Taiwan Semiconductor Manufacturing Co.

2Q26 earnings preview: Robust demand and pricing underpin capex expansion

Reiterate Rating: BUY | PO: 3,100 TWD | Price: 2,415 TWD

13 July 2026

Equity

Key Changes

(NT$)	Previous	Current
Price Obj.	3,060.00	3,100.00
2026E EPS	102.55	106.78
2027E EPS	150.06	153.00
2028E EPS	176.81	178.13
2026E EBITDA (m)	3,915,419.5	3,989,367.9
2027E EBITDA (m)	5,556,714.1	5,662,101.1
2028E EBITDA (m)	6,431,146.3	6,495,806.6

Solid 2Q26/3Q26 demand; GM resilient through 2nm ramp

We expect TSMC's 2Q26 sales tracking to +12% QoQ and could grow 10-15% QoQ in 3Q26, on HPC product refreshes and benefit from price hike in early '26. With favorable FX, utilization and pricing partially offset by dilution from 2nm ramp skewed to 2H26 and higher summer electricity cost, its GMs could stay stable at ~67-68% in 3Q26 (vs street/buyside 68-70% expectations). VIS disposal gain could lift NT$1.95 EPS in 2Q26.

Stronger project visibility into 2027 drives capex upside

We expect TSMC's sales to grow by 39% YoY in US$ in '26 backed by the ramp for new gen GPUs and ASICs, stronger CPUs, Apple's product launches and now supplemented by firmer pricing outlook on mature nodes. On solid demand pipeline and tight equipment supply, we expect its capex to reach US$58bn in '26 (vs. US$56bn guide) and further grow to US$78bn/US$83bn in '27/28 for further clean room and capacity expansion.

Checkpoints: AI demand sustainability and competition

Amid hyperscalers' need of fund raising for further spend on the AI infrastructure in a component cost inflation environment, TSMC's comment on AI investment sustainability and its capex commitment in the next few years could be a bellwether. Structurally, we would focus on its capacity expansion strategy balancing fulfilling customers' demand due to back-end competition from Intel vs. the business cyclicality in the downturns.

Mid-cycle valuation compelling as EPS upgrades continue

We lift our 26/27/28E EPS from NT$103/NT$150/NT$177 to NT$107/NT$153/NT$178. We keep our Buy rating on TSMC and raise PO to NT$3,100 on 20x '27 P/E. While recent street could be aggressive on 2H26 GMs, we believe its current valuation is undemanding at 16x '27 P/E (vs. its long term 11-21x) backed by its dominant position in advanced technologies.

Estimates (Dec) (NT$)	2024A	2025A	2026E	2027E	2028E
Net Income (Adjusted - mn)	1,173,268	1,717,886	2,769,055	3,967,763	4,619,453
EPS	45.24	66.24	106.78	153.00	178.13
EPS Change (YoY)	39.9%	46.4%	61.2%	43.3%	16.4%
Consensus EPS (Visible Alpha)			95.21	127.32	159.20
Dividend / Share	18.00	24.00	24.00	24.00	24.00
Free Cash Flow / Share	33.55	38.66	69.89	92.94	120.88
ADR EPS (US$)	7.04	10.62	16.58	23.75	27.66
ADR Dividend / Share (US$)	2.80	3.85	3.73	3.73	3.73
Valuation (Dec)					
P/E	53.38x	36.46x	22.62x	15.78x	13.56x
Dividend Yield	0.745%	0.994%	0.994%	0.994%	0.994%
EV / EBITDA*	29.97x	22.67x	14.91x	10.51x	9.16x
Free Cash Flow Yield*	1.39%	1.60%	2.89%	3.85%	5.01%

* For full definitions of *iQmethod* SM measures, see page 19.

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Stock Data

Price (Common / ADR)	2,415 TWD / 434.11 USD
Price Objective	3,100 TWD / 590.00 USD
Date Established	13-Jul-2026 / 24-Jun-2026
Investment Opinion	B-1-7 / B-1-7
52-Week Range	1,085 TWD-2,535 TWD
Market Value (mn)	1,944,596 USD
Market Value (mn)	62,626,674 TWD
Shares Outstanding (mn)	25,932.4 / 5,186.5
Average Daily Value (mn)	3,179 USD
Free Float	92.1%
BofA Ticker / Exchange	TSMWF / TAI
BofA Ticker / Exchange	TSM / NYS
Bloomberg / Reuters	2330 TT / 2330.TW
ROE (2026E)	42.1%
Net Dbt to Eqty (Dec-2025A)	-37.3%

See Exhibit 31 for glossary

iQprofile℠ Taiwan Semiconductor Manufacturing Co.

Key Income Statement Data (Dec)	2024A	2025A	2026E	2027E	2028E
(NT$ Millions)					
Sales	2,894,308	3,809,054	5,361,248	7,537,870	8,811,967
Gross Profit	1,624,354	2,281,294	3,611,271	5,191,707	5,973,990
Sell General & Admin Expense	(96,888)	(99,222)	(125,130)	(157,121)	(177,284)
Operating Profit	1,322,053	1,936,092	3,164,820	4,629,010	5,339,083
Net Interest & Other Income	83,786	105,574	193,753	179,437	259,769
Associates	NA	NA	NA	NA	NA
Pretax Income	1,405,839	2,041,666	3,358,573	4,808,447	5,598,852
Tax (expense) / Benefit	(233,407)	(326,266)	(590,761)	(843,511)	(982,690)
Net Income (Adjusted)	1,173,268	1,717,886	2,769,055	3,967,763	4,619,453
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	2,769,055	3,967,763	4,619,453
Depreciation & Amortization	662,797	688,096	824,548	1,033,091	1,156,724
Change in Working Capital	(143,010)	(72,100)	(59,953)	(154,359)	(70,063)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	133,123	(58,907)	125,266	59,461	73,313
Cash Flow from Operations	1,826,177	2,274,976	3,658,916	4,905,957	5,779,427
Capital Expenditure	(956,007)	(1,272,411)	(1,846,462)	(2,495,826)	(2,644,790)
(Acquisition) / Disposal of Investments	(58,000)	(37,014)	(14,597)	(1,618)	(101)
Other Cash Inflow / (Outflow)	149,164	165,031	40,141	3,074	3,595
Cash Flow from Investing	(864,843)	(1,144,393)	(1,820,917)	(2,494,370)	(2,641,296)
Shares Issue / (Repurchase)	(9)	(2)	(2)	0	0
Cost of Dividends Paid	(337,129)	(440,855)	(596,447)	(622,381)	(622,381)
Cash Flow from Financing	(346,301)	(440,345)	(609,851)	(624,652)	(623,019)
Free Cash Flow	870,171	1,002,565	1,812,454	2,410,131	3,134,637
Net Debt	(1,403,733)	(2,035,607)	(3,337,723)	(5,128,773)	(7,644,639)
Change in Net Debt	(556,872)	(647,079)	(1,236,900)	(1,789,206)	(2,515,751)
Key Balance Sheet Data					
Property, Plant & Equipment	3,234,980	3,691,841	4,894,701	6,431,920	7,838,117
Other Non-Current Assets	368,606	424,052	429,115	429,453	429,429
Trade Receivables	272,088	281,791	329,503	416,202	439,725
Cash & Equivalents	2,422,020	3,068,595	4,371,827	6,160,606	8,675,833
Other Current Assets	394,245	466,745	493,099	594,904	674,530
Total Assets	6,691,938	7,933,024	10,518,245	14,033,084	18,057,635
Long-Term Debt	958,429	896,062	901,506	902,547	902,764
Other Non-Current Liabilities	145,408	118,147	153,342	176,339	198,762
Short-Term Debt	59,858	136,926	132,598	129,286	128,430
Other Current Liabilities	1,204,667	1,321,094	1,556,599	1,605,325	1,653,139
Total Liabilities	2,368,362	2,472,229	2,744,045	2,813,496	2,883,095
Total Equity	4,323,576	5,460,795	7,774,200	11,219,588	15,174,540
Total Equity & Liabilities	6,691,938	7,933,024	10,518,245	14,033,084	18,057,635
iQ*method℠ - Bus Performance					
Return On Capital Employed	23.2%	28.4%	34.9%	37.1%	32.1%
Return On Equity	30.3%	35.4%	42.1%	42.0%	35.1%
Operating Margin	45.7%	50.8%	59.0%	61.4%	60.6%
EBITDA Margin	68.6%	68.9%	74.4%	75.1%	73.7%
iQ*method℠ - Quality of Earnings					
Cash Realization Ratio	1.6x	1.3x	1.3x	1.2x	1.3x
Asset Replacement Ratio	1.4x	1.8x	2.2x	2.4x	2.3x
Tax Rate (Reported)	16.6%	16.0%	17.6%	17.5%	17.6%
Net Debt-to-Equity Ratio	-32.5%	-37.3%	-42.9%	-45.7%	-50.4%
Interest Cover	NM	NM	NM	NM	NM

Key Metrics

* For full definitions of *iQmethod*℠ measures, see page 19.

