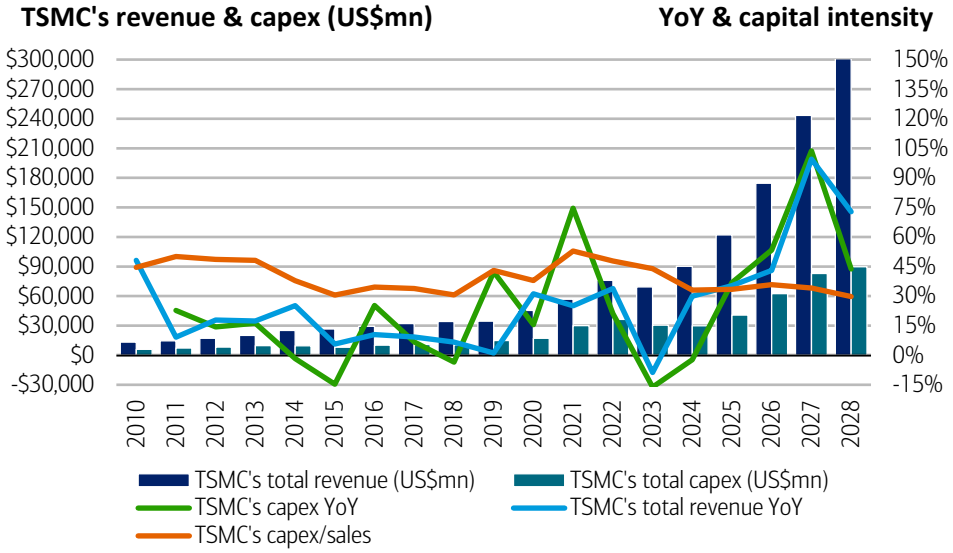


Source: Company Data, BofA Global Research estimates

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Considering the capex required for further 3nm capacity expansion in the additional phases in its Tainan megafab, Arizona and the recently announced 2nd fab in Kumamoto on strong AI/HPC/automotive demand, ramping scale for 2nm family including A16, R&D on A14 supplemented by multiple back-end packaging technologies in progress (e.g. CoWoS, CoPoS, SoIC, WMCM) and lower capex efficiency in its US operation, our bottom up model shows TSMC's capex could be US$83bn/US$90bn in 2027/28 at a CAGR of 20% CAGR from 2026-28.

Exhibit 14: TSMC's revenue and Capex trend
TSMC's sales should still outgrow Capex to keep its capital intensity manageable



Source: Company Data, BofA Global Research estimates

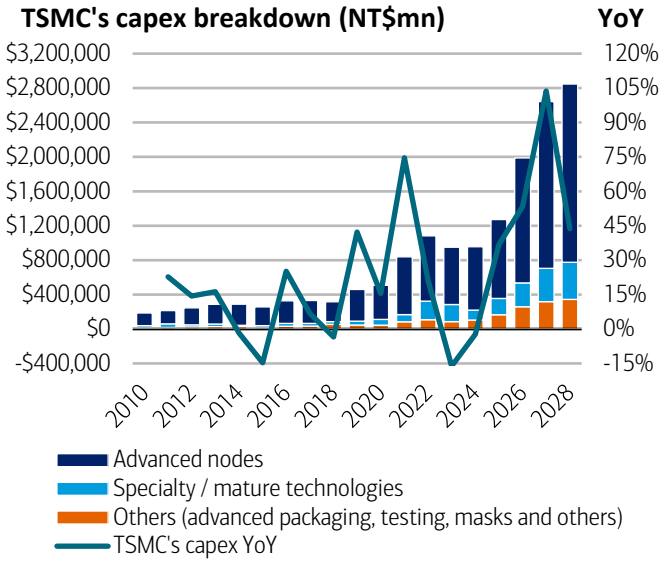
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Beyond the technology upgrades and capacity expansion, we would note the equipment price hike would drive additional spending required by TSMC in the next few years. Our feedback from the tool suppliers noted they plan to hike the price by 10-15% for the front-end manufacturing equipment and 5-10% for the back-end packaging equipment effective from 2027 to reflect higher component and labor cost.

With TSMC's stronger bargaining power against the equipment supply chain vs. its peers, it should be able to fully pass on the ~10% higher nominal capex to its customers by lifting its foundry pricing when the tools are delivered for its production ramp in 2H27, setting up a good start for the pricing outlook in 2028.

While the surge in headline capex hike could lead to concern on accelerating depreciation, we estimate it will only grow at 21% CAGR from 2026-28 due to modestly higher portion of the spending towards facility and clean room with much longer depreciation cycle than equipment. This should keep the depreciation still undergrowing its sales of +32% CAGR, sustaining GMs expansion to 68-69% levels by 2028.

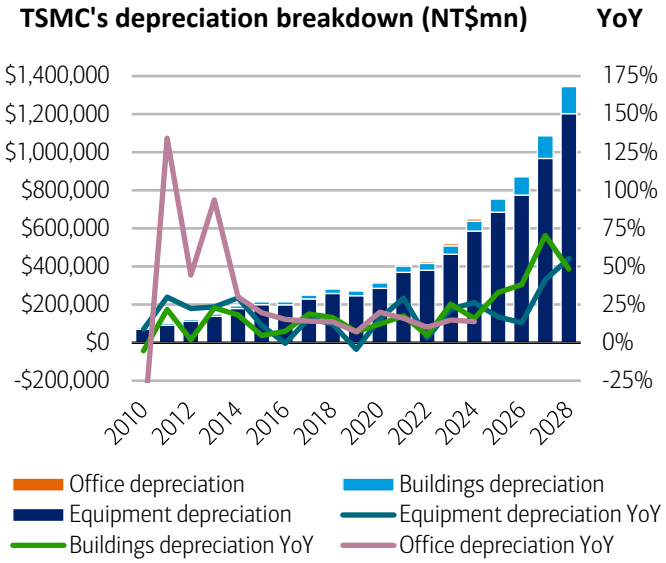
Exhibit 15: TSMC Capex spending breakdown by technology
TSMC spends the most on advanced front-end but packaging is outgrowing



Source: Company Data, BofA Global Research estimates

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Exhibit 16: TSMC's depreciation trend
TSMC's depreciation growth will be led by equipment



Source: Company Data, BofA Global Research estimates

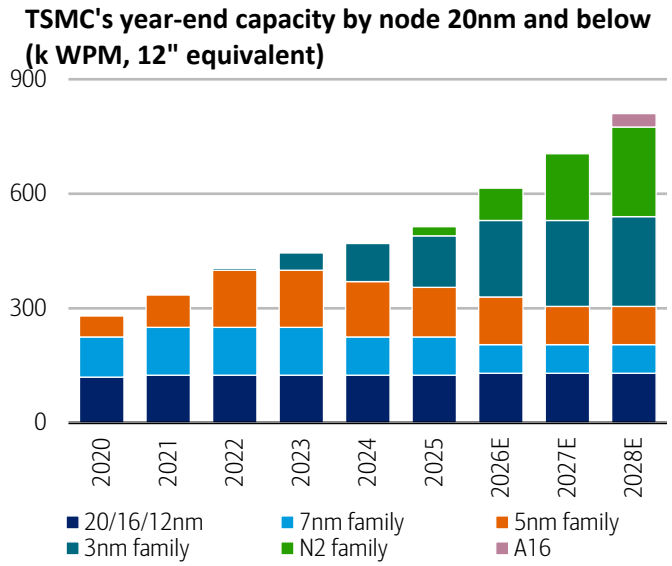
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We keep our Buy rating on TSMC and lift PO from NT$3,100 to NT$3,260 on unchanged 20x '27E P/E and US$ADR PO from $590 to $620. Our EPS for 2026/27/28E are now NT$112/161/203 (vs. NT$110/156/188 prior) as we factor in stronger CPU and AI GPU/ASIC demand outlook. Its current valuation seems undemanding at 16x '27E P/E (vs. its long term P/E average of 11-21x).

Capacity expansion accelerates across advanced front-end and back-end

As TSMC is in the process to retire a portion of its equipment on 6", 8" and mature 12" processes while still adding the capacity on the advanced nodes, we estimate the company's total front-end manufacturing capacity will drop by 2% YoY in 2026.

