# Responding to the New International Trade Order Amid the U.S. Tariff Shock: Opportunities and Challenges for Taiwan

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# Abstract

U.S. President Donald Trump dropped a bombshell on April 2, dubbed "American Liberation Day," by imposing high reciprocal tariffs on many countries, triggering a backlash. However, on April 9, Trump made a U-turn and announced a 90-day extension, before which only a 10% general tariff would be imposed. If the tariff rate remains high after 90 days, how big will its impact be on the global and Taiwanese economies and industries? How should the supply chain be adjusted? What are Taiwan's possible negotiating strategies toward the United States within these 90 days? What price will Taiwan have to pay? What changes will occur in Taiwan's economy and industries after Trump imposes the tariffs? This paper analyzes the above issues and proposes strategies for the government and enterprises on how to respond.

Keywords: President Trump, U.S. Tariff Policy, Reciprocal Tariffs, Taiwan's Response Strategy, Sovereign Fund

# I. Introduction

President Donald Trump is more unpredictable than the unpredictable economy. In the three months since he took office, he has issued 100 executive orders and decrees. At the same time, he has repeatedly called for high tariffs on semiconductors, medicines, automobiles, and steel, and has threatened to impose a tariff of 25% on Canada and Mexico. What is even more shocking is that on April 2, now known as "Liberation Day" in the U.S., Trump dropped a bombshell by imposing staggeringly high reciprocal tariffs on many countries. Among them, a tariff of 54% was imposed

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on China (34% this time, together with the original 20%, a total of 54%), 49% on Cambodia, 46% on Vietnam, 37% on Thailand, 32% on Indonesia and Taiwan, 26% on India and South Korea, 24% on Malaysia, 20% on the European Union, and 10% on the United Kingdom, which triggered backlash from various countries.

For Taiwan, TSMC (Taiwan Semiconductor Manufacturing Company) announced at the end of March that it would invest US\$165 billion in the United States, and TSMC Chairman Che-chia Wei was also invited to the White House. Yet, a 32% reciprocal tariff was still announced. The 32% tariff is higher than those imposed on South Korea and Japan, sparking concern in Taiwan.

However, Trump's Gemini-sign fickle personality was immediately on display, as he announced on April 9 that the pause on the tariffs would be extended for 90 days, leaving only a 10% general tariff.<sup>1</sup>

What bargaining chips does Taiwan have during those 90 days? What is the final possible tariff rate? If the original 32% tariff is maintained, how much of an impact will it have on Taiwan? But if a 10% tariff is imposed, what price will Taiwan have to pay?

This paper explores the impact of President Trump's tariff policy on Taiwan's economy and industry, the impact on the trilateral relations between the United States, China, and Taiwan, and Taiwan's response. This paper is divided into six sections. In addition to the introduction, the second section discusses the evolution of Trump's tariff war, Trump's philosophy, and possible consequences. The third section analyzes the impact of Trump's 32% reciprocal tariff on Taiwan's economy and industry. The fourth section analyzes the reasons behind Trump's U-turn and Taiwan's strategy for the next 90 days. The fifth section describes Taiwan's future economic and industrial landscape. The final section provides policy recommendations.

Jiann-Chyuan Wang, "Tariff Success Lies in Cooperation," April 24, 2025. *Taipei Times*, <a href="https://www.taipeitimes.com/News/editorials/archives/2025/04/24/2003835706">https://www.taipeitimes.com/News/editorials/archives/2025/04/24/2003835706</a>>.

## II. The Philosophy and History of Trump's Tariff War

#### 1. Trump's Tariff Policy Philosophy

Several of Trump's economic and political advisers, including Stephen Miran and Peter Navarro, have two main philosophies. First, the United States maintains world military security, which results in a large amount of debt: In order to assume the world's military and political security, the United States spends large amounts of money on defense and military expenditures. This debt is global public property and must therefore be shared by countries around the world. Reciprocal tariffs are thus designed to increase other countries' purchases of U.S. Treasury bonds and to reduce their trade surpluses with the United States.