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	8.1x

Key Changes

(US$)	Previous	Current
2026E EPS	15.92	16.58
2027E EPS	23.30	23.75
2028E EPS	27.45	27.66

2Q26 sales/GMs tracking to top its guide; Vanguard disposal gains another EPS lift

We profile our expectations for TSMC's 2Q26 earnings on July 16th. 2Q26 sales are on track to +12% QoQ, at the high-end of its guidance, which we believe is led by continued HPC/AI build strength especially with multiple product upgrades from 5nm/4nm to 3nm and inventory pre-builds on 2nm. Notably, the advanced node supply tightness should be backed by the drivers including **1) accelerators** (GPUs and ASICs): NVidia's surging demand for Rubin GPU and Blackwell staying high along with AMD's MI400 and AWS's Trainium3 ramp more than offsetting Google's Ironwood TPU mild winddown, **2) CPUs:** solid demand for general purpose servers and AI data centers across x86 (AMD's Turin and Venice CPUs) and ARM based CPUs (e.g. Nvidia's Vera CPU and Google's Axion CPU) and **3) networking switch**: from Nvidia/Mellanox, Broadcom and Marvell.

On top of the solid advanced node demand and resilient orders from consumer applications ex-smartphones, we see the above seasonal 2Q26 sales also backed by more favorable pricing on better mix and modest benefit from the price hike in the beginning of the year. With sales tracking to the top end of its guidance, we expect its 2Q26 GMs to also reach the high-end its guidance for 65.5-67.5% (BofAe 67.7%).

Exhibit 1: TSMC 2Q26-3Q26 and 2026-27 estimates BofAe vs. street
We lift our EPS estimates for '26/27 to NT$107/153

	2Q26E			3Q26E			2026E			2027E		
	BofAe	**Old**	**Street**	**BofAe**	**Old**	**Street**	**BofAe**	**Old**	**Street**	**BofAe**	**Old**	**Street**
Sales (NT$mn)	$1,274,425	$1,273,016	$1,264,538	$1,418,786	$1,403,357	$1,375,834	$5,361,248	$5,331,236	$5,207,731	$7,537,870	$7,418,637	$6,694,347
Sales QoQ / YoY (%)	**12.4%**	**12.2%**	**11.5%**	**11.3%**	**10.2%**	**8.8%**	**40.8%**	**40.0%**	**36.7%**	**40.6%**	**39.2%**	**28.5%**
Gross profit (NT$mn)	$863,158	$852,138	$846,140	$962,286	$929,297	$902,134	$3,611,271	$3,534,378	$3,429,760	$5,191,707	$5,090,004	$4,376,764
GMs (%)	**67.7%**	**66.9%**	**66.9%**	**67.8%**	**66.2%**	**65.6%**	**67.4%**	**66.3%**	**65.9%**	**68.9%**	**68.6%**	**65.4%**
Operating profit (NT$mn)	$752,231	$741,212	$740,699	$842,485	$812,824	$786,801	$3,164,820	$3,094,449	$2,993,904	$4,629,010	$4,537,873	$3,834,012
OpMs (%)	59.0%	58.2%	58.6%	59.4%	57.9%	57.2%	59.0%	58.0%	57.5%	61.4%	61.2%	57.3%
Pretax profit (NT$mn)	$846,056	$771,834	$766,018	$876,903	$846,815	$815,482	$3,358,573	$3,224,053	$3,106,700	$4,808,447	$4,715,574	$3,967,679
Pretax margins (%)	66.4%	60.6%	60.6%	61.8%	60.3%	59.3%	62.6%	60.5%	59.7%	63.8%	63.6%	59.3%
Tax expense (NT$mn)	-$168,729	-$153,927	-$146,921	-$146,799	-$141,763	-$135,907	-$589,518	-$564,622	-$544,233	-$840,684	-$824,129	-$686,682
Tax rate (%)	19.9%	19.9%	19.2%	16.7%	16.7%	16.7%	17.6%	17.5%	17.5%	17.5%	17.5%	17.3%
Net profit (NT$mn)	$677,327	$617,908	$619,096	$730,103	$705,053	$679,575	$2,769,055	$2,659,432	$2,562,467	$3,967,763	$3,891,445	$3,280,998
Net margins (%)	53.1%	48.5%	49.0%	51.5%	50.2%	49.4%	51.6%	49.9%	49.2%	52.6%	52.5%	49.0%
EPS (NT$)	**$26.12**	**$23.83**	**$23.91**	**$28.15**	**$27.19**	**$26.25**	**$106.78**	**$102.55**	**$99.20**	**$153.00**	**$150.06**	**$126.15**

Source: BofA Global Research estimates, Bloomberg

BofA GLOBAL RESEARCH

HPC/Apple lifting 3Q26 sales outlook; resilient GM expectation but below street

For 3Q26, we expect TSMC's sales to grow in line with seasonality for +11-15% QoQ (BofAe +11%) even off a high base through 1H26. We model a mild growth in its wafer shipment (BofAe +10%/-18% QoQ for advanced/mature nodes), balancing HPC demand strength and Apple's chipset builds for its new product launches and its gradual retirement of 6" and 8" capacity and effective capacity loss due to equipment movement for the node conversion. The blended ASPs strength (BofAe +9% QoQ) should be the key driver for 3Q26 as shipment mix continues to shift toward advanced nodes and more meaningful benefit from the like-for-like price hike effective from the beginning of 2026 considering 5-6+ months production lead time.

While utilization is trending higher, FX is modestly positive, and pricing environment is turning even more favorable with mature node capacity seeing potential cost inflation, supplemented by the already rising price on the advanced nodes, we model a relatively stable GMs only up 10bps QoQ to 67.8% in 3Q26 (vs. recent street and investors' expectations at 68-70%). The key factors we consider as mildly negative offset would be 1) higher depreciation: +30-35% HoH in 2H26 due to more overseas and 2nm capacity ramp and 2) growing contribution from 2nm still going through yield learning curve. Specifically, the management guided 2-3% margins dilution from 2nm ramp for 2026 and the impact could be concentrated in 2H26 as the volume grows. That said, TSMC's GMs in 2H26 could have reached low-70% levels without 2nm ramp, an encouraging milestone reflecting the company's structurally higher value to its customers through its strong technology leadership.

Exhibit 2: Our 2026-28E earnings are 8-21% above consensus as we model a higher sales growth and margins
TSMC 2026-28 estimates BofAe vs. Street

	2026E				2027E				2028E			
	BofAe	Old	Street	vs. street	BofAe	Old	Street	vs. street	BofAe	Old	Street	vs. street
Sales (NT$mn)	$5,361,248	$5,331,236	$5,207,731	3%	$7,537,870	$7,418,637	$6,694,347	13%	$8,811,967	$8,710,259	$8,249,461	7%
Sales QoQ / YoY (%)	40.8%	40.0%	36.7%		40.6%	39.2%	28.5%		16.9%	17.4%	23.2%	
Gross profit (NT$mn)	$3,611,271	$3,534,378	$3,429,760	5%	$5,191,707	$5,090,004	$4,376,764	19%	$5,973,990	$5,918,900	$5,378,566	11%
GMs (%)	67.4%	66.3%	65.9%	1%	68.9%	68.6%	65.4%	3%	67.8%	68.0%	65.2%	3%
Operating profit (NT$mn)	$3,164,820	$3,094,449	$2,993,904	6%	$4,629,010	$4,537,873	$3,834,012	21%	$5,339,083	$5,298,995	$4,727,071	13%
OpMs (%)	59.0%	58.0%	57.5%	2%	61.4%	61.2%	57.3%	4%	60.6%	60.8%	57.3%	3%
Pretax profit (NT$mn)	$3,358,573	$3,224,053	$3,106,700	8%	$4,808,447	$4,715,574	$3,967,679	21%	$5,598,852	$5,557,209	$4,921,126	14%
Pretax margins (%)	62.6%	60.5%	59.7%	3%	63.8%	63.6%	59.3%	5%	63.5%	63.8%	59.7%	4%
Tax expense (NT$mn)	-$589,518	-$564,622	-$544,233	8%	-$840,684	-$824,129	-$686,682	22%	-$979,399	-$971,979	-$854,040	15%
Tax rate (%)	17.6%	17.5%	17.5%	0%	17.5%	17.5%	17.3%	0%	17.5%	17.5%	17.4%	0%
Net profit (NT$mn)	$2,769,055	$2,659,432	$2,562,467	8%	$3,967,763	$3,891,445	$3,280,998	21%	$4,619,453	$4,585,230	$4,067,086	14%
Net margins (%)	51.6%	49.9%	49.2%	2%	52.6%	52.5%	49.0%	4%	52.4%	52.6%	49.3%	3%
EPS (NT$)	$106.78	$102.55	$99.20	8%	$153.00	$150.06	$126.15	21%	$178.13	$176.81	$155.72	14%

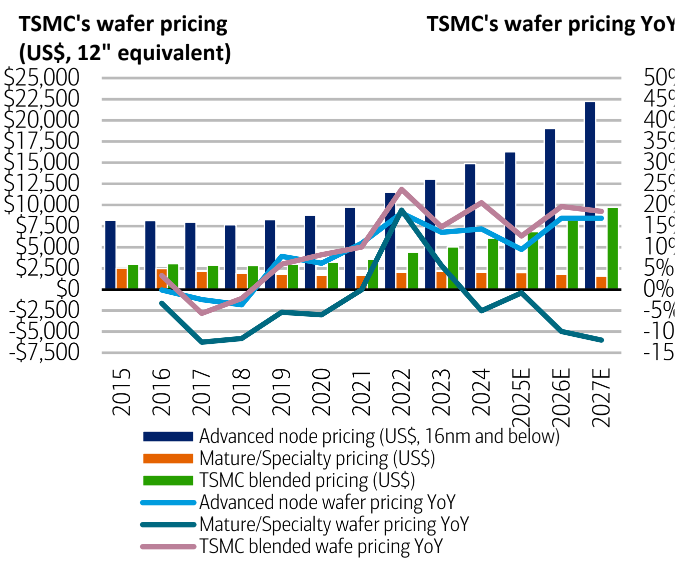
Source: BofA Global Research estimates, Bloomberg

BofA GLOBAL RESEARCH

2026 sales and margins outlook intact despite weakening consumer demand

Factoring in stronger CPU and AI GPU/ASIC demand outlook, we are lifting our sales expectation for TSMC in '26/'27 to +41%/+40% YoY respectively (vs. BofA prior +40%/+39% YoY). More importantly, with utilization staying tighter for longer along with inflationary cost pass through, TSMC should raise its advanced node and packaging pricing by another 5-10% in the beginning of 2027, lifting its GMs to 67%/69% in 2026/27 (vs. BofA prior 66%/68%).

