

## Taiwan and the Global Semiconductor Supply Chain

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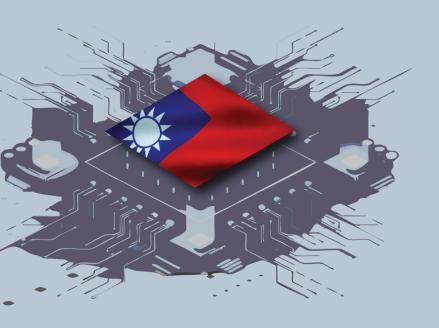
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## EXECUTIVE SUMMARY

The global semiconductor industry reached new heights in 2025. In the second quarter, worldwide sales climbed to US\$ 179.7 billion, a record-breaking figure and a 7.8% increase quarter-on-quarter. This surge was powered by strong momentum from the Asia-Pacific region (excluding Japan), complemented by healthy growth in the Americas.

The upswing was fueled by soaring demand for AI applications, rising shipment volumes, and anticipatory stocking ahead of major product launches in smartphones, PCs, and servers. Together, these factors created the conditions for the global market to achieve an estimated US\$ 727.7 billion in total size for 2025, a historic milestone.

Taiwan remains at the very center of the global semiconductor value chain. The island's IC industry is set to post record output in 2025, with IC manufacturing as the driving force. Within this segment, the foundry sector has consolidated its position as the linchpin of Taiwan's semiconductor strength.

This concentration of market power is most evident in the performance of TSMC, whose share of the global foundry market surged to a historic 70.2% in Q2 2025. This figure not only underscores Taiwan's indispensable role in advanced semiconductor manufacturing but also places TSMC far ahead of competitors such as Samsung and leading Chinese foundries.



#### GLOBAL SEMICONDUCTOR MARKET

2025 Q2

The global semiconductor market in 2025 Q2 presented a situation of "declining prices, increasing volume, and record-high value": sales revenue hit an all-time high, average selling price (ASP) remained the third highest historically, and shipments nearly returned to the boom levels seen during the pandemic.

**US\$ 179.7 B** 

#### **GLOBAL SEMICONDUCTOR SALES**

This represents a 7.8% quarter-on-quarter increase and a robust 19.6% year-on-year surge.

**US\$ 0.677** 

#### **AVERAGE SELLING PRICE (ASP)**

The third-highest in the past five years—despite a 3.8% dip from Q1, it still marked a 6.2% increase compared with Q2 2024.

**265.3 B UNITS** 

#### **SHIPMENTS**

Growth of 12.0% quarter-on-quarter and 12.6% year-on-year.



## GLOBAL SEMICONDUCTOR MARKET

2025 Q2

#### Figure 1



Source: Chia-Chen Lee, "Taiwan IC Industry Development in 2025Q2," Industrial Economics and Knowledge Center (IEK), Industrial Technology Research Institute (ITRI), September 9, 2025, p. 2.

### **MAJOR SEMICONDUCTOR MARKETS**



#### ACCORDING TO WORLD SEMICONDUCTOR TRADE STATISTICS (WSTS), THE PERFORMANCE OF MAJOR REGIONAL SEMICONDUCTOR MARKETS IN 2025 Q2 VARIED:

The global semiconductor market momentum in 2025 Q2 mainly came from the strong growth of the Asia-Pacific region (excluding China and Japan). The U.S. remained at a high level but saw a slight pullback; in contrast, Japan continued to stagnate, while Europe maintained a moderate recovery trend.



Up 24.1% YoY

**Europe** 

US\$ 13.2 B

Up 5.3% YoY Up 3.9% QoQ China

US\$ 51.7 B

Up 13.1% YoY Up 12.2% QoQ Asia-Pacific (excluding China and Japan)

Up 34.2% YoY Up 18.2% QoQ

Japan

Down 2.7% QoQ Up 2.9% YoY

#### 2025 Q2 - World Semiconductor

From the perspective of global semiconductor market share, the United States has continued to consolidate its position as the largest market. Its global share has gradually risen since 2021Q3, reaching 30.6% in 2025Q2, slightly below the peak of 35.2% in 2024Q4 but still in first place.