Second, the United States overvalues the dollar and increases its trade deficit for the sake of global currency liquidity. Since the world uses the dollar as a trading tool, and the proportion of foreign exchange reserves is as high as 50%, the United States must maintain the strength of its currency. Through the overvaluation of the dollar, countries around the world have large trade surpluses with the United States, and the dollar flows out to various countries as a trading tool or foreign exchange reserve. With such development, the U.S. dollar is overvalued, the manufacturing sector has declined, employment is reduced, and workers' wages are dragged down. Therefore, it is necessary to force the currencies of various countries to appreciate against the U.S. dollar so that the United States can re-industrialize.

Moreover, Trump is a businessman. In order to maintain the stability of U.S. dollar assets, he may even start a war or provoke a geopolitical crisis.

#### 2. Trump's Tariff Policy Is Both a Means and an End

The United States imports US\$3.3 trillion a year. If a 10% tariff is imposed, its revenue will reach US\$330 billion, and if a 20% tariff is imposed, it will reach US\$660 billion. In addition to relieving the fiscal pressure on the United States, it can also serve as a tax base for reducing personal income tax and corporate income tax to convince Congress to approve the budget.

On the other hand, high tariffs are also a means to achieve the goal of threatening other countries to reduce their trade surpluses, invest in the United States, purchase U.S. Treasury bonds, and purchase U.S. arms and agricultural products through bilateral negotiations.

#### 3. Trump's Tariffs Are Universal, Targeted, and Sectoral

Trump's tariffs have universal, targeted, and sectoral targets. The so-called universality means that even countries that do not have a trade surplus with the United States will be subject to at least a 10% tariff in order to make up for fiscal deficits. Targeted means imposing high reciprocal tariffs on countries that have large trade surpluses with the United States. Sectoral tariffs are regarded as exceptions, mainly to protect key industries in the United States such as semiconductors, automobiles, steel and aluminum, biotechnology, and pharmaceuticals.

#### 4. Trump's Reciprocal Tariffs

The formula for calculating Trump's reciprocal tariffs is (the amount of each country's trade surplus with the United States / the amount of each country's exports

China 54% (34% + 20%), Cambodia 49%, Vietnam 46% Thailand 36%, Indonesia 32%, Taiwan 32%, Switzerland 31% South Korea 26%, Japan 24%, Malaysia 24%, EU 20% UK 10%, 10% for other countries that do not have a trade surplus with the United States



Figure 1. Possible U.S. Tariff Rates for Importing Goods

Source: Compiled by author.

to the United States)  $\div$  2. Therefore, the amount of each country's trade surplus with the United States plays an important role in determining the level of its tariff rates. The reciprocal tariff rates are as follows: Cambodia 49%, Vietnam 46%, Thailand 36%, Indonesia/Taiwan 32%, South Korea/India 26%, Japan 24%, the European Union 20%, and so on.<sup>2</sup>

# 5. Exceptions

Semiconductors and pharmaceutical products are exceptions, and secondly, the *United States-Canada-Mexico Free Trade Agreement* (USMCA) has separate provisions. In addition, it remains to be determined whether products under the WTO's *Information Technology Agreement* (ITA) will be included in the exemptions.

# III. Impact on the Global and Taiwanese Economy

# 1. Impact on the Global Economy

Trump's high tariff policy is bound to lead to a shrinkage in trade, coupled with



Figure 2. The Evolution of Trump's Tariff Policy

Source: Compiled by author.

Jiann-Chyuan Wang, "The Impact and Response of Trump's Trade Policy," February 6, 2025, Economic Daily News, <a href="https://money.udn.com/money/story/5629/8529992">https://money.udn.com/money/story/5629/8529992</a>>.

the realignment of the supply chain and the increase in costs, which will be passed on to importers and consumers; it will also have an impact on import consumption. If major countries engage in trade retaliation, such as China, the European Union, and Canada, the impact will be exacerbated. Therefore, the International Monetary Fund (IMF), the Organization for Economic Co-operation and Development (OECD), and other organizations have lowered their predictions for global trade growth.