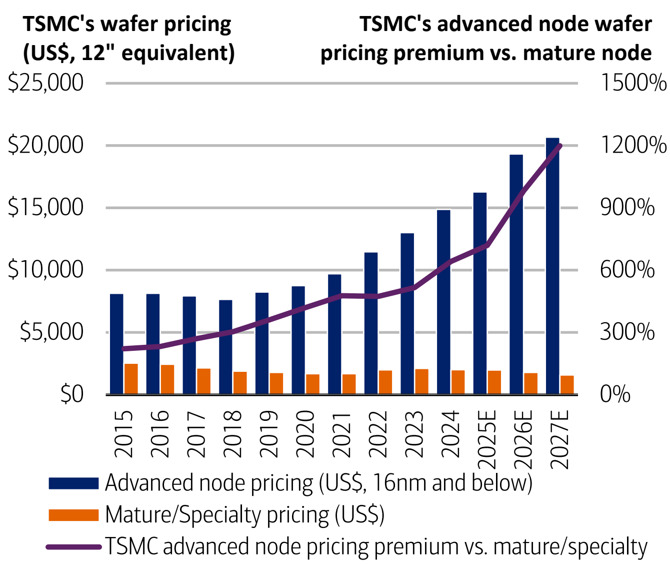
Exhibit 3: TSMC's wafer pricing by advanced vs. mature nodes
TSMC's wafer pricing by advanced vs. mature nodes



Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 4: 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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Importantly, we believe the company's front-end manufacturing sales growth this year will be largely driven by the blended price hike (BofAe +31% YoY), factoring in 1) 10-15% like-for-like price uplift on 5nm and 3nm, 2) the ramp of 2nm through the year, 3) 5-10% like-for-like pricing decline on the mature nodes. In addition, the wafer shipment mix skewed toward advanced nodes plays an important role, with TSMC's advanced wafer pricing is now 12x higher than the ones on the mature nodes, accelerating the blended price improvement in the past couple of years.

The wafer shipment will grow mildly YoY in 2026, with advanced node demand mostly offset by the decline in the mature nodes (BofAe -8% YoY shipment) due to its capacity retirement on 6" and 8" processes. The consumer chipset order cut from March could also affect the wafer output in 2H26, offsetting the fully loaded advanced nodes (BofAe +23% YoY shipment) led by high performance computing applications and high-end mobile chipsets.

Although N2 is the 1st node using nanosheet technology, it has reached the targeted defect density levels 2 quarters ahead of 3nm. While it still takes a few years for N2 to reach corporate GMs which is trending higher (vs. ~11 quarters for N3), we expect N2/A16 to enjoy a better margin profile vs. 3nm on better yield curve.

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 power 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 5: TSMC/ Intel/Samsung's technology roadmap
TSMC targets to roll out a new node for HPC with biennial cadence, supporting major leaps in performance

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

BofA GLOBAL RESEARCH

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.

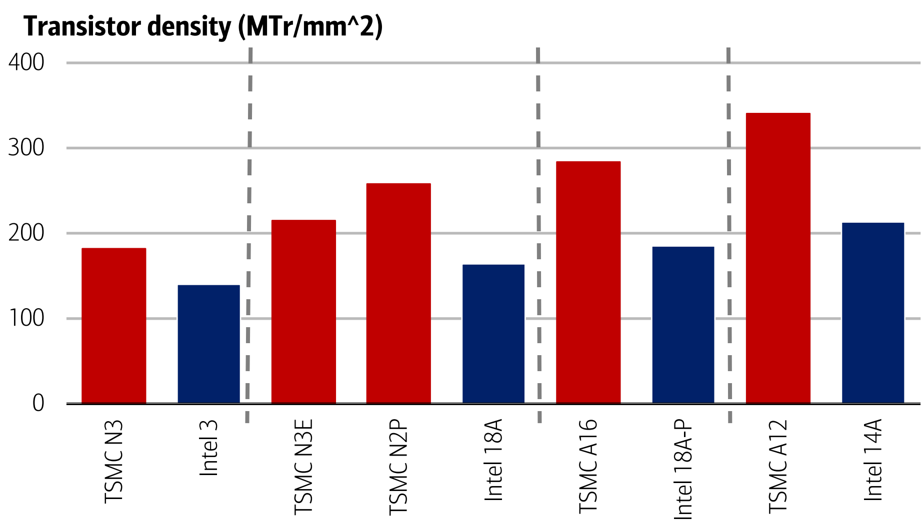
Longer term, Intel's next major upgrade will be on 14A which is guided to start risk production in 2028 for commercialization in 2029. It is important to note A14 will be the first major node Intel provides with its external foundry customers and 0.9 PDK is targeted to be shipped in 4Q26.

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 0225, 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 6: TSMC & Intel's transistor density comparison

Transistor density gap could be even widened to ~50%/~60% for TSMC's upcoming A16/A12 nodes when comparing with Intel 18A-P/14A



Source: BofA Global Research

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 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 develops 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.

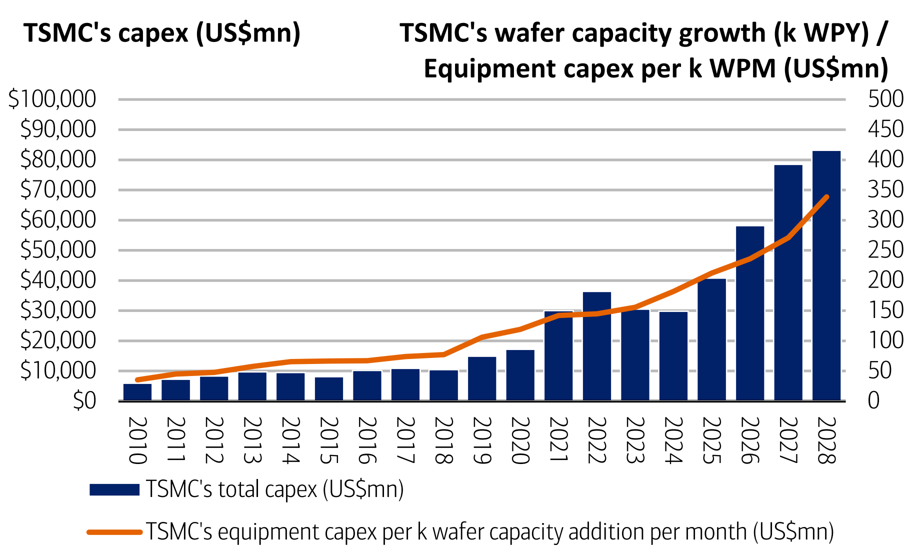
While CoPoS mass ramp is toward '29, the CoWoS upgrade at good yield should keep its position vs. Intel's EMIB-T currently at 80-85% pilot yield seeing risk of losing business if it fails to deliver 95% mass production yield by mid-'27.

Capex track slightly ahead of its guide for 2026 and will stay aggressive in '27-28

Based on our bottom up capacity analysis across front-end manufacturing and back-end packaging, TSMC's capex spending is tracking to US$58bn for 2026 (vs. its narrowed guidance of US$56bn). 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 7: 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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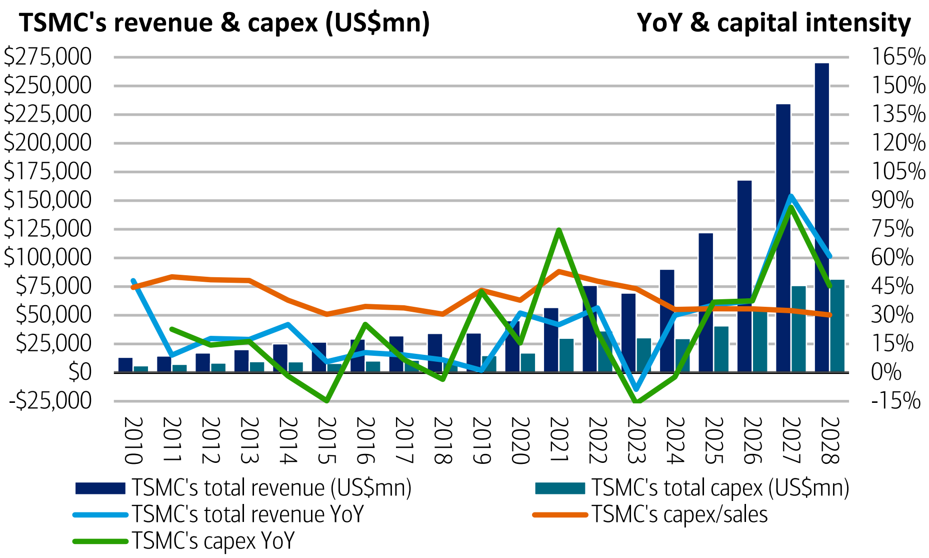
Considering the capex required for further 3nm capacity expansion in the additional phases in its Tainan megafab, Arizona and the recently announced 2[nd] fab in Kumamoto on strong AI/HPC/automotive demand, ramping scale for 2nm family including A16, R&D on A14 supplemented by multiple back-end packaging 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$78bn/US$83bn in 2027/28 at a CAGR of 23% CAGR from 2026-28.