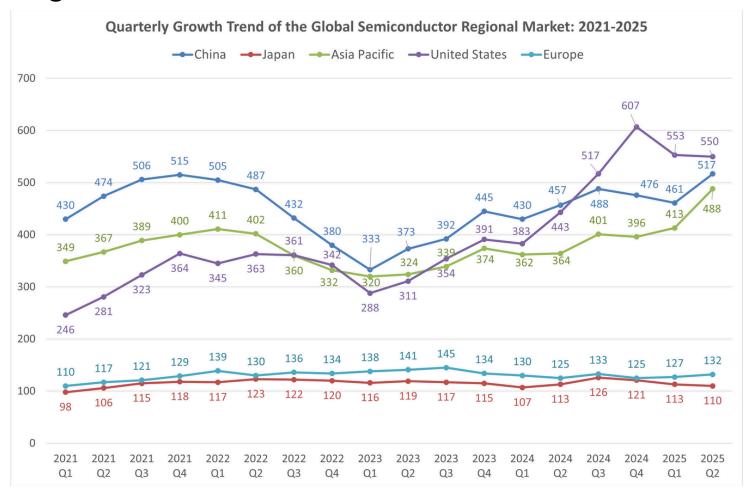
China ranked second with a 28.8% share in 2025Q2. However, its market share has been on a downward trend, falling from 34.8% in 2021Q3.

The Asia-Pacific region (excluding China and Japan) ranked third with a 27.2% share in 2025Q2, maintaining a stable range of 25%–27% in recent years.

As for Europe and Japan, their market shares peaked in 2023Q1 at 11.5% and 9.7%, respectively, but have since declined year by year, falling to 7.3% and 6.1% in 2025Q2, even lower than 8.3% and 7.9% in 2021Q3.

Overall, the global semiconductor market structure is shifting toward "U.S.-led, Asia-centered": the U.S. market share has risen significantly, China and the Asia-Pacific combined still account for more than half, while the shares of Europe and Japan continue to shrink.

#### Figure 2



Note: Data sourced from WSTS, Global Monthly Semiconductor Market Value released in August 2025. Source: Chia-Chen Lee, "Taiwan IC Industry Development in 2025Q2," IEK, ITRI, September 9, 2025, p. 3.



Figure 3



Note: Data sourced from WSTS, published in August 2025 on the global semiconductor monthly market values. Source: Chia-Chen Lee, "Taiwan IC Industry Development in 2025Q2," IEK, ITRI, September 9, 2025, p. 3.

#### Global Semiconductor Market in 2025

According to the latest forecast released by WSTS in August 2025, the global semiconductor market is entering a new wave of strong growth. Driven by the rapid adoption of Al applications and anticipatory stocking due to expectations of tariff policy changes, the first half of the year saw a significant wave of "advance purchases", boosting overall demand momentum.

Against this backdrop, WSTS revised its global outlook upward: in 2025, the market size is expected to reach US\$ 727.7 billion, with annual growth revised upward from 11.2% to 15.4%. Looking ahead, the market size is projected to approach US\$ 800.0 billion in 2026 (up 9.9%), reach US\$ 840.5 billion in 2027, and surpass US\$ 897.6 billion in 2028.

In terms of growth rates, the global semiconductor market has experienced sharp fluctuations in recent years: in 2020 it grew 6.8%, while in 2021 it surged to 26.2% due to post-pandemic demand; in 2022 it cooled sharply to 3.3%, and in 2023 it contracted by 8.2%. In 2024, it rebounded strongly, with growth reaching 19.7%. WSTS forecasts that growth will remain high at 15.4% in 2025, slow to 9.9% in 2026, ease further to 5.1% in 2027, and then slightly rebound to 6.8% in 2028.