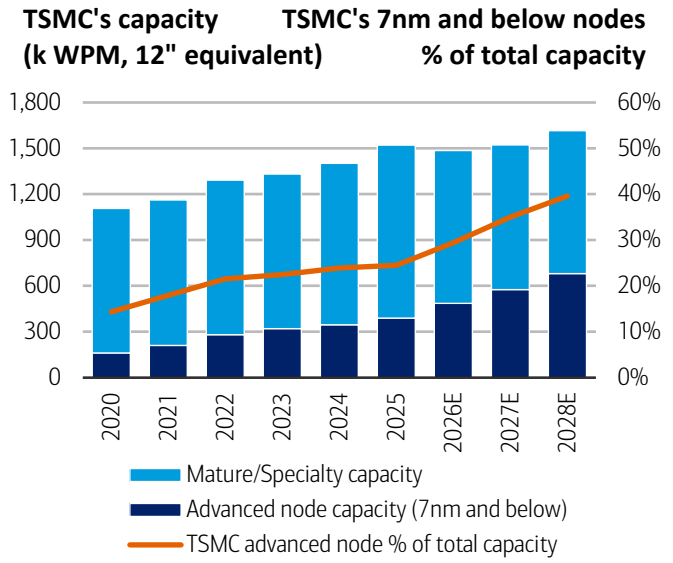
Exhibit 17: TSMC's year-end capacity by node for 20nm and below
TSMC will expand aggressively on 3nm and 2nm through 2027



Source: Company Data, BofA Global Research estimates

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Exhibit 18: TSMC's advanced node capacity as % of its installed base
TSMC's advanced nodes will reach 40% of its total capacity



Source: Company Data, BofA Global Research estimates

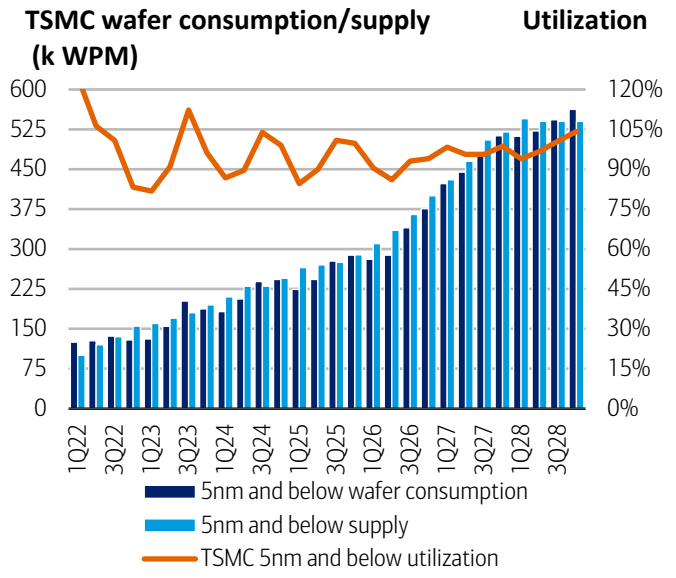
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The trend could be more stable into 2027-28 as TSMC strives to optimize its capacity mix and across node conversion to accommodate its customers' demand especially on the leading-edge technologies, with its advanced capacity set to grow by 10% CAGR from 2025-28 balanced by the mature capacity reduction at -8% CAGR.

Based on our estimate, TSMC's capacity for 7nm and below nodes will grow from 320k WPM per month in 2023 to ~700k WPM by 2028 at a 16% CAGR, through expansion and efficient conversion from higher equipment commonality, cross technology planning and AI productivity gains (e.g. tool idle time and chamber cleaning schedule optimization). This will also support the mix of 7nm and below capacity climb toward 40-45% of its total capacity (vs. 24% in 2023). By region, we expect the capacity expansion through 2027 to enable its overseas fabs to account for 17% of TSMC's total capacity by 2028 (vs. 7% in 2020) and similarly for the advanced node capacity (vs. ~0% in 2023), mainly in Arizona and Kumamoto.

Specifically, we believe the company is on track to its target on 25% CAGR capacity expansion for its 5nm and 3nm from '22-27. We model its 3nm capacity will reach 190k/230k WPM by 4Q26/27. On N2 family, TSMC plans to grow capacity by 70% CAGR from '26-28, with 1st year ramp delivering 45% more capacity vs. 3nm as it rolls out 5 fabs at once.

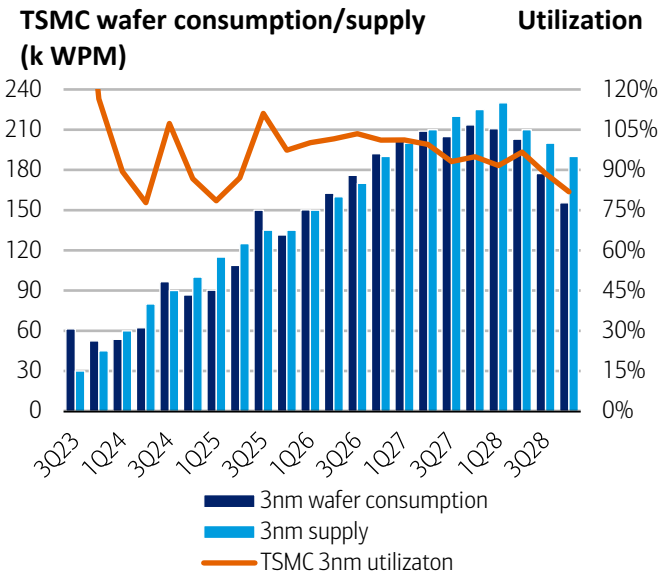
Exhibit 19: TSMC 5nm and below wafer consumption/supply/utilization
Utilization of 5nm and blow to remain high



Source: Company Data, BofA Global Research estimates

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Exhibit 20: TSMC 3nm wafer consumption/supply/utilization
TSMC 3nm to see utilization staying close to full

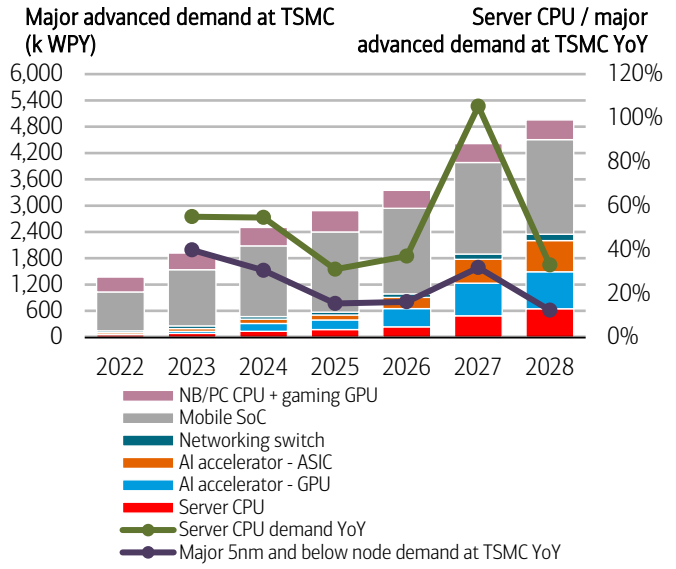


Source: Company Data, BofA Global Research estimates

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On the demand, with 5nm and 3nm generating ~50% of TSMC's revenue in 2025, we analyze the supply and demand landscape through our bottom-up capacity model and wafer consumption by the company's major customers for their major products on these nodes. Based on our estimate, the utilization for 5nm and below nodes could stay high at least 90% if we only consider the effective capacity which is especially important during the period of frequent capacity conversion and new node ramp in the next few years.

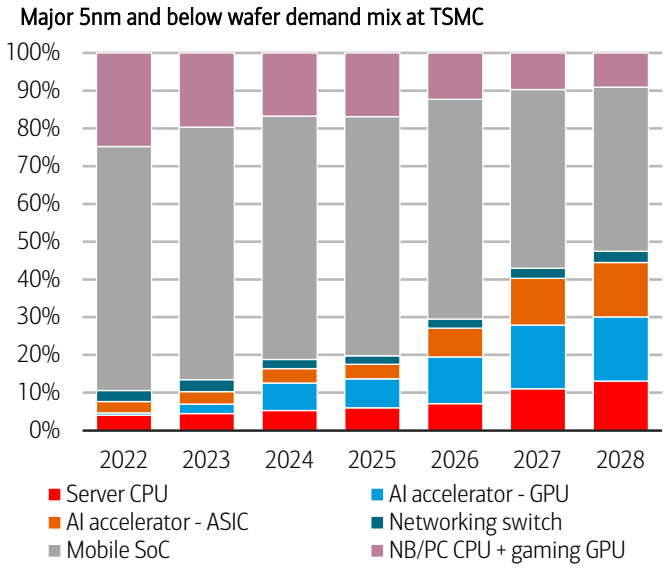
Exhibit 21: Major 5nm and below wafer demand at TSMC
Server CPU demand outgrows overall major advanced chipsets



Source: BofA Global Research estimates

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Exhibit 22: Major 5nm and below wafer demand mix at TSMC
Server CPU accounts for 13% in 2028

