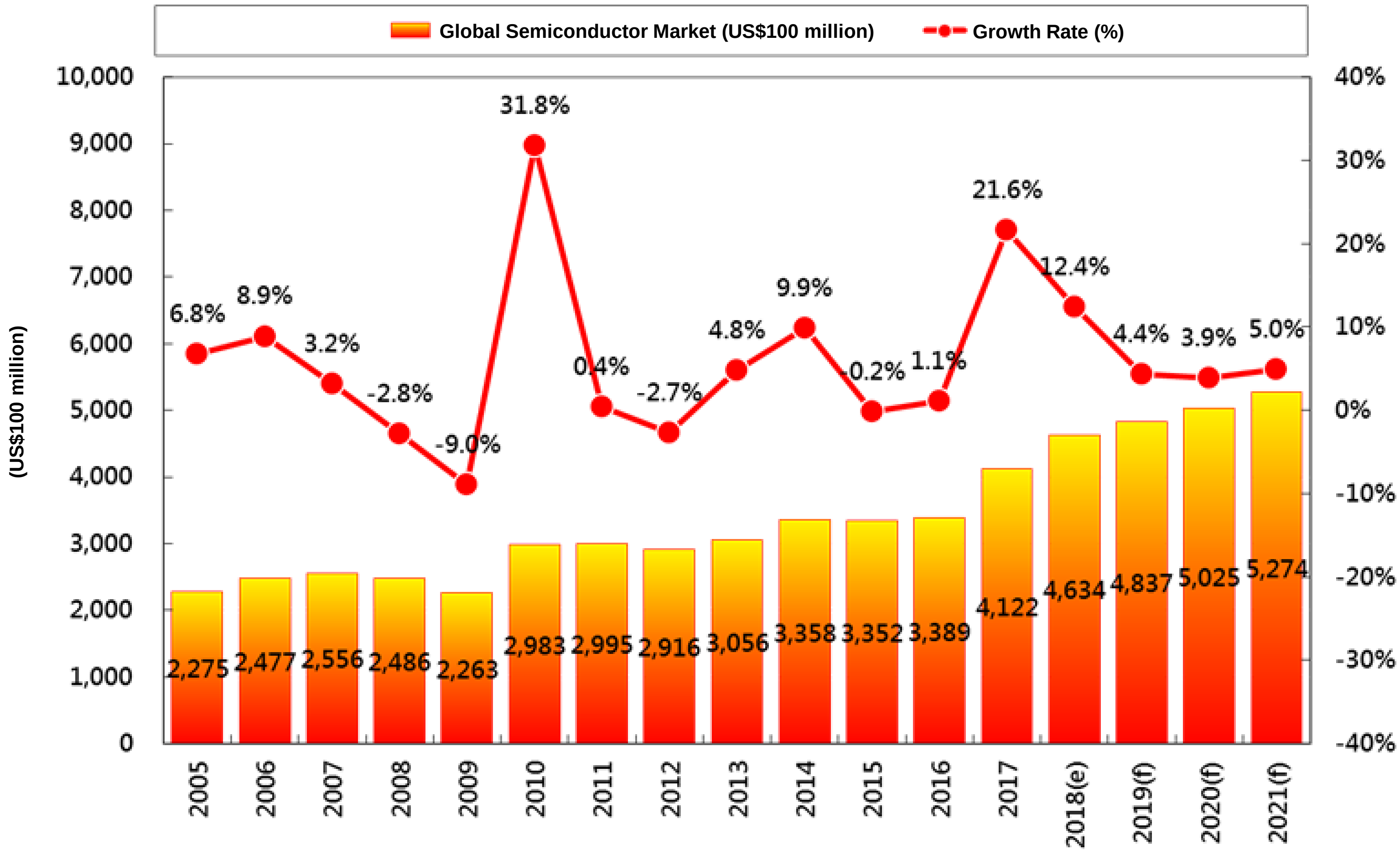
In 2017, the global semiconductor market reached USD 412.2 billion with a growth of 21.6%. It is expected to reach USD 463.4 billion in 2018 with a continuous growth of 12.4%.