Exhibit 8: 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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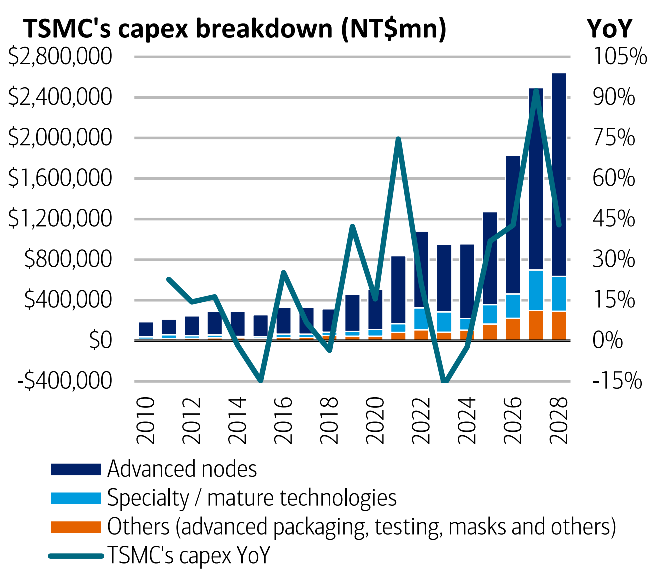
While the surge in headline capex hikes could lead to concern on accelerating depreciation, we estimate it will only grow at 17% CAGR from 2026-28 due to modestly higher portion of the spending towards facility and clean room with much longer depreciation cycle than equipment. This should keep the depreciation still undergrowing its sales of +28% CAGR, sustaining GMs expansion to 68% levels by 2028.

Exhibit 9: 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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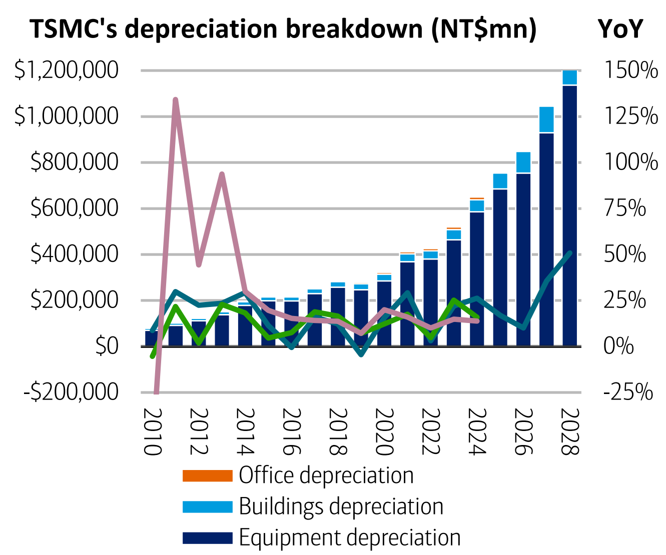
Exhibit 10: TSMC's depreciation trend
TSMC's depreciation growth will be led by equipment



Source: Company Data, BofA Global Research estimates

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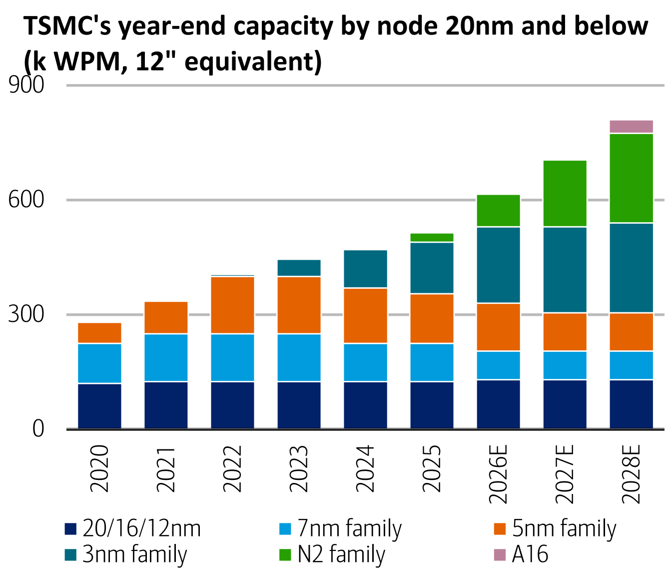
We keep our Buy rating on TSMC and lift PO from NT$3,060 to NT$3,100 on 20x '27E P/E (unchanged); our US$ADR PO remains $590. Our EPS for 2026/27/28 are now NT$107/153/178 (vs. NT$103/150/177 prior) as we factor in stronger CPU and AI GPU/ASIC demand outlook. Its current valuation seems undemanding at 17x '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 1% YoY in 2026.

Exhibit 11: 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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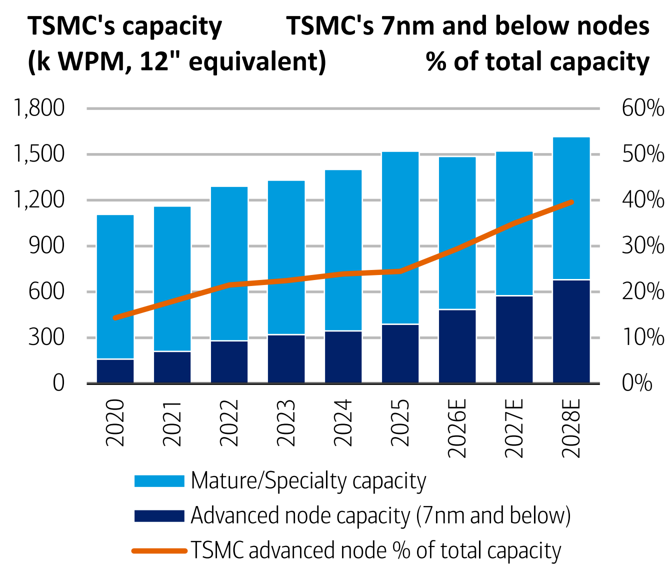
Exhibit 12: TSMC's advanced node capacity as % of its installed base
TSMC's advanced nodes will reach 40% of its total capacity



Source: Company Data, BofA Global Research estimates

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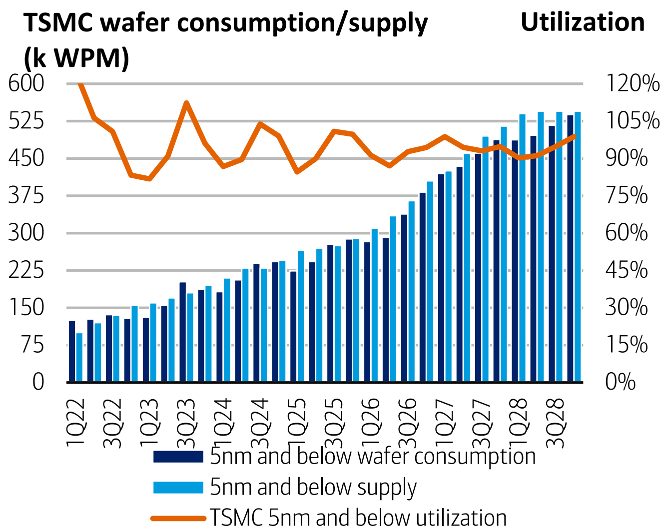
The trend could be more stable into 2027-28 as TSMC strives to optimize its capacity mix and across node conversion to accommodate its customers’ demand especially on the leading edge technologies, with its advanced capacity set to grow by 10% CAGR from 2025-28 balanced by the mature capacity reduction 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 ~680k WPM by 2028 at a 16% CAGR, through organic 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 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 13: TSMC 5nm and below wafer consumption/supply/utilization
Utilization of 5nm and blow to remain high



Source: BofA Global Research estimates

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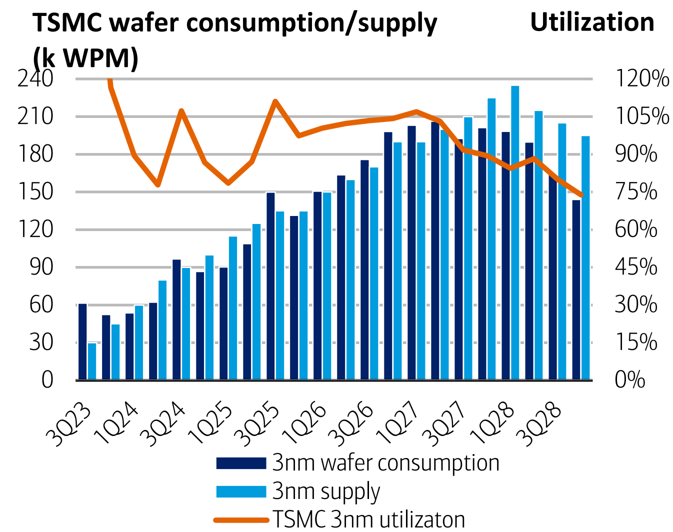
Exhibit 14: TSMC 3nm wafer consumption/supply/utilization
TSMC 3nm to see utilization staying close to full