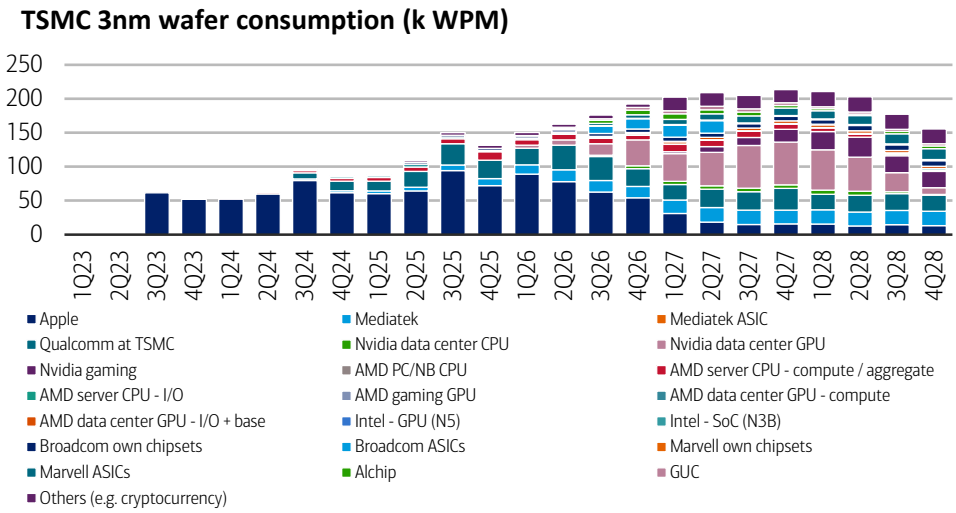


Source: BofA Global Research estimates

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We would note 3nm, as a sweet spot for high performance computing, networking and flagship smartphone chipsets, could see the utilization staying close to full even with continued expansion on strong project pipeline, sustaining continued price hike even in 2027 following the price surge in 2025-26. The node could be even more profitable from 2028-29 when the fixed cost starts rolling off following 5 year depreciation cycle.

Exhibit 23: TSMC 3nm wafer consumption by customers
Mediatek/Qualcomm/Nvidia should remain the largest customers following Apple's migration to 2nm

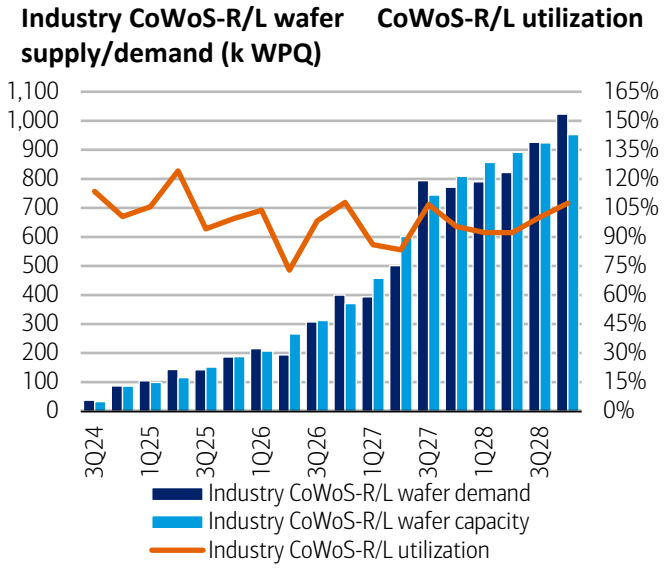


Source: BofA Global Research estimates

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On the back-end packaging, with surging server CPU demand on top of the already strong order backlog for GPUs and ASICs, we estimate the industry's CoWoS supply will need to grow by 52% CAGR from 2026-28. TSMC will still lead the capacity expansion from 120k WPM in 4Q26 to 210k WPM in 4Q27, while the OSATs will also grow their portion of the supply with ASE and Amkor adding capacity to 70-75k+ WPM (vs. 30-35k in 4Q26) and 25-30k WPM (vs. 15-20k by 4Q26) in 4Q27 respectively. Specifically, while TSMC should still lead the supply for complex GPU and ASIC packaging, ASE grows as a major 2nd source with its capacity share growing from 18% of the industry in '26 to 29% in '28 and proven track record as the major CoWoS full process service provider for AMD's Venice server CPU.

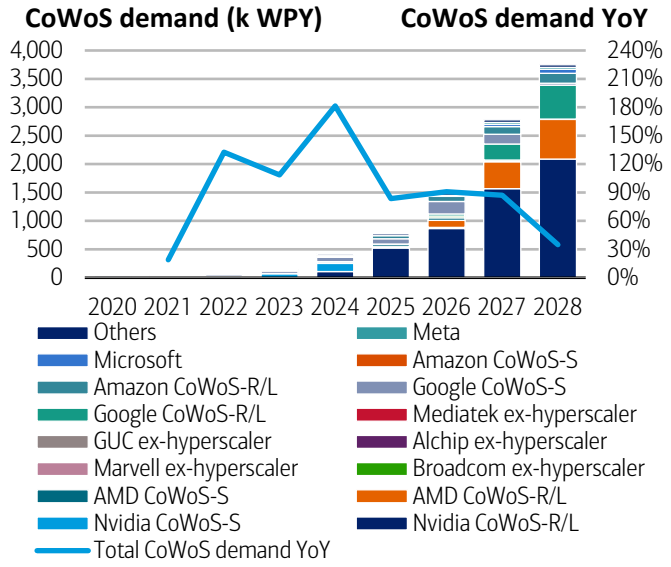
Exhibit 24: Industry CoWoS-R/L supply/demand
CoWoS-R/L utilization should stay at high levels



Source: BofA Global Research estimates

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Exhibit 25: Industry CoWoS demand
CoWoS demand should remain strong through 2028



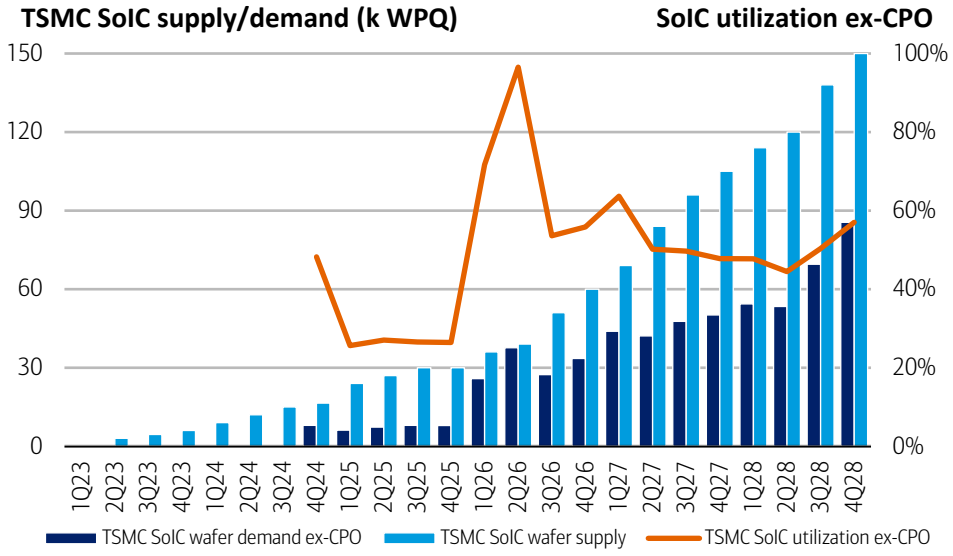
Source: Global Research estimates

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We estimate TSMC's SoIC capacity will reach 20k WPM by 4Q26 and will need to grow to 35k WPM by 4Q27 and further to 50k WPM by 4Q28 with the applications proliferating from AMD's GPUs to Apple's M-series CPUs in 2026, hyperscalers' customized ARM based server CPUs in 2027 and adoption by Nvidia for its Feynman GPU along with the inflection of CPO penetration in 2028.

Similar to CoWoS, the SoIC technology could be even more important for TSMC going forward and the capacity ramp could be steep given much faster data transmission required for the HPC chipsets across CPUs, GPUs, AI accelerators and networking switches. At full utilization, we estimate SoIC could contribute US$2.9bn annually to TSMC in 2028 (1% of the company's total sales)

Exhibit 26: TSMC SoIC supply/demand trend
TSMC's SoIC capacity will reach 20k WPM by 4Q26 and will need to grow to 35k WPM by 4Q27



Source: Company Data, BofA Global Research estimates

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Solid technology roadmap and execution easing competition concern

TSMC is pursuing a dual track strategy for its front-end manufacturing, advancing the solution for both its consumer and HPC customers. The nodes targeted for consumer chipsets requiring cost efficiency and IP reuse will be introduced on an annual basis to match its customers' yearly product launch schedule. For the HPC applications, the company targets to roll out a new node with biennial cadence, supporting major leaps in performance, transistor density, and power density.