Source：WSTS, ITRI- ISTI, organized by SIPO (August 2018)

Global Significance of Taiwan's Semiconductor Industry in 2017.

The world's No. 3 player in terms of total IC Industry output
(IC Design No.2; IC Foundry No.1; IC Packaging and Testing No.1)

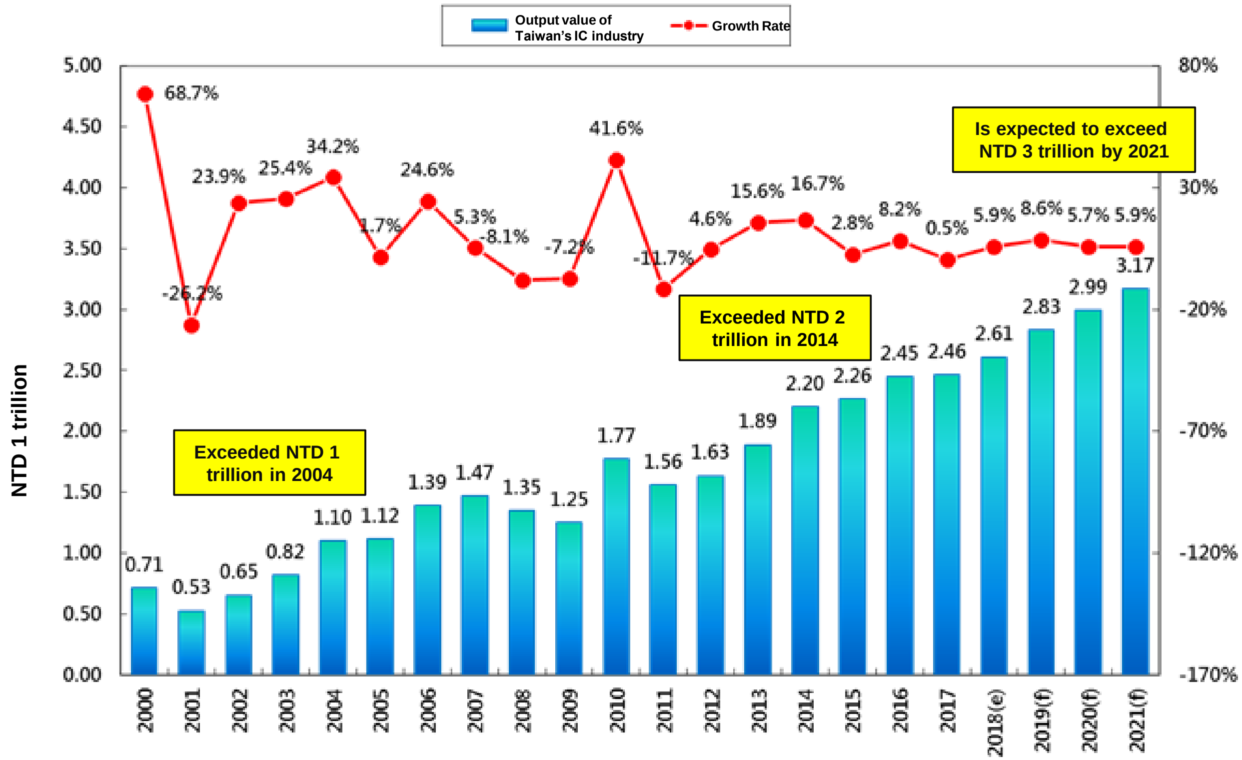
2017	Output of Taiwan (US$100 million)	Global Output (US$100 million)	Taiwan's Market Share (%)	Taiwan's Ranking	Major Taiwanese Companies	Leading Countries
Output Value of IC Industry Chain = A+B+C+D	810	5,026	16.1%	NO.3	TSMC	The U.S. and Korea
A.IC Design	203	976	20.8%	NO.2	MediaTek	The U.S.
B.IDM (including Memory)	53	3,227	1.6%	NO.5	Nanya Technology	The U.S., Korea, Japan and Europe
C.IC Foundry	397	547	72.5%	NO.1	TSMC	Taiwan
D.IC Packaging and Testing	157	281	55.9%	NO.1	ASE	Taiwan
Output value of IC products (IC brand) =A+B	256	4,203	6.1%	NO.4	MediaTek	The U.S., Korea and Japan