Overall, under the dual forces of Al adoption and frontloaded demand, the global semiconductor market will maintain strong growth in the short term, but mid- to long-term growth will gradually stabilize, reflecting a market entering a more sustainable expansion phase.



#### Figure 4



Note: Data sourced from WSTS, published in June and August 2025 on the global semiconductor market forecast data. Source: Chia-Chen Lee, "Taiwan IC Industry Development in 2025Q2," IEK, ITRI, September 9, 2025, p. 4.

## TAIWAN SEMICONDUCTOR MARKET

2025Q2

#### **IC DESIGN**

Output value: **US\$ 11.2 billion (NT\$ 359.5 billion)** 

Quarter-over-quarter change: **-0.7%** Year-on-year change: **+15.0%** 

Key factors affecting performance: Foreign exchange losses due to rapid appreciation of the NT dollar. Fading effect of China's earlier subsidy-driven rush orders.

Demand trends:
Strong demand for edge Al chips
Strong demand for networking chips

#### **IC MANUFACTURING**

Total output: US\$ 33.3 billion (NT\$ 1.0686 trillion)

Quarter-on-quarter (QoQ): **+10.4%** Year-on-year (YoY): **+32.4%** 

Foundry

Output: **US\$ 28.9 billion (NT\$ 1.0219 trillion)**QoQ: **+10.3%** 

YoY: **+34.4%** 

Robust demand for AI and HPC, along with recovering demand in communications, industrial, and automotive semiconductors, fueled strong revenue growth. While the NT dollar's appreciation created some foreign exchange pressure, most firms effectively managed losses and maintained stable operations.

• Memory and Others:

Output: **US\$ 1.5 billion (NT\$ 46.7 billion)**QoQ: **+10.7%** 

YoY: **+0.2%** 

Although DRAM ASPs declined slightly, higher shipments lifted revenue. Taiwanese NOR Flash suppliers, benefiting from smaller chip size advantages, performed well in wearable and IoT markets and actively pursued MLC NAND Flash orders potentially vacated by Korean competitors.

#### **IC PACKAGING & TESTING**

- Packaging: Output was US\$ 3.6
   billion (NT\$ 115.5 billion), up 8.0%
   quarter-on-quarter and 13.0% year-on-year.
- Testing: Output was US\$ 1.6 billion (NT\$ 55.8 billion), up 8.2% quarteron-quarter and 15.3% year-on-year.

In 2025 Q2, Taiwan's IC packaging and testing industry output totaled (NT\$ 171.3 billion) US\$ 54 billion, up 8.1% quarter-on-quarter. The market gradually recovered from seasonal weakness, with the impact of weak demand in smartphones and consumer electronics easing. Increased DRAM shipments improved packaging utilization, while rising demand for AI servers and HPC applications further boosted advanced packaging and high-speed testing demand.



# Table 1. Taiwan IC Industry Value in Q2 2025

NT\$ Billion

Category	25 Q1	Q0Q	YoY	25 02	Q0Q	YoY	25 Q3(e)	Q0Q	YoY	25 Q4(e)	0°0	YoY	2025 (e)	YoY
IC Industry Value	1,488.80	-0.40%	27.60%	1,599.40	7.40%	25.90%	1,675.80	4.80%	21.10%	1,733.60	3.50%	16.00%	64975/10	22.20%
IC Design	362	8.40%	20.60%	359.5	-0.70%	15.00%	345	-4.00%	800.9	360	4.30%	7.80%	1,426.50	12.10%
IC Manufacturing	968.3	-2.80%	34.60%	1,068.60	10.40%	32.40%	1,147.10	7.30%	28.00%	1,176.20	2.50%	18.00%	4,360.20	27.50%
- Foundry	926.1	-3.30%	37.20%	1,021.90	10.30%	34.40%	1,093.40	7.00%	28.50%	1,120.80	2.50%	17.00%	4,162.20	28.30%
- Memory & Other	42.2	8.20%	-5.00%	46.7	10.70%	0.20%	53.7	15.00%	17.50%	55.4	3.20%	42.10%	198	12.70%
IC Packaging	106.9	-3.70%	8.30%	115.5	8.00%	13.00%	124.2	7.50%	11.50%	133.7	7.60%	20.50%	480.3	13.50%
IC Testing	51.6	-2.40%	6.30%	55.8	8.20%	15.30%	59.5	8.60%	17.80%	63.7	7.10%	20.70%	230.5	15.20%
IC Product Value	404.2	8.40%	17.30%	406.2	0.50%	13.10%	398.7	-1.80%	7.40%	415.4	4.20%	11.40%	1,624.50	12.20%
Global Semiconductor Market (US\$ Bn)	luctor Mar	ket (US\$ E	3n)										7.7.77	15.40%