Exhibit 27: Front-end manufacturing roadmap comparison
TSMC's advanced node technology roadmap advancing faster vs. Intel and Samsung and has the widest offerings targeted for different applications

Company	End Market / Segment	2023	2024	2025	2026	2027	2028	2029
TSMC	Data Center	N4P & N4X		N3X & N2	N2P & A16	N2X		A12
	High-end consumer/mobile	N3	N3E	N3P & N2	N2P		N2U & A14	A13
	Automotive		N5A		N3A			
	Mainstream		N4P	N4C	N3C		N2U	
Intel Foundry	Data center and high-end client	3	3	3 & 18A		18A-P		14A & 14A-E
	Mature	16	16-E		Intel/UMC 12			
Samsung Foundry	Data Center	SF4P	SF4X				SF2X	SF2Z
	High-end consumer/mobile	SF4P	SF3	SF2	SF2P	SF2P+		SF1.4
	Automotive	SF5A		SF4A		SF2A		
	Mainstream			SF4U				

Source: BofA Global Research estimates

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This is evidenced in its N2 family and below nodes, with N2U ramping in '28 for mobile applications and A13 node in '29 which will be backward compatible to A14. It will also have A12 node in '29 integrated SPR to address power integrity and current delivery constraint suitable for AI/HPC systems. The strategy along with the continued expansion of the derivative offerings for main nodes should position TSMC well to defend its market share with its competitors claiming their progress on the advanced manufacturing.

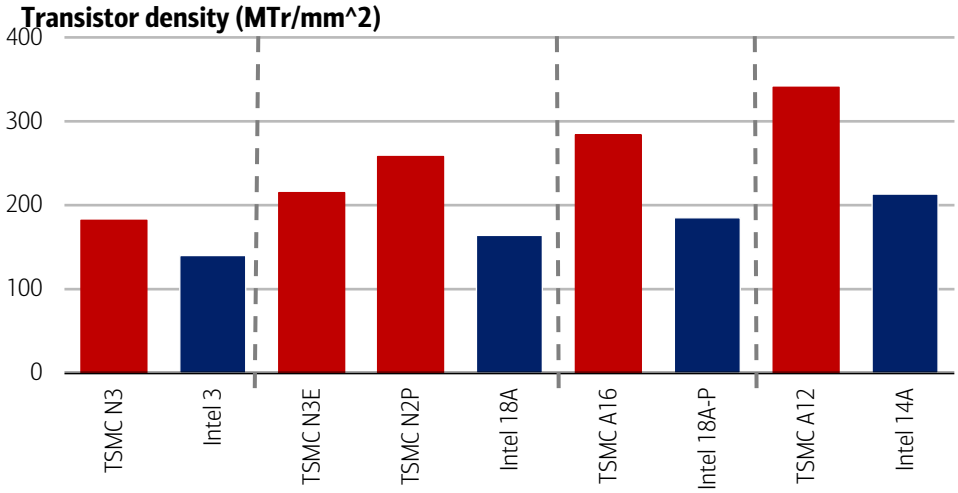
Specifically, Intel's 18A has been in mass production since 4Q25 for its Panther Lake and Clearwater Forest chipsets though yield will not be fully fine tuned until 1Q27 at 25-30k WPM capacity scale in its Oregon and Arizona fabs. The follow on derivative technology, 18A-P, has recently started risk production featuring 9% performance gains though may not enter into mass production until 2027 at the earliest.

Longer term, Intel's next major upgrade will be on 14A which is guided to start risk production in 2028 for commercialization in 2029. It is important to note A14 will be the first major node Intel provides with its external foundry customers and 0.9 PDK is targeted to be shipped in 4Q26.

For Samsung, at its recent SAFE Forum in 2Q26, the company reaffirmed four generations of 2nm roadmap, including SF2 which has been in production since 2025, SF2P in 2026, SF2P+ in 2027-28 and SF2X (no firm date). Notably, the previously announced derivative technologies, including SF2Z featuring backside power for HPC applications and SF2A for automotive applications, were not included in its latest roadmap which should be folded as part of its SF2P+ offerings. With a modest delay for its 2nm progress, the company also pushed out its SF1.4 mass production to 2029 (vs. original 2027).

On the capacity and yield planning for its advanced nodes, Samsung noted its SF2 yield is still at 50-60% levels but confirmed its SF2P+ tooling has been in installation through 2026 for mass production in 2027 in its Taylor fab. Its capacity expansion in the US along with the existing 20k WPM capacity on SF2 in Korea put the company's capacity installed base on the node at 35k WPM by the end of 2027.

Exhibit 28: TSMC's front-end manufacturing transistor density vs. Intel
TSMC is widening its transistor density advantage against Intel as technology advances



Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Based on the capacity planning and technology roadmap, we believe TSMC retains the leadership through its roadmap and yield execution and scale. Specifically, the company's transistor density has been outperforming by ~30% for its N3/N3E vs. Intel 3/18A. With similar production timing and targeted applications, we estimate the transistor density gap could be even widened to ~50%/~60% for TSMC's upcoming A16/A12 nodes when comparing with Intel 18A-P/14A.

In addition to delivering superior specs on the power, performance and area, TSMC's execution reliability has become self-reinforcing: superior yield and on-time delivery on the leading edge technologies win customer trust. The profitable business opportunity then translates the cash flow funds to the next leg of capex cycle required for further technology and capacity lead. In contrast to TSMC's 150-200k+ WPM capacity scale on every major node at mature yield, Samsung and Intel running their business at 15-20% of the company's scale at 60-70% yield is not sufficient to meet their own demand nor the stringent requirement from the external customers especially as the opportunity cost gets higher on the advanced manufacturing.

On the back-end packaging and testing solutions, TSMC provides its customers with higher complexity of the system level integration across advanced logic dies, CPO components and HBM through its CoWoS and SoIC technologies for the compute density and efficiency optimization. To accommodate larger size package, it is rolling out 5.5-reticle CoWoS in '26 with yield reaching 98%+ and will push the technology to 9.5x/14x reticle limit in '27/'28

Longer term, the company is developing SoW for up to 40-reticle packaging and CoPoS potentially for late '28 / early '29 mass deployment. The company is also upgrading CPO with COUPE solutions from PCB and substrate to interposer for 10x power efficiency uplift and 20x latency reduction though the contribution would still be limited based on our estimate at least through '27 before accelerating to 1% of its sales in '28 with more scale up switch adoption.

While CoPoS mass ramp is toward '29, the CoWoS upgrade at good yield should keep its position vs. Intel's EMIB-T currently at 80-85% pilot yield seeing risk of losing business if it fails to deliver 95%+ mass production yield by mid-'27.

SpaceX could be an anchor customer for TSMC, but not co-owning capacity/tech

On top of the competition risk from the incumbent players, the headline of Elon Musk's aggressiveness to build Terafab targeting long term 1 terawatt equivalent chipset capacity for AI compute deployment in the space term also triggers the investor concerns on TSMC's positioning. We believe the risk is overstated as there could be a delay in the qualification process of Intel's 18A for external customers and 14A due to IP and manufacturing flow issues based on the recent supply chain feedback. In addition, the equipment vendors also noted Terafab is only evaluating on equipment spec and potential procurement rather than placing firm orders. With extending equipment delivery lead time, this could put the company in an unfavorable position to receive tools for the initial production ramp in '29 it scheduled.

In the mid-term, Terafab's applications under Texas's JETI program earlier this year outlined ~US$119bn of planned investment across 4 phases from '26-36, with ~60% of it on tool procurement. The spending in '26-28 would be highly skewed toward facility construction before it starts to pull in US$6-8bn equipment per annum from '29-36.

We estimate the company will need to spend US$600mn+ for every 1k WPM expansion on the advanced nodes it targets in the US. Factoring the investment it targets to spend in the next decade, Terafab could only grow its capacity installed base by ~10k WPM per annum at maximum to 96k WPM front-end manufacturing capacity installed by '36, well below TSMC's scale, even if it can successfully deliver the technology roadmap through its own R&D effort and Intel partnership. This would prevent Terafab's operation from the economies of scale as the node migration continues, keeping TSMC as the major foundry partner for Tesla/SpaceX.