Source: BofA Global Research estimates

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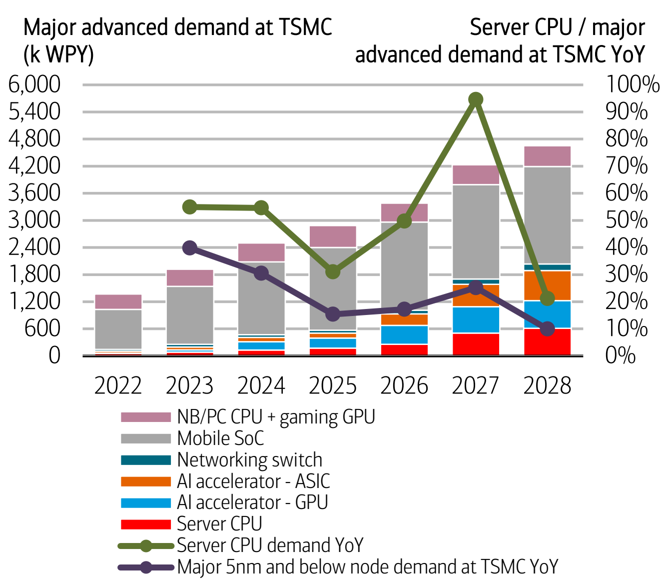
On the demand, with 5nm and 3nm generating ~50% of TSMC's revenue in 2025, we analyze the supply and demand landscape through our bottom-up capacity model and wafer consumption by the company's major customers for their major products on these nodes. Based on our estimate, the utilization for 5nm and 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 15: 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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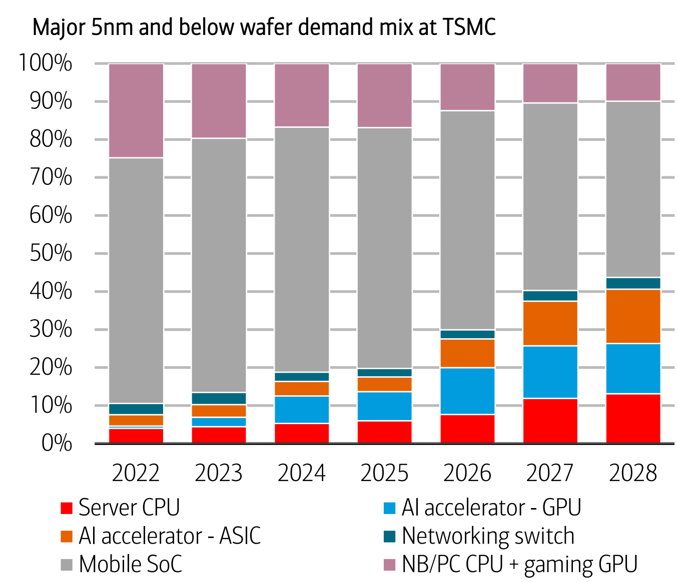
Exhibit 16: Major 5nm and below wafer demand mix at TSMC
Server CPU accounts for 13% in 2028



Source: BofA Global Research estimates

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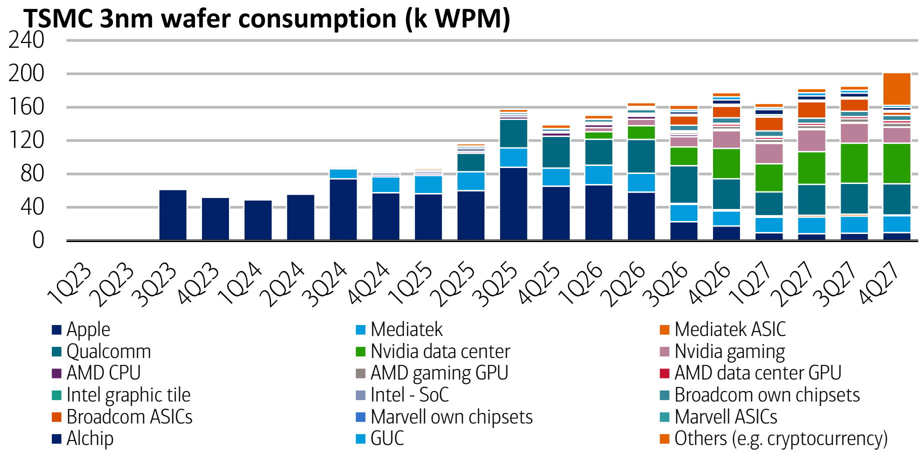
We would note 3nm, as a sweet spot for high performance computing, networking and flagship smartphone chipsets, could see the utilization staying close to full even with continued expansion on strong project pipeline, sustaining continued price hikes even in 2027 following the price surge in 2025-26.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

Exhibit 17: TSMC 3nm wafer consumption by customers
Mediatek and Qualcomm should remain the largest customers following Apple's migration to 2nm



Source: BofA Global Research estimates

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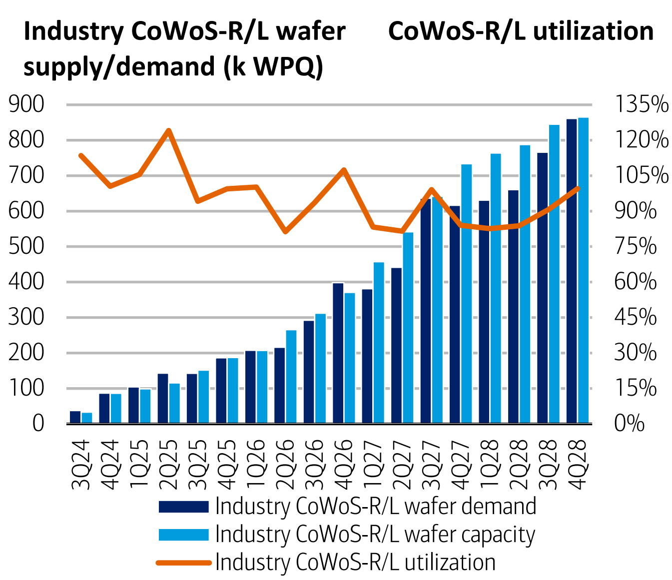
On the back-end packaging, with surging server CPU demand on top of the already strong order backlog for GPUs and ASICs, we estimate the industry's CoWoS supply will need to grow by 52% CAGR from 2026-28. TSMC will still lead the capacity expansion from 120k WPM in 4Q26 to 180k WPM in 4Q27, while the 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 '27 and proven track record with as the major CoWoS full process server provider for AMD's Venice server CPU.

Exhibit 18: Industry CoWoS-R/L supply/demand
CoWoS-R/L utilization should stay at high levels



Source: BofA Global Research estimates

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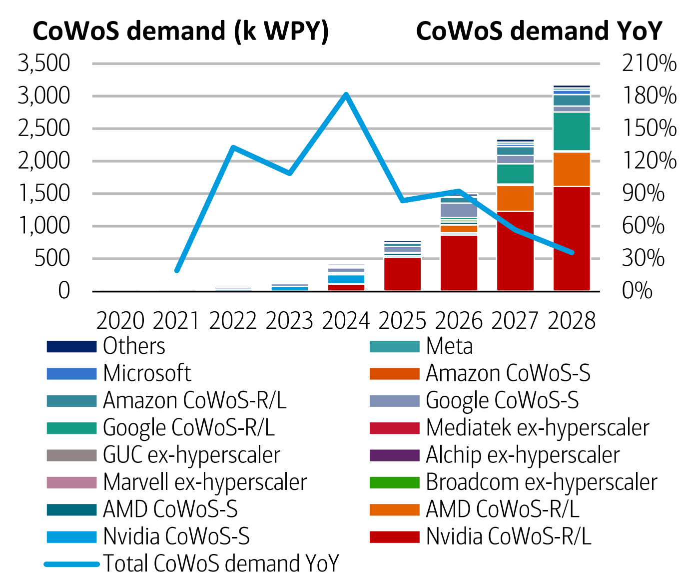
Exhibit 19: Industry CoWoS demand
CoWoS demand should remain strong through 2028