Source: Source: Chia-Chen Lee, "Taiwan IC Industry Development in 2025Q2," IEK, ITRI,

September 9, 2025, p. 5.

1. (e) indicates estimate.

<sup>2.</sup> IC Industry Value = IC Design + IC Manufacturing + IC Packaging + IC Testing.

<sup>3.</sup> IC Product Value = IC Design + Memory & Other Manufacturing.

<sup>4.</sup> IC Manufacturing Value = Foundry + Memory & Other Manufacturing.

<sup>5.</sup> The above values are based on companies headquartered in Taiwan.

#### Taiwan Semiconductor Market in 2025

According to Industrial Economics and Knowledge Center (IEK) estimates, Taiwan's IC industry output value in 2025 is expected to reach NT\$ 6.5 trillion (US\$ 202.4 billion), up 22.2% from 2024, setting another record high. This achievement builds on the 2024 peak of NT\$ 5.3 trillion (US\$ 165.6 billion), underscoring Taiwan's continued pivotal role in the global semiconductor supply chain.

Looking back over the past decade, Taiwan's IC industry grew from NT\$ 2.2 trillion (US\$ 73.5 billion) in 2014, to NT\$2.67 trillion (US\$ 86.3 billion) in 2019, NT\$ 4.84 trillion (US\$ 162.4 billion) in 2022, and is expected to reach NT\$ 6.5 trillion (US\$ 202.4 billion) in 2025, with a CAGR of 10.3% from 2014 to 2024.

#### **Breakdown by Sector**



IC Packagin	g and Testing
Projected Output for IC packaging	Projected Output for IC Testing
US\$ 15 B	US\$ 7.2 B
CAGR ove	r 10 years
3.9%	4.8%
YoY inc	crease
13.5%	15.2%

Memory and Others
US\$ 6.2 B
Projected Output
CAGR over 10 years
-2.4%
Yoy increase
12.7%

IC Design
US\$ 44.4 B Projected Output
CAGR over 10 years 28.3%
Yoy increase 12.1%



## TABLE 2. TAIWAN IC INDUSTRY OUTPUT VALUE: 2021—2025(E)

**US\$** Billion

Category	2021	Growth Rate	2022	Growth Rate	2023	Growth Rate	2024	Growth Rate	2025(e )	Growth Rate
IC Industry Value	127.2	26.7%	150.7	18.5%	135.3	-10.2%	165.6	22.4%	202.4	22.2%
IC Design	37.8	42.4%	38.4	1.4%	34.2	-11.0%	39.6	16.0%	44.4	12.1%
IC Manufacturing	69.4	22.4%	91	31.0%	81.8	-8.8%	106.5	28.4%	135.8	27.5%
- Foundry	60.5	19.1%	83.6	19.1%	77.6	-7.2%	101.1	30.1%	129.7	28.3%
- Memory & Others	9	51.0%	7.3	-18.2%	5.3	-27.8%	5.5	3.3%	6.2	12.7%
IC Packaging	13.6	15.3%	14.5	7.0%	12.2	-15.6%	13.2	7.7%	15	13.5%
IC Testing	6.3	18.4%	6.8	7.7%	5.9	-12.8%	6.2	5.0%	7.2	15.2%
IC Product Value	46.8	44.0%	45.7	-2.3%	39.5	-13.7%	45.1	14.3%	50.6	12.20%
Global Semiconductor Market (US\$ bn)	555.9	26.2%	574.1	3.3%	526.9	-8.2%	630.5	19.7%	727.7	15.40%

Source: Chia-Chen Lee, "Taiwan IC Industry Development in 2025Q2," IEK, ITRI, September 9, 2025, p. 6.