Exhibit 29: Wafer supply/demand analysis on Elon Musk's AI deployment target
With Terafab's near term delay and limited long term scale, TSMC will continue to be critical for Musk's ambitious AI compute deployment plan

Wafer supply/demand analysis on Elon Musk's AI deployment target	
SpaceX's annual orbital AI deployment target in 2028 (GW)	10
SpaceX's annual orbital AI deployment target in 2029 (GW)	100
Musk's long term target to deploy AI compute annual run rate (GW)	1,000
TDP of Nvidia's Feynman GPU (W)	6,000
GPU die output per front-end wafer (units)	55
Wafer demand for Feynman compute die for SpaceX's in '28 (k WPM)	10
Wafer demand for Feynman compute die for SpaceX's in '29 (k WPM)	101
Wafer demand for Feynman compute die to meet Musk's LT target (k WPM)	1,006
TSMC's 3nm and below capacity in 2028 (k WPM)	505
Terafab advanced wafer capacity scale by 2028 (k WPM)	0
Terafab capacity by 2036 based on its US$119bn investment plan (k WPM)	96

Source: BofA Global Research estimates

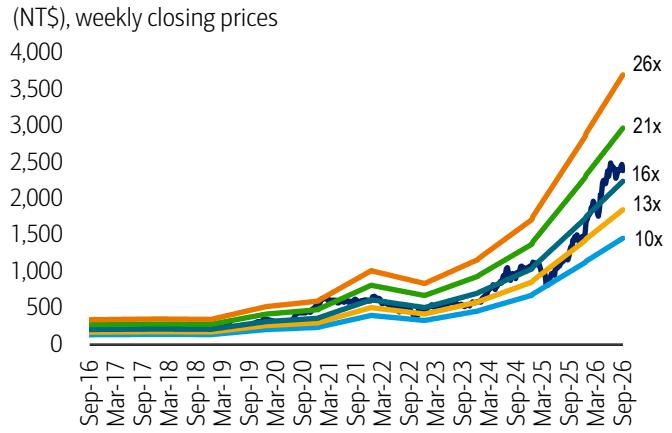
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We also analyze the wafer consumption from SpaceX's annual orbital AI deployment target in '28/'29 of 10GW/100GW and Musk's long term 1TW target. Assuming the compute it plans to deploy in '28-29 is all powered by the most advanced Nvidia's Feynman GPUs delivering 6kW per package, this would drive 1.7mn/16.7mn chipset demand in '28/'29 respectively which requires 10k/101k monthly advanced wafer production. From the supply perspective, as Feynman GPU will be built on TSMC's A16 node, the chipset demand should be fully accommodated. With limited support from Terafab, SpaceX in this scenario could become one of the largest customers for TSMC consuming ~20% of its advanced node capacity in '29 (vs. ~1% in '26 and ~2% in '28).

Longer term, Musk's ambitious target to deploy 1 terawatt AI compute power annually would consume 1mn+ wafers per month on the advanced nodes. To have higher level of the control on capacity sufficiency, Terafab could consider to partner with TSMC though the likelihood of TSMC licensing technology or operating a fab with Terafab holding a meaningful share should be low. Specifically, we would note TSMC's JV fab record is limited only with WaferTech, SSMC, VIS, JASM, ESMC and AVSM mostly on mature nodes and it did not co-own a fab with Apple who contributed ~21% of its revenue from '15-25 mostly on the advanced processes as it keeps full business control and preserves customer neutrality.

TSMC valuation reasonable and has room to re-rate with its HPC customers

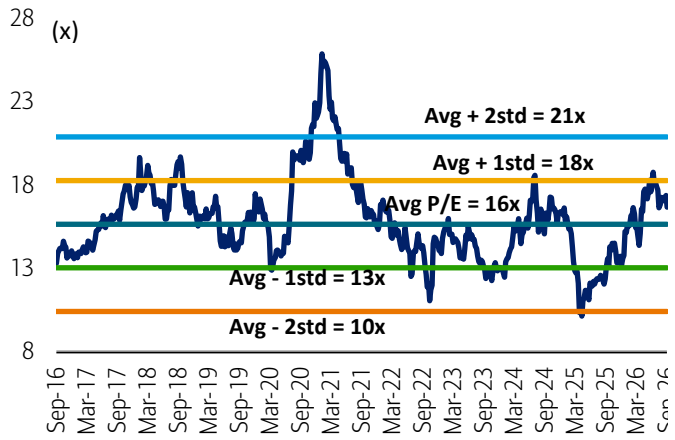
Exhibit 30: TSMC's P/E valuation band
TSMC's share at 16x '27E P/E is undemanding



Source: BofA Global Research estimates, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 31: TSMC's valuation based on BofA estimates
TSMC's valuation of 16x '27E P/E is at the middle of its historical 10-21x range

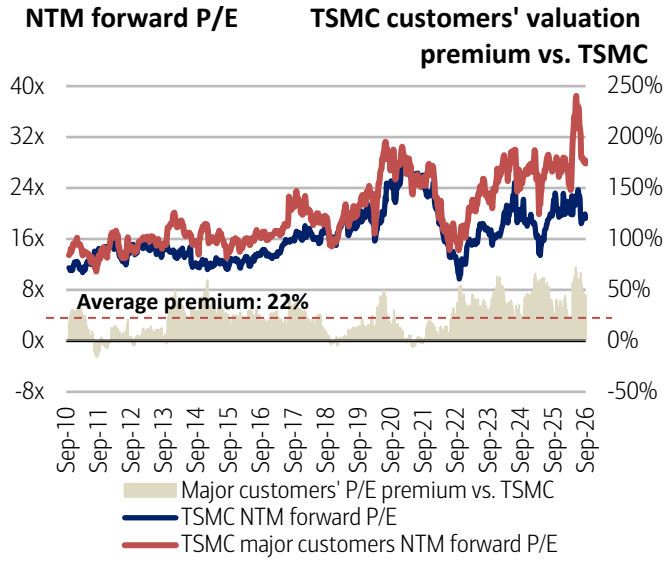


Source: BofA Global Research estimates

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TSMC's current valuation remains well supported when viewed through both its historical context and its relative positioning vs. its customers. In the past decade, TSMC's forward P/E has averaged ~16x with a range of 10-21x through the cycles.

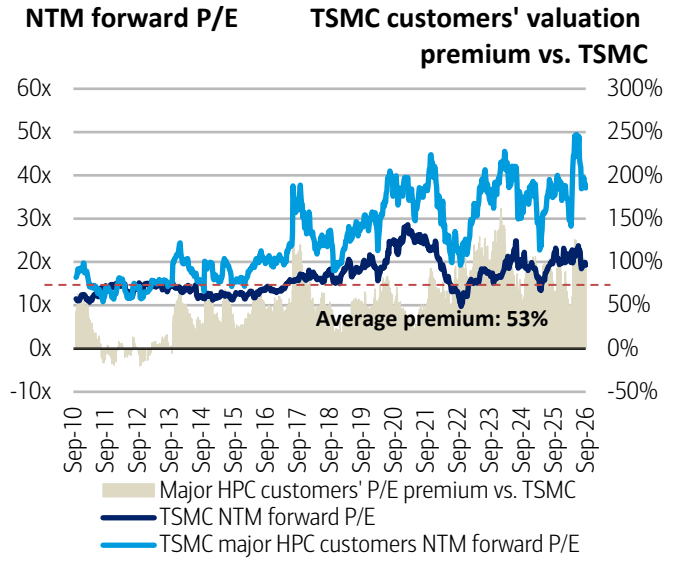
Exhibit 32: TSMC's P/E trend vs. its customers
TSMC customers' P/E is now at 45% premium to TSMC vs. 22% average



Source: BofA Global Research, Bloomberg

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Exhibit 33: TSMC's P/E trend vs. its HPC customers
HPC fabless are the main driver for valuation premium at 100%



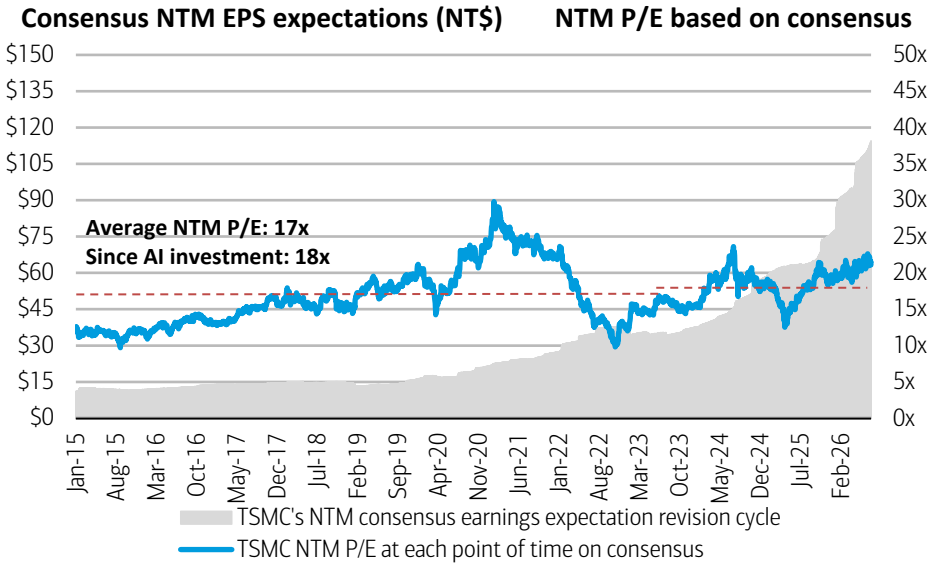
Source: BofA Global Research, Bloomberg

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The relatively more modest valuation improvement for TSMC also contrasts with its customers' more pronounced re-ratings. Based on our analysis of forward P/E spreads, TSMC's major customers usually have a 22% average premium vs. TSMC in the long term though the current level is at 45%, suggesting TSMC's valuation has been lagging.