#### 2. Impact on the U.S. Economy

The U.S. economy, which has been booming for many years, is now in a downturn, with rising unemployment, falling household consumption spending, and the excess savings brought about by COVID-19 being exhausted. Therefore, the U.S. economy is already in a downward phase, and Trump's tariff policy has made the situation worse, because tariffs will inevitably lead to rising prices and hit consumption, especially since consumption accounts for more than 70% of U.S. GDP. The expected inflation will severely hit U.S. economic growth.

In view of this, the former U.S. Treasury Secretary and Goldman Sachs both believe that the probability of a U.S. economic recession is as high as over 50%. If inflation is added, will it lead to stagflation? If this situation develops, the U.S. Federal Reserve will inevitably be caught in a dilemma: either cutting interest rates to save the economy or raising interest rates to fight inflation. U.S. economic recovery is expected to be even more difficult.

#### 3. Impact on Taiwan's Economy

When Trump first announced the reciprocal tariffs on April 2, *Bloomberg* predicted that Taiwan's economy would experience a -3.8% recession, which frightened the government and the general public. The assumption was that Taiwan's exports would be revised down by 60%, though this did not take into account that a decrease in exports would also lead to a simultaneous decrease in imports, that manufacturers would diversify their export markets, and that the decline in export revenue would have less than 50% impact on the value-added of the industry.

If we assume that U.S. exports account for 20% of Taiwan's exports, of which added value accounts for 40%, and exports account for 60% of GDP, the impact on GDP should be 0.96% (=  $20\% \times 20\% \times 40\% \times 60\%$ ). If we also take into account the crowding-out effect on private investment and even the shrinking in consumption, the possible impact should be around 1% to 1.5%. According to estimates by the Center for Eccnomic Forcasting of the Chung-Hua Institution for Economic Research, if Scenario 1 occurs (U.S. tariffs do not cause recession or stagflation, products under the *Information Technology Agreement* are exempted, and the reciprocal tariff returns to 10%), Taiwan's growth rate in 2025 will be 2.85%. If Scenario 2 occurs (the above two conditions remain unchanged, but the reciprocal tariff exceeds 20%), Taiwan's economic growth rate will drop to 1.66% (about 1.5% lower than the current estimate of 3%) (see Figure 3).

## 4. Impact on Taiwan's Industries

Trump's 32% reciprocal tariff will not only have an impact on Taiwan's local industries, but also a significant impact on Taiwanese businessmen overseas. Taiwan's five major production bases at home and abroad are China (54%), Vietnam (46%),

	2025	;				
	Scenario 1 Forecast	Scenario 2 Forecast	Scenario 1			
Real GDP	24,319.44	24,039.01	1. The U.S. is not in recession of			
yoy (%)	2.85	1.66	stagflation			
Private Consumption	11,513.10	11,485.83	2. ICT product exemptions			
yoy (%)	1.92	1.68	3. Reciprocal tariff 10%			
Private Fixed Investment	5,034.57	5,021.04	•			
yoy (%)	3.01	2.73	Scenario 2			
Exports, gds+serv	15,428.73	15,218.32				
yoy (%)	6.72	5.27	1. The U.S. is not in recession of			
CPI(2021=100)	110.05	109.96	stagflation			
yoy (%)	2.08	1.99	2. ICT product exemptions			
Exchange Rate (NT\$/US\$)	32.56	32.70	3. Reciprocal tariff 20% or more			
yoy (%)	-1.37	-1.80				

## Figure 3. Taiwan's Economic Growth Forecast for 2025

Source: The Center for Economic Forecasting of the Chung-Hua Institution for Economic Research, "Economic Forecast Press Release 2025Q2," April 18, 2025, *CIER*, <a href="https://www.cier.edu.tw/wp-content/uploads/2025/05/2025Q2-NEWS.pdf">https://www.cier.edu.tw/wp-content/uploads/2025/05/2025Q2-NEWS.pdf</a>>.