Source: BofA Global Research estimates

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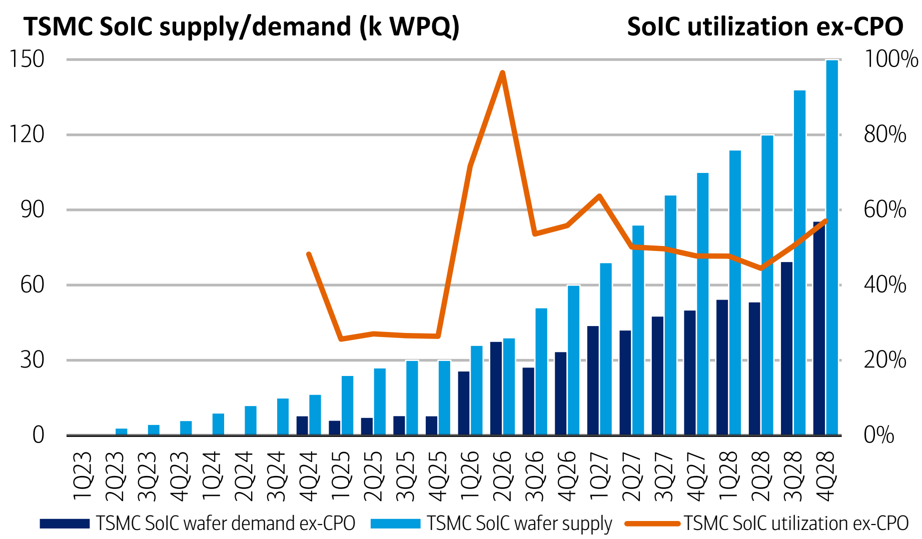
We estimate TSMC's SoIC capacity will reach 20k WPM by 4Q26 and will need to grow to 35k WPM by 4Q27 and further to 50k WPM by 4Q28 with the applications proliferating from AMD's GPUs to Apple's M-series CPUs in 2026, hyperscalers' customized ARM based server CPUs in 2027 and adoption by Nvidia for its 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$2516mn annually to TSMC in 2028 (1% of the company's total sales)

Exhibit 20: 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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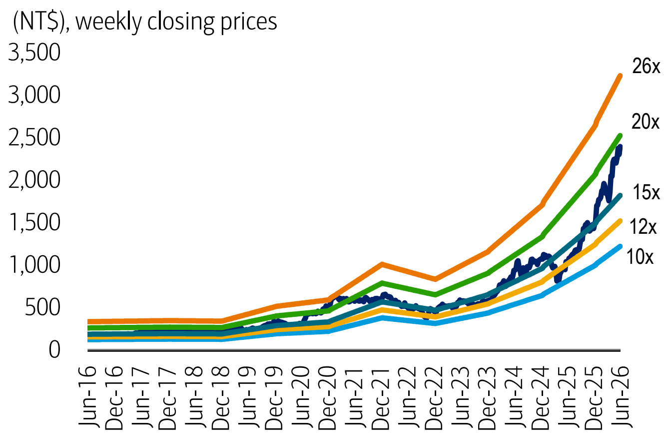
TSMC valuation reasonable and has room to re-rate with its HPC customers

Exhibit 21: TSMC's P/E valuation band

TSMC's share at 17x '27E P/E is undemanding



Source: BofA Global Research estimates, Bloomberg

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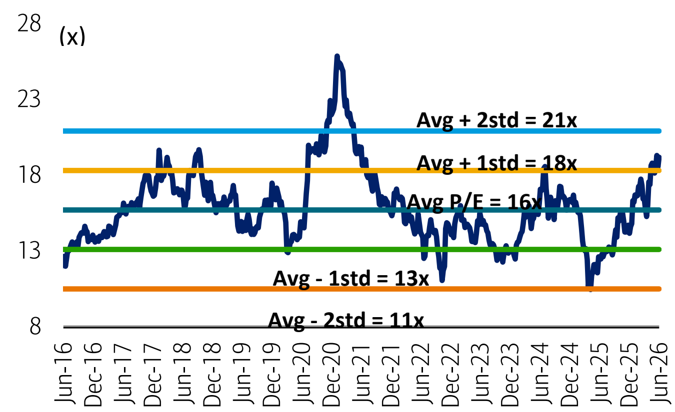
Exhibit 22: TSMC's valuation based on BofA estimates

TSMC's valuation of 17x '27E P/E is at the middle of its historical 11-21x range



Source: BofA Global Research estimates

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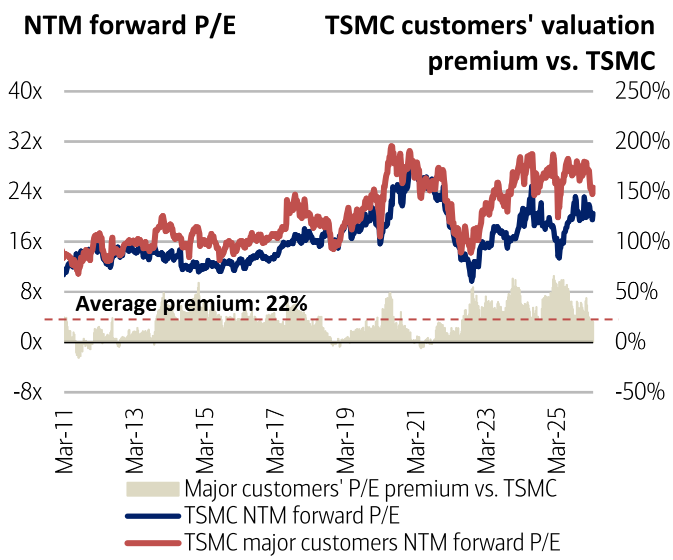
TSMC's current valuation remains well supported when viewed through both its historical context and its relative positioning vs. its customers. In the past decade, TSMC's forward P/E has averaged ~16x with a range of 11-21x through the cycles.

Exhibit 23: TSMC's P/E trend vs. its customers
TSMC customers' P/E is now at 50% premium to TSMC vs. 22% average



Source: BofA Global Research, Bloomberg

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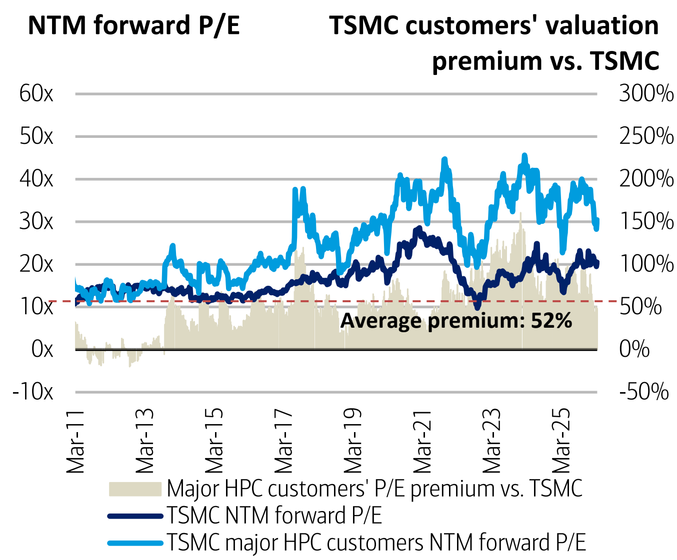
Exhibit 24: TSMC's P/E trend vs. its HPC customers
HPC fabless are the main driver for valuation premium at 100%



Source: BofA Global Research, Bloomberg

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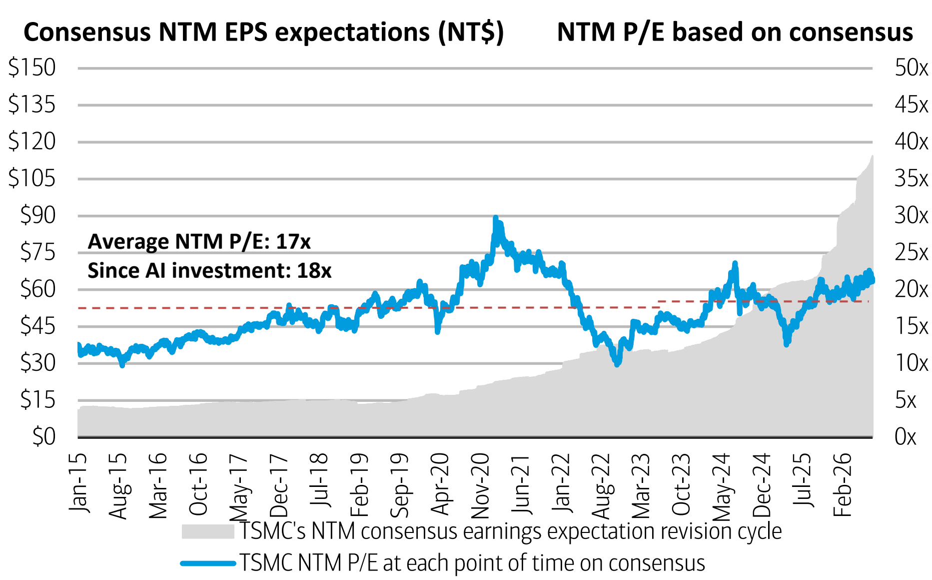
The relatively more modest valuation improvement for TSMC also contrasts with its customers' more pronounced re-ratings. Based on our analysis of forward P/E spreads, TSMC's major customers usually have a 22% average premium vs. TSMC in the long term though the current level is at 45%, suggesting TSMC's 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 52%). 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 25: 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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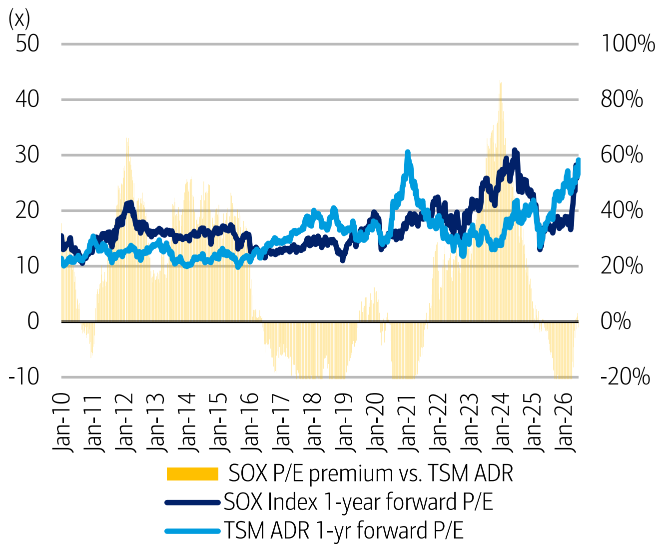
It is also noteworthy that, while TSMC's share performance since 2H23 has been solid, it is predominantly driven by the earnings upward revisions rather than multiple expansion.