Specifically, the valuation deviation for TSMC's HPC customers vs. the company has widened with 100-150% valuation premium vs. TSMC at this stage (vs. historical average of 53%). We believe this is driven by a surge in valuation for the direct beneficiaries from AI data center deployment, including the companies designing GPUs, ASICs and networking chipsets.

Exhibit 34: TSMC's consensus earnings vs. P/E trend
TSMC's share price strength only driven by earnings upgrade so far



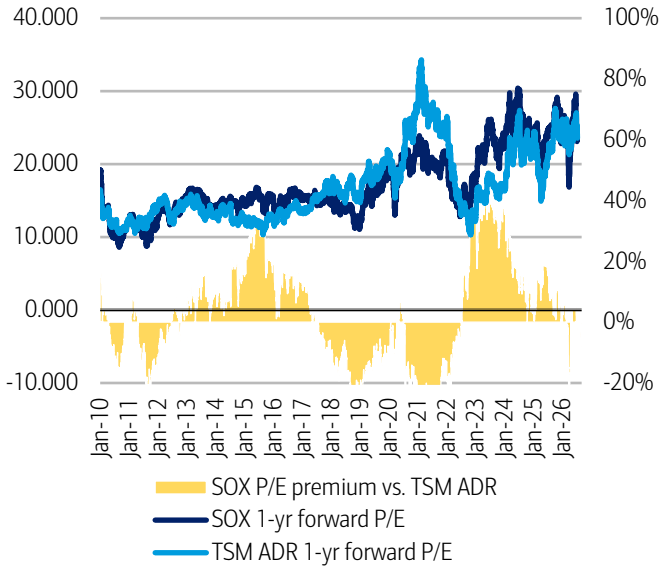
Source: BofA Global Research, Bloomberg

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It is also noteworthy that, while TSMC's share performance since 2H23 has been solid, it is predominantly driven by the earnings upward revisions rather than multiple expansion. The company's NTM P/E has remained largely stable, only lifted to 18x in the past 2 years vs. its long-term ~17x levels. The company's ADR though has been performing better as it attracts a broader investor base vs. common share, with its premium still at 10% (vs. the long term average 8%) and at 20x 2027 consensus P/E.

With its firmer technology leadership, this should bode well for the company's earnings upgrade cycle and its share should also be re-rated at least 20x NTM P/E (24x P/E for ADR factoring the premium), back closer to its customers and the broader ecosystem.

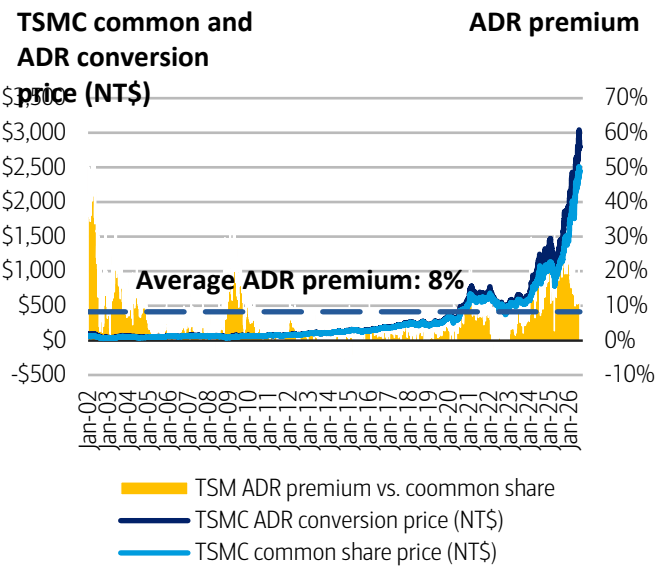
Exhibit 35: TSM ADR 1-year forward P/E vs. SOX premium
SOX index P/E is at -8% premium vs. TSM ADR



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 36: TSM ADR conversion price vs. common share and premium
TSM ADR premium is higher than common historical level at 10%



Source: BofA Global Research, Bloomberg

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Exhibit 37: TSMC's quarterly and annual income statement
TSMC's quarterly and annual income statement

(NT$bn, %)	1Q26	2Q26E	3Q26E	4Q26E	1Q27E	2Q27E	3Q27E	4Q27E	2025	2026E	2027E	2028E
Revenues	$1,134	$1,270	$1,494	$1,653	$1,703	$1,811	$2,065	$2,212	$3,809	$5,551	$7,790	$9,657
Cost of Sales	-$383	-$410	-$494	-$532	-$547	-$584	-$622	-$666	-$1,528	-$1,818	-$2,419	-$3,003
Gross Profit	$751	$860	$1,000	$1,121	$1,156	$1,226	$1,443	$1,545	$2,281	$3,733	$5,371	$6,654
Operating Expenses	-$92	-$94	-$108	-$115	-$118	-$121	-$131	-$135	-$345	-$410	-$504	-$556
Operating Income	$659	$767	$892	$1,006	$1,039	$1,105	$1,312	$1,411	$1,936	$3,324	$4,867	$6,098
Non-operating Income (Exp)	$29	$96	$32	$37	$39	$41	$45	$50	$106	$193	$175	$261
Pretax Income	$688	$862	$924	$1,043	$1,078	$1,146	$1,358	$1,460	$2,042	$3,517	$5,042	$6,359
Net tax	-$115	-$156	-$155	-$175	-$180	-$207	-$228	-$245	-$326	-$601	-$861	-$1,086
Net Income	$573	$707	$769	$868	$898	$939	$1,130	$1,215	$1,718	$2,917	$4,185	$5,277
Fully Diluted EPS - Local (NT$)	$22.08	$27.25	$29.67	$33.48	$34.65	$36.24	$43.59	$46.88	$66.24	$112.46	$161.36	$203.48
% of Revenue												
Gross Profit	66.2	67.7	67.0	67.8	67.9	67.7	69.9	69.9	59.9	67.2	68.9	68.9
Operating Expenses	-8.1	-7.4	-7.3	-7.0	-6.9	-6.7	-6.3	-6.1	-9.1	-7.4	-6.5	-5.8
Operating Income	58.1	60.3	59.7	60.9	61.0	61.0	63.6	63.8	50.8	59.9	62.5	63.1
Pretax Income	60.6	67.9	61.8	63.1	63.3	63.3	65.8	66.0	53.6	63.4	64.7	65.9
Net Income	50.5	55.6	51.5	52.5	52.7	51.9	54.7	54.9	45.1	52.5	53.7	54.6
QoQ Growth %												
Revenues	8.4	12.0	17.6	10.6	3.1	6.3	14.0	7.1				
Gross Profit	15.2	14.5	16.3	12.0	3.1	6.1	17.7	7.1				
Operating Income	16.7	16.3	16.4	12.8	3.2	6.4	18.8	7.5				
Net Income	13.3	23.4	8.8	12.8	3.5	4.6	20.3	7.6				
YoY Growth %												
Revenues	35.1	36.0	50.9	58.0	50.2	42.5	38.2	33.8	31.6	45.7	40.3	24.0
Gross Profit	52.3	57.2	70.0	71.9	53.9	42.5	44.3	37.9	40.4	63.6	43.9	23.9
Operating Income	61.9	65.4	78.2	78.1	57.6	44.2	47.1	40.2	46.4	71.7	46.4	25.3
Net Income	58.8	77.8	70.2	71.6	56.7	32.9	46.9	40.0	46.4	69.8	43.5	26.1
EPS	58.3	77.4	70.1	71.7	56.9	33.0	46.9	40.0	46.4	69.8	43.5	26.1

Source: Company data, BofA Global Research

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Exhibit 38: TSMC's quarterly and annual balance sheet
TSMC's quarterly and annual balance sheet