Thailand (37%), and Taiwan and Indonesia are all subject to the 32% tariff, making Taiwan's overseas layout particularly vulnerable. How the international supply chain will move in future remains uncertain. Secondly, for individual industries, the electronic information industry (such as display cards, servers, network communications, semiconductors), steel and metal (such as steel and aluminum products, water hardware), transportation (such as automobiles and parts, bicycles), machinery, and petrochemicals/rubber, which have a high proportion of exports to the United States, will be hit hard (see Figure 4).

For Taiwan's key industry, semiconductors, although wafer foundry is a semifinished product that is ultimately processed into chips, the tariffs are levied on importers and upstream businesses. However, once the tariff war triggers consumption and economic recession, and demand for final consumer electronic products decreases, they will also be negatively affected.

	Total Industry	Electronic Information	semiconductor	<b>Graphics</b> Card	server	Netcom	Steel Metal	Steel and aluminum	Water Hardware/ Hand Tools	Transportation	Automobile & Components	Bicycles	Machinery	Petrochemical & Rubber, Plastic
U.S. tariffs	-	-	For now	32	32	32	-	25	32	-	25	32	32	32
U.S. Exports (Billion USD)	1,102	792	74	318	159	44	76	43	25	53	33	9	49	36
U.S. Share of Total Exports (%)	24	25	5	61	74	50	25	31	50	36	48	29	24	14
Impact Assessment		Semiconductors: Tariffs pending GPUs & Servers: Impact expected, under review Networking: Higher costs, profit impact, under review			Steel & Aluminum: 25% for all countries; fair competition maintained, fasteners affected Hand Tools & Hardware: Short-term profit decline			the U.S. ication erm aiwan to-long- local ; parts	Low U.S. export	Petrochemicals & Rubber: Low U.S. export value Plastics: High U.S. reliance for some; rising costs reduce costs reduce				

Figure 4. Assessment of the Impact of Reciprocal Tariffs on Taiwan's Industries

Source: Yan-Cih Lyu, "The Ministry of Economic Affairs assesses the impact of reciprocal tariffs, including electronic information and machine tools," April 4, 2025, *Commercial Times*, <a href="https://www.ctee.com.tw/news/20250404700743-430104">https://www.ctee.com.tw/news/20250404700743-430104</a>>.

Of course, Taiwan also has some resilient industries, such as a complete semiconductor supply chain (advanced processes also have strong transferability), automotive components (during Trump's first U.S.-China trade war, some manufacturers set up operations in the United States and benefited instead), high-end servers (indispensable, plus high gross profit margins, most have already been set up in Mexico, so it is easy to switch to investment in the United States), and even some heavy machinery and electronics industries (longer certification times), hand machine tools (strong bargaining and transferability capabilities), among others.

# IV. The Reasons Behind Trump's U-Turn and His 90-Day Negotiation Strategy

## 1. The Reasons Behind Trump's U-Turn

Trump's proposed high tariffs on April 2 triggered backlash from various countries, leading to a U-turn, with Trump announcing a 90-day extension to decide on the tariff rate. During the transition period, a 10% tariff rate is to be levied. The main reasons behind this include:

- (1) The plunge in Treasury bond prices: In order to counter Trump's tariff policy, China, the European Union, and Japan sold large quantities of U.S. Treasury bonds, causing Treasury bond prices to plummet, yields to rise, and U.S. debt interest to rise sharply, causing large fluctuations in the capital market, which was the key to Trump's policy change.
- (2) Time was too tight and no time was reserved for negotiations: Trump's reciprocal tariffs were proposed hastily, lacking effective time to negotiate with other countries to obtain more favorable conditions.
- (3) The American people have reacted and Trump's approval rating has declined: the proposal of reciprocal tariffs has caused a sharp drop in U.S. and global stock markets and government bond prices, which has triggered investor panic. In addition, inflation has caused dissatisfaction among middle- and low-income groups, which are the main reasons for his delay in policy.