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 19% (vs. the long term average 8%) and at 21x 2027E 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 26: TSM ADR 1-year forward P/E vs. SOX premium

SOX index P/E following recent rally is back to 3% premium vs. TSM ADR, in line with long term average



Source: BofA Global Research, Bloomberg

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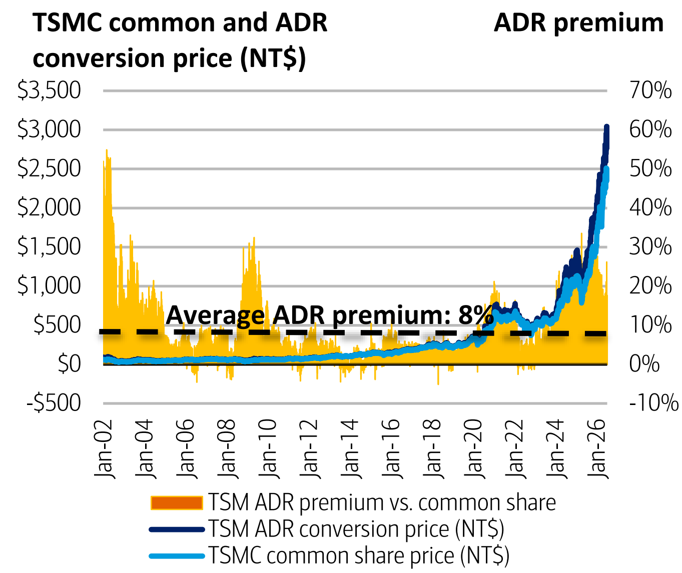
Exhibit 27: TSM ADR conversion price vs. common share and premium

TSM ADR premium is higher than common historical level at 15%



Source: BofA Global Research, Bloomberg

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Exhibit 28: 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	$1,274	$1,419	$1,534	$1,652	$1,793	$2,000	$2,094	$3,809	$5,361	$7,538	$8,812
Cost of Sales	-$383	-$411	-$457	-$499	-$511	-$559	-$615	-$661	-$1,528	-$1,750	-$2,346	-$2,838
Gross Profit	$751	$863	$962	$1,035	$1,141	$1,234	$1,385	$1,432	$2,281	$3,611	$5,192	$5,974
Operating Expenses	-$92	-$111	-$120	-$123	-$128	-$134	-$147	-$154	-$345	-$446	-$563	-$635
Operating Income	$659	$752	$842	$911	$1,013	$1,100	$1,238	$1,278	$1,936	$3,165	$4,629	$5,339
Non-operating Income (Exp)	$29	$94	$34	$37	$40	$42	$46	$51	$106	$194	$179	$260
Pretax Income	$688	$846	$877	$948	$1,053	$1,142	$1,285	$1,329	$2,042	$3,359	$4,808	$5,599
Net tax	-$115	-$169	-$147	-$159	-$176	-$228	-$216	-$223	-$326	-$591	-$844	-$983
Net Income	$573	$677	$730	$789	$877	$913	$1,069	$1,106	$1,718	$2,769	$3,968	$4,619
Fully Diluted EPS - Local (NT$)	$22.08	$26.12	$28.15	$30.43	$33.84	$35.25	$41.24	$42.67	$66.24	$106.78	$153.00	$178.13
<u>% of Revenue</u>												
Gross Profit	66.2	67.7	67.8	67.4	69.1	68.8	69.3	68.4	59.9	67.4	68.9	67.8
Operating Expenses	-8.1	-8.7	-8.4	-8.0	-7.7	-7.5	-7.3	-7.4	-9.1	-8.3	-7.5	-7.2
Operating Income	58.1	59.0	59.4	59.4	61.3	61.3	61.9	61.1	50.8	59.0	61.4	60.6
Pretax Income	60.6	66.4	61.8	61.8	63.8	63.7	64.2	63.5	53.6	62.6	63.8	63.5
Net Income	50.5	53.1	51.4	51.4	53.1	50.9	53.4	52.8	45.1	51.6	52.6	52.4
<u>QoQ Growth %</u>												
Revenues	8.4	12.4	11.3	8.1	7.7	8.6	11.5	4.7				
Gross Profit	15.2	14.9	11.5	7.5	10.3	8.2	12.2	3.4				
Operating Income	16.7	14.2	12.0	8.1	11.2	8.6	12.6	3.2				
Net Income	13.3	18.2	7.8	8.1	11.2	4.2	17.0	3.5				
<u>YoY Growth %</u>												
Revenues	35.1	36.5	43.3	46.6	45.6	40.7	40.9	36.5	31.6	40.8	40.6	16.9
Gross Profit	52.3	57.7	63.5	58.7	51.8	43.0	43.9	38.4	40.4	58.3	43.8	15.1
Operating Income	61.9	62.3	68.3	61.3	53.7	46.2	47.0	40.3	46.4	63.5	46.3	15.3
Net Income	58.8	70.3	61.5	56.0	53.1	35.0	46.5	40.2	46.4	61.2	43.3	16.4
EPS	58.3	70.1	61.4	56.0	53.3	35.0	46.5	40.2	46.4	61.2	43.3	16.4

Source: Company data, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 29: 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	$3,381	$3,676	$4,042	$4,248	$4,622	$5,130	$5,829	$2,768	$4,042	$5,829	$8,344
Short Term Investment	$348	$324	$336	$330	$333	$332	$332	$332	$301	$330	$332	$332
Accounts receivable	$363	$305	$349	$330	$411	$402	$452	$416	$282	$330	$416	$440
Inventory	$311	$351	$358	$343	$400	$424	$454	$443	$288	$343	$443	$522
Other current assets	$207	$134	$140	$150	$162	$159	$149	$152	$179	$150	$152	$153
Current Assets	$4,266	$4,495	$4,860	$5,194	$5,554	$5,938	$6,517	$7,172	$3,817	$5,194	$7,172	$9,790
Long Term Investments	$167	$169	$168	$169	$168	$169	$168	$169	$172	$169	$169	$169
Fixed Assets	$3,955	$4,242	$4,516	$4,895	$5,291	$5,687	$6,068	$6,432	$3,692	$4,895	$6,432	$7,838
Other Assets	$274	$253	$262	$260	$263	$260	$261	$261	$252	$260	$261	$261
Long-term Assets	$4,395	$4,665	$4,946	$5,324	$5,722	$6,116	$6,498	$6,861	$4,116	$5,324	$6,861	$8,268
Total Assets	**$8,661**	**$9,160**	**$9,806**	**#####**	**$11,276**	**$12,053**	**$13,015**	**$14,033**	**$7,933**	**$10,518**	**$14,033**	**$18,058**
Short term loans	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Notes & Accounts Payable	$100	$90	$95	$98	$115	$117	$131	$133	$84	$98	$133	$166
Current portion of long term debt	$156	$116	$121	$133	$132	$125	$128	$129	$137	$133	$129	$128
Other current Liabilities	$1,458	$1,458	$1,458	$1,458	$1,473	$1,473	$1,473	$1,473	$1,237	$1,458	$1,473	$1,487
Current Liabilities	$1,714	$1,664	$1,674	$1,689	$1,719	$1,715	$1,731	$1,735	$1,458	$1,689	$1,735	$1,782
Long term debt	$901	$902	$905	$902	$903	$903	$903	$903	$896	$902	$903	$903
Other non-current liabilities	$113	$121	$119	$153	$127	$130	$132	$176	$118	$153	$176	$199
Long-term Liabilities	$1,014	$1,023	$1,025	$1,055	$1,029	$1,033	$1,035	$1,079	$1,014	$1,055	$1,079	$1,102
Total Liabilities	**$2,729**	**$2,688**	**$2,699**	**$2,744**	**$2,748**	**$2,748**	**$2,767**	**$2,813**	**$2,472**	**$2,744**	**$2,813**	**$2,883**
Total parent shareholders' equity	$5,891	$6,434	$7,067	$7,734	$8,487	$9,266	$10,209	$11,180	$5,420	$7,734	$11,180	$15,135
Minority Interest	$41	$39	$40	$40	$40	$40	$40	$40	$41	$40	$40	$40
Total Liabilities and Equity	**$8,661**	**$9,160**	**$9,806**	**#####**	**$11,276**	**$12,053**	**$13,015**	**$14,033**	**$7,933**	**$10,518**	**$14,033**	**$18,058**