(NT$bn)	1Q26	2Q26E	3Q26E	4Q26E	1Q27E	2Q27E	3Q27E	4Q27E	2025	2026E	2027E	2028E
Cash	$3,036	$3,134	$3,761	$4,089	$4,283	$4,625	$5,181	$5,976	$2,768	$4,089	$5,976	$8,950
Short Term Investment	$348	$384	$366	$375	$370	$373	$371	$372	$301	$375	$372	$372
Accounts receivable	$363	$441	$354	$341	$428	$439	$469	$430	$282	$341	$430	$482
Inventory	$311	$386	$366	$357	$422	$445	$474	$457	$288	$357	$457	$552
Other current assets	$207	$221	$157	$171	$187	$189	$185	$178	$179	$171	$178	$182
Current Assets	$4,266	$4,566	$5,005	$5,332	$5,690	$6,071	$6,680	$7,413	$3,817	$5,332	$7,413	$10,538
Long Term Investments	$167	$228	$197	$213	$205	$209	$207	$208	$172	$213	$208	$207
Fixed Assets	$3,955	$4,303	$4,587	$5,016	$5,417	$5,824	$6,211	$6,579	$3,692	$5,016	$6,579	$8,038
Other Assets	$274	$279	$269	$268	$273	$272	$270	$271	$252	$268	$271	$271
Long-term Assets	$4,395	$4,810	$5,053	$5,497	$5,894	$6,305	$6,689	$7,057	$4,116	$5,497	$7,057	$8,517
Total Assets	**$8,661**	**$9,376**	**$10,057**	**$10,829**	**$11,584**	**$12,376**	**$13,369**	**$14,470**	**$7,933**	**$10,829**	**$14,470**	**$19,055**
Short term loans	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Notes & Accounts Payable	$100	$111	$97	$102	$121	$130	$137	$137	$84	$102	$137	$175
Current portion of long term debt	$156	$167	$134	$149	$152	$150	$146	$149	$137	$149	$149	$149
Other current Liabilities	$1,458	$1,580	$1,580	$1,580	$1,596	$1,596	$1,596	$1,596	$1,237	$1,580	$1,596	$1,611
Current Liabilities	$1,714	$1,858	$1,811	$1,831	$1,868	$1,876	$1,879	$1,881	$1,458	$1,831	$1,881	$1,936
Long term debt	$901	$864	$902	$895	$893	$889	$895	$893	$896	$895	$893	$893
Other non-current liabilities	$113	$179	$134	$177	$151	$160	$155	$209	$118	$177	$209	$237
Long-term Liabilities	$1,014	$1,043	$1,036	$1,072	$1,044	$1,049	$1,050	$1,102	$1,014	$1,072	$1,102	$1,129
Total Liabilities	**$2,729**	**$2,901**	**$2,847**	**$2,903**	**$2,912**	**$2,925**	**$2,929**	**$2,983**	**$2,472**	**$2,903**	**$2,983**	**$3,065**
Total parent shareholders' equity	$5,891	$6,433	$7,170	$7,884	$8,631	$9,410	$10,399	$11,446	$5,420	$7,884	$11,446	$15,949
Minority Interest	$41	$42	$40	$41	$41	$41	$41	$41	$41	$41	$41	$41
Total Liabilities and Equity	**$8,661**	**$9,376**	**$10,057**	**$10,829**	**$11,584**	**$12,376**	**$13,369**	**$14,470**	**$7,933**	**$10,829**	**$14,470**	**$19,055**

Source: Company data, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 39: TSMC's quarterly and annual cash flow
TSMC's quarterly and annual cash flow

(NT$bn)	1Q26	2Q26E	3Q26E	4Q26E	1Q27E	2Q27E	3Q27E	4Q27E	2025	2026E	2027E	2028E
Net Profit	$572	$707	$769	$868	$898	$940	$1,130	$1,216	$1,718	$2,917	$4,185	$5,277
Depreciation & Amortization	$165	$199	$233	$235	$244	$255	$265	$297	$688	$832	$1,061	$1,209
Change in Working Capital	-$118	-$155	$156	$15	-$150	-$27	-$48	$63	-$72	-$102	-$162	-$113
Other adjustment	$79	$33	$17	$25	$12	$6	$20	$40	-$59	$155	$77	$95
Operating Cash Flow	**$699**	**$783**	**$1,176**	**$1,143**	**$1,005**	**$1,173**	**$1,368**	**$1,615**	**$2,275**	**$3,801**	**$5,161**	**$6,468**
Capital Expenditure	-$351	-$496	-$497	-$644	-$664	-$664	-$664	-$664	-$1,272	-$1,988	-$2,657	-$2,875
Proceeds from sale of non-current assets	$2	$0	$1	$1	$1	$1	$1	$1	$1	$3	$3	$3
Acquisitions/Disposals of investments	-$30	-$37	$49	-$24	$12	-$6	$3	-$2	-$37	-$43	$8	$0
Other investment items	$22	$40	$10	$0	-$4	$0	$2	$0	$164	$73	-$3	$0
Investing Cash Flow	**-$357**	**-$493**	**-$437**	**-$667**	**-$656**	**-$669**	**-$659**	**-$666**	**-$1,144**	**-$1,954**	**-$2,649**	**-$2,872**
Net Share issue/repurchase	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Dividends paid	-$130	-$156	-$117	-$156	-$156	-$156	-$156	-$156	-$467	-$558	-$622	-$622
Change in debt	$14	-$22	$5	$8	$0	-$5	$2	$1	$43	$5	-$2	-$1
Other financing cash flow	-$5	-$7	$0	$0	$0	$0	$0	$0	-$17	-$12	$0	$0
Financing Cash Flow	**-$120**	**-$185**	**-$112**	**-$148**	**-$155**	**-$161**	**-$154**	**-$154**	**-$440**	**-$565**	**-$624**	**-$623**
Net Change in Cash	$222	$106	$627	$328	$194	$343	$555	$795	$690	$1,282	$1,888	$2,974
Exchange effect	$46	-$7	$0	$0	$0	$0	$0	$0	-$50	$38	$0	$0
Cash, Beginning of Year	$2,768	$3,036	$3,134	$3,761	$4,089	$4,283	$4,625	$5,181	$2,128	$2,768	$4,089	$5,976
Cash, End of Year	$3,036	$3,134	$3,761	$4,089	$4,283	$4,625	$5,181	$5,976	$2,768	$4,089	$5,976	$8,950

Source: Company data, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 40: Terms and definitions
Glossary of abbreviations/acronyms

Term	Definition
AI	Artificial Intelligence
AMD	Advanced Micro Devices
ASIC	Application Specific Integrated Circuit
AVSM	Advanced Vision Semiconductor Manufacturing
CoPoS	Chip-on-Panel-on-Substrate
CoWoS-L	Chip-on-Wafer-on-Substrate-Local Silicon Bridge
CoWoS-R	Chip-on-Wafer-on-Substrate-Redistribution Layer
CPO	Co-Packaged Optics
CPU	Central Processing Unit
EMIB	Embedded Multi-die Interconnect Bridge
ESMC	European Semiconductor Manufacturing Company
FoCoS	Fan-Out Chip on Substrate
GPU	Graphic Processing Unit
HBM	High Bandwidth Memory
HPC	High-Performance Computing
JASM	Japan Advanced Semiconductor Manufacturing
JV	Joint Venture
SoC	System on Chip
SoIC	System on Integrated Chips
SoW	System-on-Wafer
SPR	Super Power Rail
SSMC	Systems on Silicon Manufacturing Company
TPU	Tensor Processing Unit
VIS	Vanguard
WMCM	Wafer-level-multi-chip-module
WPM	Wafer per month

Source: BofA Global Research

Price objective basis & risk

Taiwan Semiconductor Manufacturing Co. (TSMWF / TSM)
Our PO for TSMC is NT$3,260 per share (US$620 per ADR), based on 20x 2027E P/E. TSMC's valuation has traded in the range of 10-26x PE from 2017. 20x is in the mid to high end of the historical range, above the average P/E of 16x. We think a PE above the average is justified given TSMC's enhanced industry position and mid-to-high 50% 5-year CAGR in AI should underpin a rerating

Downside risks to our price objective are: (1) greater-than-expected slowdown in global smartphone/consumer electronics demand, (2) Intel's potential insourcing strategy and ambitions in foundry service, (3) execution risks on advanced nodes, and (4) higher than expected tariffs.

Analyst Certification

I, Haas Liu, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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APR - Semiconductor Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Alchip	ALCPF	3661 TT	Haas Liu
	All Ring	XNQNF	6187 TT	Haas Liu
	AMEC	XRTOF	688012 CH	Dai Shen
	ASE Technology Holding	XSRIF	3711 TT	Haas Liu
	ASE Technology Holding -ADR	ASX	ASX US	Haas Liu
	ASMPT	ASMVF	522 HK	Simon Woo, CFA
	Aspeed	XLKMF	5274 TT	Mike Yang
	Chroma ATE	CRMJF	2360 TT	Haas Liu
	Doosan Corp	DOSAF	000150 KS	Simon Woo, CFA