#### Notes:

1.(e) indicates estimate.

2.IC Industry Value = IC Design + IC Manufacturing + IC Packaging + IC Testing.

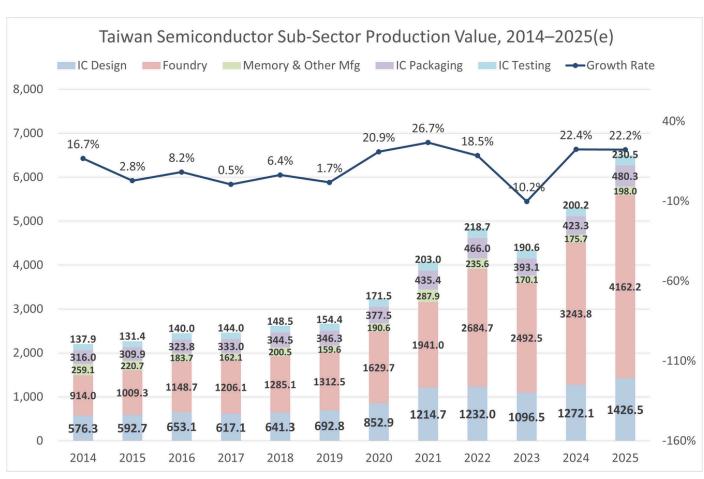
3.IC Product Value = IC Design + Memory & Other Manufacturing.

4.IC Manufacturing Value = Foundry + Memory & Other Manufacturing.

5. The above values are based on companies headquartered in Taiwan.



#### FIGURE 5. TAIWAN SEMICONDUCTOR SUB-SECTOR PRODUCTION VALUE: 2014—2025(E)



Source: Chia-Chen Lee, "Taiwan IC Industry Development in 2025Q2," IEK, ITRI, September 9, 2025, p. 7.



From an industrial structure perspective, Taiwan's semiconductor industry has undergone significant transformation over the past 11 years, with the share of foundry rising rapidly to nearly two-thirds of total output in 2025, becoming the core pillar of Taiwan's semiconductor industry.

#### **FOUNDRY**

Share increased sharply from 41.5% in 2014 to 64.1% in 2025, highlighting Taiwan's expanding dominance in this sector.

#### **IC DESIGN**

Packaging share fell from 14.3% in 2014 to 7.4% in 2025, while testing dropped from 6.3% to 3.5%, showing Taiwan's semiconductor value chain increasingly concentrated in design and especially in manufacturing.

#### **MEMORY & OTHERS**

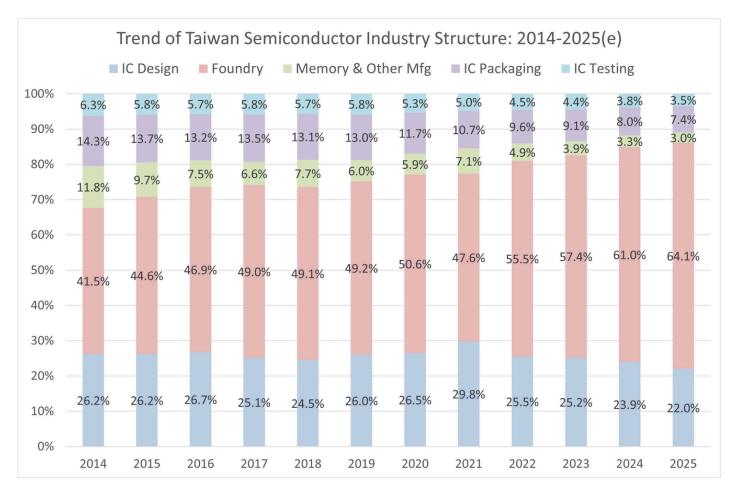
Share declined from 11.8% in 2014 to 3.0% in 2025, reflecting its gradual marginalization in Taiwan's IC industry.