#### 2. Possible Negotiation Strategies

Demand that all countries come up with compromise plans that would allow them to make concessions to the United States. Based on the U.S.' negotiation strategy, Washington has provided major trading countries with a "test paper," which includes: reducing import tariffs on the U.S., investing in the U.S., balancing the trade surplus with the U.S., reducing non-tariff barriers to the U.S. (including exchange rate intervention, export subsidies, import restrictions, interference with customs import procedures, etc.), and donations to the U.S. Treasury. These test questions may be divided into A, B, C grades depending on the satisfaction level of the answers, and different levels of reciprocal tariffs will be given.<sup>3</sup> Taiwan has made considerable efforts to reduce import tariffs, invest in the United States, and address its trade surplus with the U.S. Even if it is impossible to achieve 10%, the future reciprocal tariff should be between 10% and 20%. However, zero tariffs are impossible due to



Figure 5. U.S. Negotiating Requirements

Source: Compiled by author.

<sup>3.</sup> Ling-Xiang Hong & Yu-Fei Yang, "Asymmetric Transactions: 3 Questions in Taiwan," Wealth Magazine, No. 732, February 27, 2025, pp. 52-62.

the fact that tariffs are both Trump's means and goal (imposing a certain rate of tariffs to improve the fiscal deficit).

### 3. The Negotiation Price Paid

During the 90-day negotiation process, the Taiwanese government lowered its import tariffs on the United States, invested in the United States, balanced its trade deficit with the United States, and even purchased U.S. Treasury bonds and made financial donations to the United States. This was bound to result in increased imports, industrial shocks, and the crowding out of domestic investment and government spending. Even if a 10% tariff were achieved immediately, Taiwan's industries and the overall economy would still have to pay a considerable price.

## 4. Alternative Negotiation Policy

Alliance between Taiwan and Japan/Taiwan becomes a strategic partner of the United States in re-industrialization.

Trump's tariff policy has goals but no strategy, and will only provoke a backlash from many countries. The shortcomings of Trump's tariff policy are: (1) High tariffs are imposed on China, but there are no alternative products for food, clothing, housing and transportation. These tariffs are bound to cause rising import costs and inflation, and the reform will lose public support; (2) High tariffs are imposed on various countries, which will trigger retaliatory high tariffs and lose export markets; (3) Exports to various countries will decrease, and the trade deficit cannot be improved.

In view of this, the United States urgently needs a strategic partner for reindustrialization. Taiwan's advantages in cost-reducing production models and its complete industrial chains in automotive parts, machine tools, textiles and garments, information electronics, and semiconductors make it the best partner for the United States' re-industrialization. Taipei can negotiate with the U.S. government to set key success indicators (KPIs) for investment in the United States, including creating a certain amount of investment, creating a certain number of jobs, training a certain number of skilled workers, and establishing a certain number of technical schools, in exchange for the U.S. green channel, special economic zones (such as introducing foreign workers, reducing environmental protection, and union control, etc), as well as low tariffs on Taiwan (Taiwan will have an incentive to cooperate with U.S.) and high tariffs on China and Southeast Asia (to avoid laundering of origin).

In this way, Taiwan and overseas Taiwanese businesspeople will help the United States provide food, clothing, housing, transportation, education, entertainment, and information and electronic products to replace Chinese products, which will not cause inflation in the United States. At the same time, Taiwan's products produced in the United States can also contribute to a reduction in Taiwan's trade surplus with the United States. Furthermore, imposing moderate tariffs on allies such as the European Union, Australia, New Zealand, India, Canada, Mexico, Japan, and South Korea will not provoke retaliation and can also provide export markets for American products.



# Figure 6. A Taiwan-Japan-South Korea Strategic Alliance Can Become A Strategic Partner for the United States' Re-industrialization

Source: Jiann-Chyuan Wang, "Tariff Success Lies in Cooperation," April 24, 2025, *Taipei Times*, <a href="https://www.taipeitimes.com/News/editorials/archives/2025/04/24/2003835706">https://www.taipeitimes.com/News/editorials/archives/2025/04/24/2003835706</a>>.