- Taiwan's IC industry has a complete industry chain. From the upstream IC Design to the downstream IDM and IC Packaging and Testing, Taiwan has a unrivaled and professional division-of-labor structure. **The output value of Taiwan's IC industry is in the world's third place**, right after the United States and Korea (before Japan, Europe, mainland China and Singapore).
- The **world's No. 2 player** in terms of total IC Design output, right after the U.S. (before Mainland China).
- The **world's No. 5 player** in terms of total IDM output and the **world's No. 4 player** in terms of total memory production output. Taiwan mainly produces DRAM, and then NOR Flash and Mask ROM. Its world position comes only after Korea, the United States and Japan.
- The **world's No. 1 player** in terms of total IC foundry output and a global leader with advanced below 10 nm production process.
- The **world's No. 1 player** in terms of IC Packaging and Testing output. Besides, among the world's top 10 professional IC Packaging and Testing companies, more than half of them are from Taiwan.

Source：WSTS, ITRI- ISTI, organized by SIPO (August 2018)

Taiwan value the development of the semiconductor industry as it facilitates the country’s economic growth and social development.

The industry’s output value is expected to reach NTD 3 trillion by 2021.

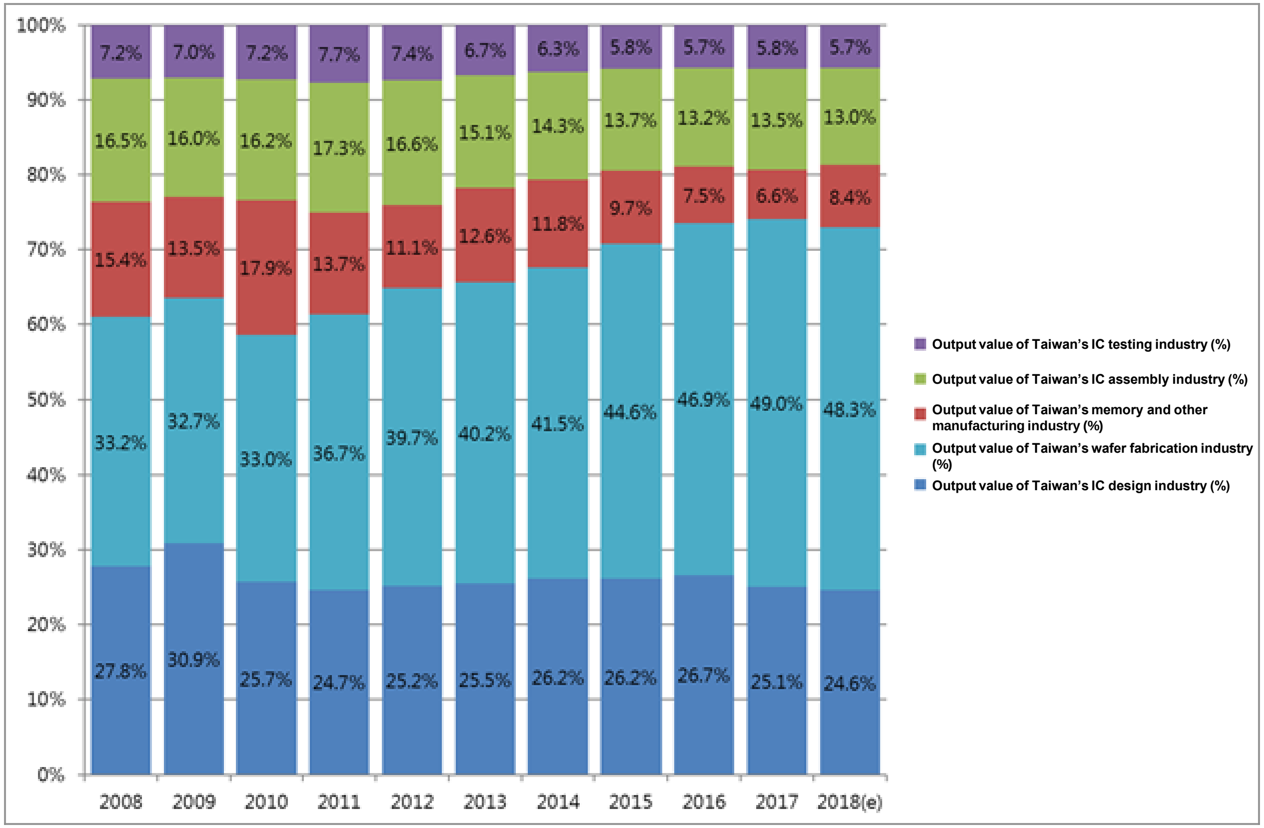