#### **IC PACKAGING AND TESTING**

Share fell from 26.2% in 2014 to 22.0% in 2025.



#### FIGURE 6.



Source: Chia-Chen Lee, "Taiwan IC Industry Development in 2025Q2," IEK, ITRI, September 9, 2025, p. 7.

#### **TSMC**

Market Share Surpasses 70%, Cementing Global Dominance

In the second quarter of 2025, global foundries delivered an impressive performance. According to the latest survey by research firm TrendForce, the combined revenue of the world's top 10 foundries reached US\$ 41.7 billion, a historic high. This figure not only represents a 14.6% increase from the first quarter but also a year-on-year jump of US\$ 9.76 billion, or 30.5%.

The surge was primarily driven by China's consumer subsidy program, which spurred early stockpiling, as well as pre-launch inventory demand ahead of new smartphone, laptop, and server releases in the second half of the year. As a result, both capacity utilization and wafer shipments increased significantly.

Amid this wave of growth, TSMC once again demonstrated overwhelming leadership. Of the US\$ 5.31 billion increase in revenue among the top 10 foundries compared to Q1, as much as 89% came from TSMC alone. Its quarterly revenue soared to US\$ 30.2 billion, up 18.5% from the previous quarter, far outpacing other foundries, which saw only single-digit growth.



## TABLE 3. TOP GLOBAL FOUNDRIES REVENUE: 2025 Q2

#### **US\$** million

Ranking	Company	2025Q2	2025Q1	Difference	QoQ	Contribution	2024Q2	YoY	Contribution
1	TSMC	30,239	25,517	4,722	18.50%	89.00%	20,819	45.20%	96.60%
2	Samsung	3,159	2,893	266	9.20%	5.00%	3,833	-17.60%	-6.90%
3	SMIC	2,209	2,247	-38	-1.70%	-0.70%	1,901	16.20%	3.20%
4	UMC	1,903	1,759	144	8.20%	2.70%	1,756	8.40%	1.50%
5	GlobalFo undries	1,688	1,585	103	6.50%	1.90%	1,632	3.40%	0.60%
6	Huahong Group	1,061	1,011	50	4.90%	0.90%	708	49.90%	3.60%
7	Tower	379	363	16	4.40%	0.30%	351	8.00%	0.30%
8	VIS	372	358	14	3.90%	0.30%	342	8.80%	0.30%
9	Nexchip	363	353	10	2.80%	0.20%	300	21.00%	0.60%
10	PSMC	345	327	18	5.50%	0.30%	320	7.80%	0.30%
Total of	Top 10	41,718	36,413	5,305	14.60%	100.00%	31,962	30.50%	100.00%

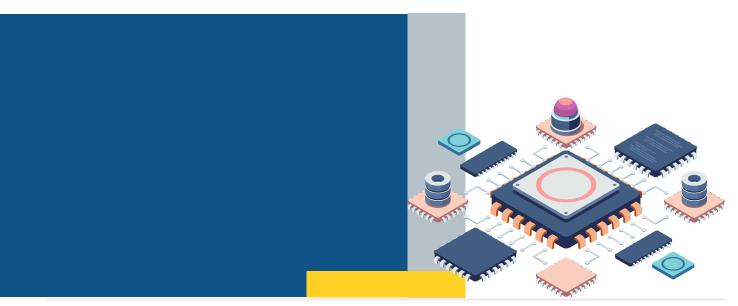
Source: Trendforce, Press Releases.



