

A WORLD RELIANT ON TAIWAN'S SEMICONDUCTOR INDUSTRY AMID CHINESE AGGRESSION

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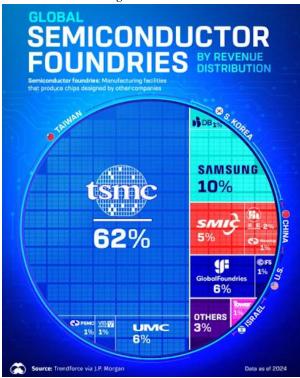


Photo:Global Semiconductor Foundries by Revenue Distributors.Source:Tendforce via J.P. Morgan

As the world awaits President Donald Trump's strategy in the Indo-Pacific, Taiwan unveils its New Southbound Policy + at the 2025 Yushan Forum,

cementing its role as an important regional partner. Semiconductor supply chains are becoming increasingly important, and just last year, commuters and tourists in Japan had to wait months to receive their transit IC cards due to a temporary semiconductor shortage. The dependence on Taiwan's semiconductor industry is a reminder of Taiwan's role in international security.

The Importance of Taiwan

If Taiwan's semiconductor industry is hit with any form of disruption or material shortages, the whole world will feel the impact. Taiwan produces around 92 percent of the most advanced chips, which is increasingly necessary due to the new AI industry and an increasingly technological world. Taiwan's role makes it an international security threat that should China decide to invade, it would disrupt the semiconductor industry for a long time. Furthermore, it could also mean Beijing would gain control over critical technology, shifting global power dynamics. It could also lead to price increases of up to 59 percent for "logic chips" in the United States. The value of the global semiconductor market is projected to surpass 1 trillion dollars by 2030, meaning that it is in both companies' and nations' interests to ensure the security of the semiconductor industry and its supply chains.

Domestic Capabilities

Moreover, it would be in both Taiwan's and Japan's interest to create a partnership where Taiwan and Japan would exchange parts of their production in order to solidify their importance and increase their deterrence against a Chinese invasion. Creating Taiwanese factories and production in Japan while creating Japanese factories in Taiwan foster interdependence. It would strengthen the supply chains' security while giving Taiwan more security insurance and giving Japan more reason to intervene in a Taiwan contingency. This can be achieved by creating foundries of fabrication in Japan, as they plan to achieve in Arizona by the end of 2025, and also by increasing downstream manufacturing in Taiwan by Japanese companies. This could also be done according to the New Southbound Policy+, but the only real option would be the Philippines, as other ASEAN countries have deeper ties with China.

Technological Advancement

Furthermore, anything from small gadgets to the automotive industry is seeing <u>rapid</u> technological advancement, particularly through the use of semiconductors. The use of semiconductors is also likely to continue, meaning a larger demand and increased risk of shortages. Therefore, it is crucial that Taiwan strengthens its supply chains and creates factories abroad in order to secure production in case of Chinese aggression or natural disasters hitting Taiwan. As Taiwan's dominance relies on staying ahead technologically, Chinese aggression could disrupt not only production but also R&D, which is another reason to diversify geographically. If disrupted, competitors like Samsung or Intel might fail to step up in a crisis.

Power Dynamic

A Taiwan contingency is not only about nationalist goals but also a way for them to dominate the advanced tech supply chains, reducing its reliance on Western imports. A Chinese <u>takeover</u> of Taiwan Semiconductor Company Limited (TSMC) would give it leverage over global economies, flipping the current dynamic where Taiwan's chips are a deterrent. This would add another layer of geopolitical tension in the region. China might gamble that the world's dependency on Taiwanese chips forces restraint from the U.S. and its allies. It could also further its own self-sufficiency, as the Chinese SMIC still lags behind in advanced nodes. Therefore, A partnership between the U.S. Japan and Taiwan is urgent.

Regional Allies and the Indo-Pacific

While Sony, Toshiba, and Samsung still rely on TSMC, a partnership could incorporate TSMC's tech and expertise, creating a broader geographical area of manufacturing. Meanwhile, ASEAN nations offer manufacturing bases to diversify supply chains. By creating a regional semiconductor alliance under frameworks like Quad or the Indo-Pacific Economic Framework (IPEF), it is possible to create new routes

and manufacturing areas, increasing production and manufacturing capabilities while also safeguarding potential disruption. This would make Taiwan's current bilateral partnership with the U.S. a multilateral strategy incorporating the New Southbound Policy+ and Donald Trump's likely focus on countering China.

Economic and Political Risks of Interdependence

The potential downside of diversification is the enormous cost of foundries abroad. The Arizona plant is estimated at 65 billion dollars and could strain Taiwan's domestic economy if jobs or tech secrets shift overseas. While avoiding Donald Trump's tariffs, it can coincidentally reduce the importance of Taiwan's geopolitical location. But, since the most important aspect of the industry is R&D, it should not affect the incentive of the U.S. to help Taiwan. Moreover, politically, China might view this as a provocation, escalating tensions around the Taiwan strait. However, while these risks are substantial, they could lead to long-term security or potential sovereignty for Taiwan.

Conclusion

Taiwan's semiconductor supremacy, producing 92% of the world's most advanced chips, is both a global lifeline and a strategic vulnerability as China's ambitions intensify. From Japan's transit card delays to the trillion-dollar tech markets' reliance on TSMC, the stakes are clear. A disruption or worse, a Chinese takeover could cripple economies and shift power to Beijing. A U.S.-Japan-Taiwan partnership, extended through regional allies via the New Southbound Policy+ and frameworks like the Quad, offers a robust counterweight. Securing supply chains and deterring aggression through interdependence. Yet, the 65 billion dollar price tag and political risk of diversification demand careful strategic planning. As Trump shapes his Indo-Pacific strategy in 2025, the U.S. and its partners must prioritize a regional semiconductor alliance, ensuring Taiwan remains a technological stronghold and not a pawn in the face of China's growing borders.