- The output value of Taiwan’s semiconductor industry reached 2.46 trillion in 2017 with a growth of 0.5%. It is expected to reach 2.61 trillion by 2018 with a growth of 5.9%.
- Taiwan’s IC industry has a complete industry chain. From the upstream IC Design to the downstream IDM and IC Packaging and Testing, Taiwan has a unrivaled and professional division-of-labor structure. **The output value of Taiwan’s IC industry** is in the world’s third place(about 20% of the market share), right after the United States and Korea.
- The world’s No. 2 player in terms of total IC Design output (about 20% of the market share). The world’s No. 1 player in terms of total IC foundry output (about 70% of the market share). The world’s No. 1 player in terms of IC Packaging and Testing output (about 50% of the market share). The world’s No. 1 player in terms of Memory output (about 10% of the market share).

Source： TSIA, ITRI- ISTI, organized by SIPO (August 2018)

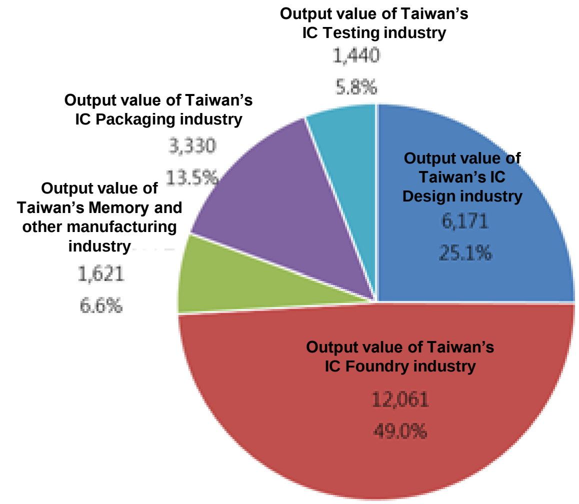
The Output Structure of Taiwan’s Semiconductor Industry.

In 2018, the proportion of IC Foundry is 48%, which has facilitated the development of IC Design (25%), IC Packaging and Testing (19%) and memory industry (8%).

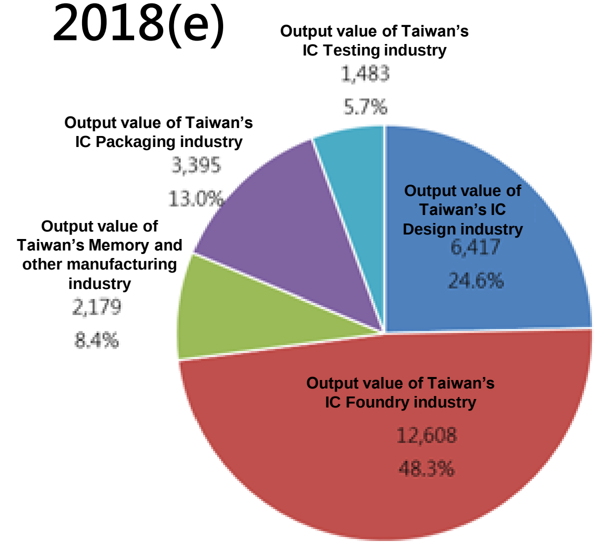


The Output Value Structure and Distribution of Taiwan’s Semiconductor Industry from 2008 to 2018.

2017



2018(e)



Source： TSIA, ITRI- ISTI, organized by SIPO (August 2018)