On a year-on-year basis, TSMC's dominance becomes even clearer. Over the past year, the top 10 foundries collectively added nearly US\$ 10 billion in revenue, with TSMC accounting for 96.6% of that growth. By contrast, Samsung's revenue plunged 17.6% during the same period. Hua Hong Group and TSMC recorded the highest annual growth rates at 49.9% and 45.2% respectively, while SMIC and Nexchip grew 21% and 16.2%. However, their scale and profitability remain far behind TSMC.

In terms of market share, the top 10 foundries together controlled 96.8% of the global market, underscoring the highly concentrated nature of the industry. Yet within this relatively stable structure, TSMC continues to widen its lead.

Over the past three years, TSMC's market share climbed from 53.4% in Q2 2022 to 70.2% in Q2 2025, a record high—an increase of 16.8 percentage points. Samsung, meanwhile, plummeted from 16.4% to 7.3% over the same period, a drop of more than 9 percentage points. UMC and GlobalFoundries also lost ground, with declines of 2.8 and 2 percentage points, respectively.



# Table 4. Ranking and Market Share of Global Top 10 Foundries by Revenue: 2022 Q1-2025 Q2

Ranking	Ranking Company						Σ	Market share	Ф					
0		202502	2025Q1	2024Q4	2024Q3	2024Q2	2024Q1	2023Q4	2023Q3	2023Q2	2023Q1	2022Q4	2022Q3	202202
1	TSMC (TW)	70.2%	%9'.29	67.1%	64.7%	62.3%	61.7%	61.2%	57.9%	56.4%	60.1%	58.5%	56.1%	53.4%
2	Samsung (KR)	7.3%	7.7%	8.1%	9.1%	11.5%	11.0%	11.3%	12.4%	11.7%	12.4%	15.8%	15.5%	16.4%
ю	SMIC (CN)	5.1%	%0.9	5.5%	90.9	5.7%	5.7%	5.2%	5.4%	2.6%	5.3%	4.7%	5.3%	5.6%
4	UMC (TW)	4.4%	4.7%	4.7%	5.1%	5.3%	5.7%	5.4%	90.9	%9.9	6.4%	6.3%	%6.9	7.2%
2	GlobalFoundries (USA)	3.9%	4.2%	4.6%	4.8%	4.9%	5.1%	5.8%	6.2%	6.7%	%9'9	6.2%	5.8%	5.9%
9	Huahong Group (CN)	2.5%	2.7%	2.6%	2.7%	2.1%	2.2%	2.0%	2.6%	3.0%	3.0%	2.6%	3.3%	3.1%
7	VIS (TW)	%6'0	1.0%	%6.0	1.0%	1.0%	1.0%	1.0%	1.1%	1.2%	1.0%	%6.0	1.2%	1.5%
oo	Tower (IL)	%6'0	%6.0	1.0%	1.0%	1.1%	1.1%	1.1%	1.2%	1.3%	1.3%	1.2%	1.2%	1.3%
6	Nexchip (CN)	%8"0	%6'0	%6.0	%6:0	%6.0	1.0%	1.0%	1.0%	n.a.	n.a.	n.a.	1.0%	1.4%
10	PSMC (TW)	%8"0	%6.0	0.8%	%6.0	1.0%	1.0%	1.0%	1.0%	1.2%	1.2%	1.2%	1.6%	1.9%
	Total of Top 10	%08'96	92.0%	96.2%	96.2%	%0.96	%0'96	92.0%	92.0%	94.0%	%0'86	98.0%	97.0%	98.0%

Source: Trendforce, Press Releases.



On an annual comparison, TSMC's share rose from 55.4% in 2022 to 69.2% in the first half of 2025, an increase of 13.8 percentage points. Samsung's share fell from 16.0% to 7.5% during the same period, a drop of 8.5 points. These figures indicate that TSMC is steadily driving the market toward a "winner-takes-all" scenario.