Of course, it would be better if Japan could join, as the Taiwan-Japan alliance would have greater bargaining power. Moreover, Japan has raw materials, and its five major trading companies have the resources, energy, raw materials, and components to dispatch. It also has industrial advantages in automobiles, steel, petrochemicals, machine tools, robots, and so on. An alliance between Taiwan, Japan, and the United States would be more powerful in resisting China. In addition, South Korea's participation would give the trilateral cooperation greater bargaining power with the United States (see Figure 6).

# V. Future Vision

Under Trump's tariff policy, what will Taiwan's economic and industrial landscape look like in the next five years? This section analyzes the situation from two perspectives: Scenario 1 (optimistic) and Scenario 2 (slightly pessimistic).<sup>4</sup>

Scenario I: Taiwan or a Taiwan-Japan alliance form an alliance to invest in the U.S. market and obtain assistance from the U.S. Green passway, Economic Zone and low tariffs on Taiwan and Japan. Through this, Taiwan and Japan successfully gain access to the U.S. market in the next 20 years and find another source of growth momentum. But with industries investing heavily in the United States, how can we avoid hollowing out of the industry? Therefore, how to integrate talent, capital, technology, taxation system with international standards and how to ensure bilateral investment are key issues. On the other hand, traditional industries have been given some breathing space under low tariffs, but they will still need to accelerate cross-domain and upgrading transformation in future.

Scenario 2: With the overall semiconductor and high-tech industries investing in the United States, Taiwan faces concerns about the hollowing out of some industries. Traditional industries face the multiple pressures of yen depreciation, Chinese dumping, and Trump's high tariffs, which could result in massive unemployment, and they must accelerate upgrading and transformation. The services industry is caught in a predicament of falling stock markets and sluggish real estate amid declining exports,

<sup>4.</sup> Jiann-Chyuan Wang, "Tariff Success Lies in Cooperation."

economic downturn, rising unemployment and sluggish consumption. At this time, the government needs to implement drastic policies to turn the tide.

In the field of high technology, as companies invest heavily in the United States, it is very important to guide the return of funds, technology, and business models, establish a two-way ecosystem, and avoid industrial hollowing out. The policy is designed to assist manufacturers in attracting talent, capital and technology back to the industry, reducing concerns about hollowing out of the industry.

In traditional industries, cross-domain, upgrading, and transformation are very important. Combining high-tech AI and 5G technologies, rapid diffusion and integration with traditional industries to enhance the competitiveness of traditional industries must be accelerated, especially through subsidies for digital transformation and green transformation, tax incentives, technical support from scientific and technological projects, seeking large-scale customization, and even diversifying export markets, in order to regain competitive advantage.

The loosening up and industrialization of the service industry is also extremely important. Accelerating the loosening up of industrialization, introducing insurance funds, and introducing new business models to create demand for high-level talent will solve the problem of soaring real estate prices, create high-level job opportunities, and reduce the industry's reliance skewed toward high technology industry.

Of course, follow-up efforts, in addition to deregulation and policy design, also require investment from government funds, especially the design of (quasi-) sovereign funds, in order to have sufficient resources to attract international talent, acquire multinational companies, and accelerate the rapid upgrading and transformation of the industrial structure.

#### **VI. Recommendations**

Based on the above analysis, under an optimistic scenario, Taiwan and Japan can form an alliance and monopolize the U.S. market for the next 20 years, but they must align their talent, capital, technology, business model, and tax system with the U.S. and international standards to avoid an industrial hollowing out. However, in a more pessimistic scenario, in addition to a possible hollowing out of Taiwan's high-tech industry, traditional industries, future services industries, stock markets, and housing markets may all be significantly impacted. Therefore, recommendations for the government strategies include:

## 1. Corporate Strategy

## (1) Diversify Export Markets

In the past, Taiwan's production model was mainly based on a small variety and large quantity, so the market was concentrated on China, the United States, Southeast Asia, and other places. As digital transformation becomes more prevalent, manufacturers are able to produce a large variety of products in small quantities or customize them in large quantities, and can consider expanding into markets in Europe and other countries.