Source: Company data, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 30: 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	$677	$730	$789	$878	$914	$1,070	$1,107	$1,718	$2,769	$3,968	$4,619
Depreciation & Amortization	$165	$190	$231	$239	$238	$248	$258	$289	$688	$825	$1,033	$1,157
Change in Working Capital	-$118	$82	-$53	$28	-$134	-$9	-$56	$45	-$72	-$60	-$154	-$70
Other adjustment	$79	$10	$15	$22	$8	$2	$15	$34	-$59	$125	$59	$73
Operating Cash Flow	$699	$959	$923	$1,078	$989	$1,154	$1,287	$1,475	$2,275	$3,659	$4,906	$5,779
Capital Expenditure	-$351	-$462	-$462	-$572	-$624	-$624	-$624	-$624	-$1,272	-$1,846	-$2,496	-$2,645
Proceeds from sale of non-current assets	$2	$1	$1	$1	$1	$1	$1	$1	$1	$4	$4	$4
Acquisitions/Disposals of investments	-$30	$21	-$10	$5	-$3	$1	-$1	$0	-$37	-$15	-$2	$0
Other investment items	$22	$21	-$9	$2	-$2	$3	-$2	$0	$164	$36	-$1	$0
Investing Cash Flow	-$357	-$419	-$480	-$564	-$628	-$619	-$625	-$622	-$1,144	-$1,821	-$2,494	-$2,641
Net Share issue/repurchase	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Dividends paid	-$130	-$156	-$156	-$156	-$156	-$156	-$156	-$156	-$467	-$596	-$622	-$622
Change in debt	$14	-$39	$9	$7	$0	-$6	$3	$1	$43	-$9	-$2	-$1
Other financing cash flow	-$5	$0	$0	$0	$0	$0	$0	$0	-$17	-$5	$0	$0
Financing Cash Flow	-$120	-$195	-$147	-$148	-$156	-$161	-$153	-$155	-$440	-$610	-$625	-$623
Net Change in Cash	$222	$345	$296	$365	$206	$374	$509	$698	$690	$1,228	$1,787	$2,515
Exchange effect	$46	$0	$0	$0	$0	$0	$0	$0	-$50	$46	$0	$0
Cash, Beginning of Year	$2,768	$3,036	$3,381	$3,676	$4,042	$4,248	$4,622	$5,130	$2,128	$2,768	$4,042	$5,829
Cash, End of Year	$3,036	$3,381	$3,676	$4,042	$4,248	$4,622	$5,130	$5,829	$2,768	$4,042	$5,829	$8,344

Source: Company data, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 31: Terms and definitions
Glossary of abbreviations/acronyms

Term	Definition
AI	Artificial Intelligence
AMD	Advanced Micro Devices
ASIC	Application Specific Integrated Circuit
CoPoS	Chip-on-Panel-on-Substrate
COUPE	Compact Universal Photonic Engine
CoWoS	Chip-on-Wafer-on-Substrate
CoWoS-L	Chip-on-Wafer-on-Substrate-Local Silicon Bridge
CPO	Co-Packaged Optics
CPU	Central Processing Unit
EMIB	Embedded Multi-die Interconnect Bridge
GPU	Graphic Processing Unit
HBM	High Bandwidth Memory
HPC	High-Performance Computing
PCB	Printed Circuit Board
PDK	Process design kit
SoIC	System on Integrated Chips
TPU	Tensor Processing Unit
VIS	Vanguard
WMCM	Wafer-level-multi-chip-module
WPM	Wafer per month

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

Taiwan Semiconductor Manufacturing Co. (TSMWF / TSM)
Our PO for TSMC is NT$3,100 per share (US$590 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 18x. We think a PE above the average is justified given TSMC's enhanced industry position and mid-40% 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
	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
	eMemory	XYLWF	3529 TT	Mike Yang
	GigaDevice	XGXIF	603986 CH	Daley Li, CFA

APR - Semiconductor Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	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
	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	XPPZF	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 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
	LX Semicon	XLXSF	108320 KS	Simon Woo, CFA
	MetaX	XMEZF	688802 CH	Daley Li, CFA
	Novatek	NVKMF	3034 TT	Haas Liu
	Realtek	RLTKF	2379 TT	Mike Yang
	Shenzhen Goodix	XQPLF	603160 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 Semi	HHUSF	1347 HK	Dai Shen
	M31 Technology	XMTZF	6643 TT	Mike Yang
	Macronix International	MXICF	2337 TT	Dai Shen
	Maxscend	XMXSF	300782 CH	Daley Li, CFA
	Parade	PRDWF	4966 TT	Mike Yang
	Soulbrain	XSBOF	357780 KS	Simon Woo, CFA
	United Microelectronics Corp.	XUMIF	2303 TT	Haas Liu
	United Microelectronics Corp.	UMC	UMC US	Haas Liu
	VeriSilicon	XMLZF	688521 CH	Daley Li, CFA
	Win Semiconductors	WSMIF	3105 TT	Haas Liu
	Wonik IPS	XRHQF	240810 KS	Simon Woo, CFA
RSTR				
	SK Hynix	HXSCF	000660 KS	Simon Woo, CFA

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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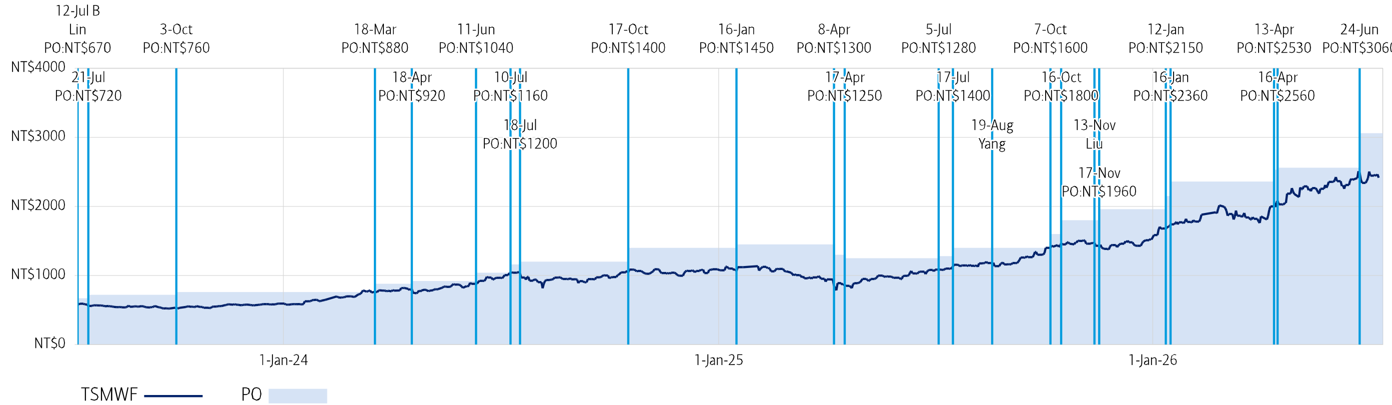
Disclosures

Important Disclosures

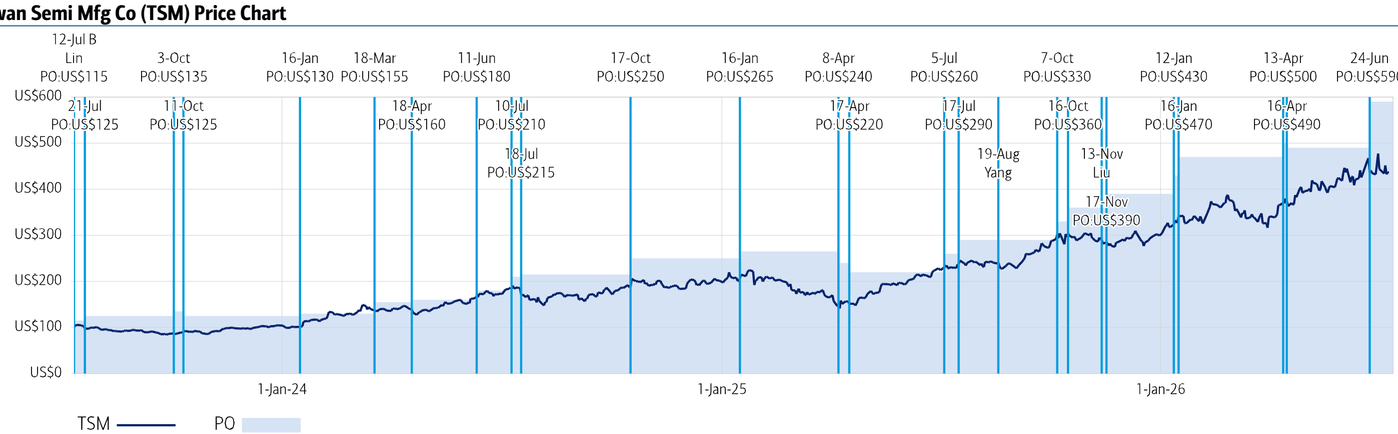
Taiwan Semi Mfg Co (TSMWF) Price Chart



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

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.

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

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	243	60.60%	Buy	123	50.62%
Hold	87	21.70%	Hold	45	51.72%
Sell	71	17.71%	Sell	21	29.58%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	1987	56.11%	Buy	1190	59.89%
Hold	797	22.51%	Hold	496	62.23%
Sell	757	21.38%	Sell	391	51.65%

[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]
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
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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