Table 5. Ranking and Market Share of Global Top 10 Foundries by Revenue: 2022-2025 Q1

Danklan	0		Marke	t Share	
Ranking	Company	2025H1	2024	2023	2022
1	TSMC (TW)	69.2%	64.0%	58.9%	55.4%
2	Samsung (KR)	7.5%	9.9%	12.0%	16.0%
3	SMIC (CN)	5.5%	5.7%	5.4%	5.3%
4	UMC (TW)	4.5%	5.2%	6.1%	6.8%
5	GlobalFoundries (USA)	4.1%	4.9%	6.3%	6.0%
6	Huahong Group (CN)	2.6%	2.4%	2.7%	3.1%
7	Tower (IL)	0.9%	1.1%	1.2%	1.3%
8	VIS (TW)	0.9%	1.0%	1.1%	1.3%
9	Nexchip (CN)	0.9%	0.9%	1.0%	1.3%
10	PSMC (TW)	0.8%	0.9%	1.1%	1.7%

Source: Trendforce, Press Releases.



Despite heavy government subsidies and policy support in recent years, Chinese foundries have struggled to break through in global share. SMIC has hovered between 5% and 6%, Hua Hong around 2%–3%, and Nexchip near 1%. Collectively, their share even slipped from 9.6% in 2022 to 9.0% in the first half of 2025. The main bottleneck lies in their reliance on mature process nodes: while record revenues are being achieved, declining average selling prices have limited profitability.

Table 6. Global Market Share of Top 3 Chinese Foundries by Revenue: 2022-2025H1

	2025H1	2024	2023	2022
SMIC	5.50%	5.70%	5.40%	5.30%
Huahong Group	2.60%	2.40%	2.70%	3.10%
Nexchip	0.90%	0.90%	1.00%	1.30%
Sum	9.00%	9.10%	9.00%	9.60%

Source: Trendforce, Press Releases.



Table 7. TSMC vs SMIC (Revenue, Gross Margin and Net Margin): 2020-2025

Unit: US\$ Billion

Year		TSMC			SMIC	
	Revenue	Gross Margin	Net Margin	Revenue	Gross Margin	Net Margin
2020	47.69	53.1%	38.7%	3.91	23.6%	17.1%
2021	57.23	52.0%	37.9%	5.44	30.9%	31.3%
2022	73.67	59.6%	44.9%	7.27	38.0%	25.0%
2023	70.60	54.4%	38.8%	6.32	19.3%	14.3%
2024	88.27	56.1%	40.5%	8.03	18.1%	6.1%
2025Q1	25.53	58.8%	43.1%	2.25	22.5%	8.3%
2025Q2	30.24	58.6%	42.7%	2.21	20.4%	5.9%

Source: Financial reports of TSMC and SMIC, and statistical data from Statista.

The profitability gap between TSMC and SMIC further highlights their divergence. TSMC's revenue grew from US\$ 47.7 billion in 2020 to US\$ 88.3 billion in 2024, and in the first half of 2025 alone, it reached US\$ 55.8 billion, putting it on track to surpass US\$ 100 billion for the year. Its gross margin has consistently stayed above 50%, nearing 60% in the first half of 2025, while its net margin remains steady around 40%, hitting 42.7% in Q2.

In contrast, SMIC's revenue also expanded rapidly, from US\$ 3.9 billion in 2020 to US\$ 8.0 billion in 2024, and US\$ 4.5 billion in the first half of 2025, likely exceeding US\$ 9 billion for the year. However, its profitability has deteriorated sharply: in 2022, gross and net margins were 38% and 25%, but by 2024 they had fallen to 18.1% and 6.1%. In Q2 2025, margins slid further to 20.4% and 5.9%. Compared with TSMC's 59% gross margin and 43% net margin, the gap is staggering.

Overall, TSMC continues to strengthen its dominance in the global foundry market through long-term technological leadership, heavy investment in advanced processes, and stable capacity expansion. Samsung's market share has sharply eroded in recent years, while China's top three foundries, despite subsidies and policy backing, remain stuck at around 9% combined. The global foundry industry is not only highly concentrated but is also accelerating toward unipolarization, shifting from past "multiplayer competition" to an era of TSMC's "overwhelming supremacy."