# (2) Accelerate Upgrading, Transformation, and Cross-Sector Development

At present, traditional industries are facing the pressure of Trump's new policies and China's export dumping, and must seek upgrading and transformation. Several cross-domain manufacturers have also performed relatively well and are worth referring to. For example, machine tools are developing in the direction of automation, semiconductors, heavy electronics, and AI, and are performing better than their peers; while petrochemicals are developing in the field of ESG (Environmental, Social, and Governance) and specialty chemicals, and are also performing relatively well. Stepping up the development of these emerging fields is highly recommended.

## 2. Government Strategy

(1) Create an inter-ministerial cooperation group to respond to the impact of Trump's new policies. The Executive Yuan should set up a task force, allocate funds, recruit talent from various ministries and commissions to negotiate with the United States, focus on publicity, public relations, and planning of policy tools, provide information to enterprises, assist enterprises in orderly relocation (and become a powerful bargaining chip for the government), and provide resource assistance to several industries that are hit hard (such as AI servers, electric vehicle supply chain manufacturers, steel industry, and transportation industry, etc.).

- (2) Allocate more budget for the United States and indirectly influence U.S. policies through lobbying groups and lobbyists. Semiconductors play a vital role in Taiwan, and Taiwan may not be able to afford any mistakes. Therefore, the government should allocate more funds to help promote semiconductors, open up policy channels, and make good use of lobbying groups and lobbyists to strengthen communication to ensure that Taiwan's semiconductors can maintain their current competitiveness under current and future geopolitical conditions.
- (3) Promote industrial diversification.<sup>5</sup> Strengthen the industrial chain depth of semiconductors, develop upstream raw materials, and extend to downstream equipment to increase the added value of the industry and improve the industrial chain. Secondly, we need to strengthen the links between semiconductors and other traditional industries. For example, chips can be used in drones for agricultural fertilization and irrigation, or in smart manufacturing and smart healthcare, and in the development of electric vehicles and so on. This will help improve the competitiveness of traditional industries and enable Taiwan's industries to develop in a more balanced way (see Figure 7).

In addition, strengthening the deregulation and industrialization of the services industry will drive investment and business model innovation in that sector, create more high-paying job opportunities for young people, and make Taiwan's industries more diversified, effectively reducing the risk of over-reliance on semiconductors.

Jiann-Chyuan Wang, "Industrial diversification strategy," *Industrial Development Administration* (MOEA), 113<sup>th</sup> Annual Think Tank Meeting, Taipei, Taiwan, August 26, 2024.



Figure 7. Promoting Vertical Integration and Lateral Diffusion of Semiconductors

Source: Compiled by author.

(4) Formulate incentive policies to accelerate the upgrading and transformation of industries and seek alternative markets. According to recent surveys of manufacturers, the machine tool industry will perform better if it develops in the direction of AI, semiconductors, heavy electronics, and automation. If the petrochemical industry develops towards specialty chemicals and ESG, the performance will be relatively satisfactory, which means that there will be more opportunities for upgrading traditional industries and developing in cross-field directions.

On the other hand, with relatively low gross profit margins, the traditional electronics industry has been developing into the medical equipment industry, or using existing technologies combined with aesthetics, craftsmanship, and design to develop the electric bicycle industry. Both have achieved stunning performances in overseas markets, which is also a positive manifestation of industrial transformation. These upgrading, transformation, and cross-domain directions are worthy of more resource investment from the government to assist enterprises in upgrading and transforming.

- (5) Planning the Overall Strategy Includes:
- A. Promoting Taiwan (or Japan as an ally) to become a strategic partner of the United States in re-industrialization: Tie the interests of Taiwan and the United States together and say, "Taiwan can enable the U.S. in the manufacturing industry and make the U.S. manufacturing industry strong again." Taiwan has a strong supply chain in petrochemicals, textiles, automotive components, electronics and information technology, and semiconductors. Taiwan is one of the very few countries that has the ability to help the United States return to manufacturing and is also an important strategic partner in the United States' re-industrialization.