APR - Semiconductor Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	eMemory	XYLWF	3529 TT	Mike Yang
	GigaDevice	XGXIF	603986 CH	Daley Li, CFA
	Global Unichip Corp.	GBUHF	3443 TT	Haas Liu
	Grand Process Technology Corp	XZOWF	3131 TT	Haas Liu
	Hanmi Semiconductor	HNSIF	042700 KS	Simon Woo, CFA
	Hon Precision	XXPIF	7769 TT	Haas Liu
	Horizon Robotics	HRZRF	9660 HK	Daley Li, CFA
	Iluvatar CoreX	XSIBF	9903 HK	Daley Li, CFA
	Ingenic	XISCF	300223 CH	Dai Shen
	InnoScience Technology	XSCHF	2577 HK	Daley Li, CFA
	JCET Group Co Ltd	XJIEF	600584 CH	Dai Shen
	King Yuan Electronics Corp.	KYUFF	2449 TT	Haas Liu
	Kinik	KIKCF	1560 TT	Haas Liu
	Macronix International	MXICF	2337 TT	Dai Shen
	MediaTek	MDTKF	2454 TT	Haas Liu
	Montage Technology	XRDFF	688008 CH	Daley Li, CFA
	MPI Corporation	XMJCF	6223 TT	Mike Yang
	Nanya Technology	NNYAF	2408 TT	Simon Woo, CFA
	NCE Power	XVFFF	605111 CH	Daley Li, CFA
	OmniVision	XXHQF	603501 CH	Dai Shen
	Phison Electronics	PISNF	8299 TT	Simon Woo, CFA
	Powerchip Semiconductor Manufacturing Co	XCHPF	6770 TT	Haas Liu
	Powertech Technology	PWOGF	6239 TT	Simon Woo, CFA
	Rockchip	XRPXF	603893 CH	Daley Li, CFA
	Samsung C&T	XCDTF	028260 KS	Simon Woo, CFA
	Samsung Elec -G	SSNHZ	SMSN LI	Simon Woo, CFA
	Samsung Electronics	SSNLF	005930 KS	Simon Woo, CFA
	Samsung Electronics Preferred	SSNNF	005935 KS	Simon Woo, CFA
	Silergy Corp.	SLEGF	6415 TT	Mike Yang
	Silicon Motion	SIMO	SIMO US	Simon Woo, CFA
	SK Hynix	HXSCF	000660 KS	Simon Woo, CFA
	SK Hynix ADR	SKHY	SKHY US	Simon Woo, CFA
	SK Square	SKSQF	402340 KS	Simon Woo, CFA
	Taiwan Semiconductor Manufacturing Co.	TSM	TSM US	Haas Liu
	Taiwan Semiconductor Manufacturing Co.	TSMWF	2330 TT	Haas Liu
	Vanguard International Semiconductor Co	VGILF	5347 TT	Haas Liu
	Winbond Electronics	WBEKF	2344 TT	Dai Shen
	WinWay Technology	XWCLF	6515 TT	Mike Yang
	WT Microelectronics	XZOPF	3036 TT	Mike Yang
NEUTRAL				
	ASMedia Technology Inc.	XZSFF	5269 TT	Mike Yang
	Black Sesame Intl Holding	BSIHF	2533 HK	Daley Li, CFA
	Hangzhou Silan Microelectronics	XDFRF	600460 CH	Daley Li, CFA
	Lion Electronics	XDHFF	605358 CH	Dai Shen
	MetaX	XMEZF	688802 CH	Daley Li, CFA
	Novatek	NVKMF	3034 TT	Mike Yang
	Realtek	RLTKF	2379 TT	Haas Liu
	Shenzhen Goodix	XQPLF	603160 CH	Daley Li, CFA
	Soulbrain	XSBOF	357780 KS	Simon Woo, CFA
	VeriSilicon	XMLZF	688521 CH	Daley Li, CFA
UNDERPERFORM				
	Crystal Clear	XPPTF	300655 CH	Dai Shen
	Faraday	FDYTF	3035 TT	Haas Liu
	GlobalWafers	XWLFF	6488 TT	Mike Yang
	Hua Hong Grace	HHUSF	1347 HK	Dai Shen
	LX Semicon	XLXSF	108320 KS	Simon Woo, CFA
	M31 Technology	XMTZF	6643 TT	Mike Yang
	Maxscend	XMXSF	300782 CH	Daley Li, CFA
	Parade	PRDWF	4966 TT	Mike Yang
	United Microelectronics Corp.	XUMIF	2303 TT	Haas Liu
	United Microelectronics Corp.	UMC	UMC US	Haas Liu
	Win Semiconductors	WSMIF	3105 TT	Haas Liu
	Wonik IPS	XRHQF	240810 KS	Simon Woo, CFA



APR - Semiconductor Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst

iQmethod℠ Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) × (1 − Tax Rate) + Goodwill Amortization	Total Assets − Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations − Total Capex	N/A
Quality of Earnings	**Numerator**	**Denominator**
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt − Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	**Numerator**	**Denominator**
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations − Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt + Other LT Liabilities	Sales
EV / EBITDA	Enterprise Value	Basic EBIT + Depreciation + Amortization

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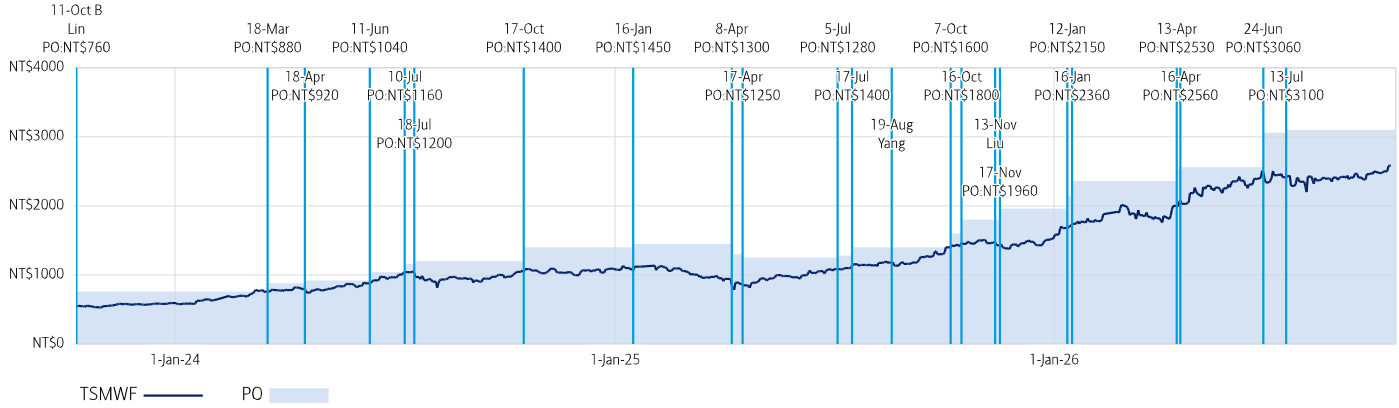
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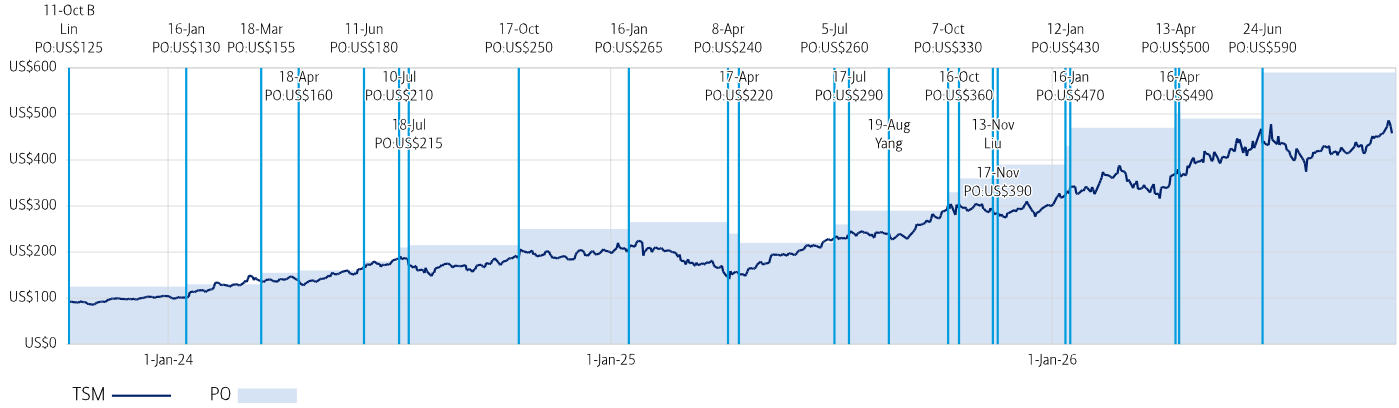
Taiwan Semi Mfg Co (TSMWF) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Taiwan Semi Mfg Co (TSM) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Equity Investment Rating Distribution: Technology Group (as of 30 Sep 2026)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	255	62.04%	Buy	157	61.57%
Hold	82	19.95%	Hold	46	56.10%
Sell	74	18.00%	Sell	31	41.89%

Equity Investment Rating Distribution: Global Group (as of 30 Sep 2026)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	2057	57.03%	Buy	1386	67.38%
Hold	806	22.35%	Hold	563	69.85%
Sell	744	20.63%	Sell	446	59.95%

[R1] Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster[R2]
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Underperform	N/A	≥ 20%

[R2]Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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