Through the negotiation of the *Taiwan-U.S. 21<sup>st</sup> Century Trade Agreement*, through policy subsidies, regulatory relaxation, the establishment of demonstration zones, Taiwan will gradually improve the U.S. supply chain, create more jobs for the U.S., and help reduce the current inequality between the rich and the poor.

If it wants to accumulate bargaining chips against the United States, Taiwan would be encouraged to form an alliance with Japan (because Japan has the raw materials, energy, and component dispatching capabilities of the five major trading companies, the raw materials and equipment base, and the strong foundation of the automobile, machine tools, robotics, and petrochemical industries), or even to attract South Korea to join, which is worthy of careful planning by the government.

B. Planning the establishment of a sovereign or quasi-sovereign fund: Taiwan currently has limited policy tools and insufficient resources. If it can plan the establishment of a sovereign or quasi-sovereign fund and combine government and private forces to inject resources into advanced areas, it will be able to quickly seek breakthroughs and upgrade and transform industries.

In addition to supporting new industries, we also help semiconductor companies strengthen vertical integration, horizontal diffusion, and the layout of global supply chains to reduce their operating risks. These include policy coordination, information provision, the leading role of state-owned banks (the practice of the Bank of Japan), assistance to overseas offices, and the planning of overseas economic and trade operations bases, all of which are areas in which we can actively invest.

Of course, the establishment of (quasi-) sovereign funds has its pressures and shortcomings, but if more attention is paid to policy design (such as private-sector leadership, openness and transparency, and public disclosure of performance online), it can play a role in guiding industrial policy (see Figure 8).

C. Upgrading and transforming traditional industries for the second time:<sup>6</sup> Traditional industries are currently under triple pressure from industrial relocation, Chinese

	<b>Blurred Arguments</b>	Facts / Recommendations
1	Few countries have sovereign wealth funds; mainly for wealth accumulation	<ul> <li>All of the following countries sovereign fund: Oil-producing countries, Temasek-type funds: Singapore, Malaysia, China, Korea, Japan</li> </ul>
2	National Development / Labor / Pension Funds already exist	<ul> <li>National funds rarely act as lead investors; limited resources in driving industries</li> <li>Using labor / pension fund will draw criticism</li> <li>Industrial policy impact remains limited</li> </ul>
3	Central bank reserves (economic/national security) can't be used freely	<ul> <li>5-6% of foreign exchange reserves will not hurt economy or security, but can help execution industrial policy</li> </ul>
4	Sovereign wealth funds focus on profit; little industrial policy, wide investment scope	<ul> <li>70–80% for investment returns</li> <li>20–30% for industrial policy</li> </ul>
5	Government-led model	<ul> <li>Government-led: inflexible audit &amp; accounting</li> <li>Public 51%, private 49%; managed by private sector, oversight by board of trustee (e.g., Japan, Singapore)</li> <li>Overcome audit / accounting rigidity</li> </ul>
6	Risk of abuse/misuse	<ul> <li>Publish investment targets &amp; performance online (full transparency) (e.g., Singapore)</li> </ul>
7	Fund sources	<ul> <li>Central bank reserves</li> <li>Retirement funds</li> <li>Financial institution</li> <li>Private capital</li> </ul>

Figure 8. Planning Taiwan's Sovereign Funds

Source: Compiled by author.

*6.* In the early 1990s, facing challenges from China and ASEAN countries, the Taiwanese government applied tax incentives in the areas of R&D personnel training, international marketing to accelerate the upgrading of traditional industries. This strengthened Taiwan's competitiveness and is regarded as the first time industrial upgrading and transformation initiative.

dumping, and competition from the depreciation of the Japanese yen. Trump's high reciprocal tariffs have made the situation even worse. Under such circumstances, there should be plans and slogans with a bigger picture, such as "Assisting traditional industries for their second transformation" to attract public attention and advocate for more resources and policy tools to be invested in order to turn the tide.