

# Economic Security: Taiwan's Role in New Global Supply Chains

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## **Abstract**

In recent years, the international political and economic situation has undergone rapid changes, yet Taiwan's economy has demonstrated remarkable resilience. The pivotal factors contributing to Taiwan's stable economic growth are its close investments and trade ties with economic partners, positioning Taiwan deeply within the global value chain. Empirical results indicate that Taiwan's total contribution to the U.S., Japan, Canada, and the European Union is 10.2%, with a direct contribution of 0.4%, and the indirect contribution through Vietnam, China, Indonesia, and Thailand amounting to 9.8%. Notably, in 2022, Taiwan had 290 export products that ranked among the world's top 20. In other words, besides its strength in the ICT industry, Taiwan also excels in other manufacturing sectors, clearly occupying an irreplaceable position in the global industrial chain. Looking ahead, international economic and trade dynamics are shifting from economic efficiency to economic security and resilience, highlighting the increasing importance of Taiwan in terms of democracy and market economy.

**Keywords:** Taiwan's Economic, Taiwan's Trade, New Global Supply Chains, China, Economic Coercion

## **I. Preface**

In recent years, the international political and economic situation has undergone rapid changes, from the U.S.-China trade and technology tensions in 2018 to the outbreak of the COVID-19 in 2020 and the Russia-Ukraine conflict in 2022. However, Taiwan's economy has demonstrated remarkable resilience, with an average growth rate of 3.6% from 2018 to 2022, surpassing the global average by 1.2 percentage

points. As a result, Taiwan’s share of the global gross domestic product (GDP) has increased by 0.1 percentage points to 0.8%, solidifying its position as the 21<sup>st</sup> largest economy in the world (see Table 1).

**Table 1. Overall Economic Performance in Taiwan**

Time (The Year)	GDP (Million US Dollars)	Economic Growth Rate(%)	Share of World GDP Ratio(%)
2018	60.9	2.8	0.7
2019	61.1	3.1	0.7
2020	67.3	3.4	0.8
2021	77.6	6.5	0.8
2022	76.1	2.4	0.8

Note: Units in parentheses.

Source: Compiled by author using data from Directorate-General of Budget, Accounting and Statistics (DGBAS), Executive Yuan, “Macro Statistical Database,” November 24, 2023, accessed, *National Statistic, Taiwan*, <<https://nstatdb.dgbas.gov.tw/dgbasall/webMain.aspx?sys=100&funid=defjsp>>; The World Bank, “World Development Indicators,” November 24, 2023, accessed, *The World Bank, Databank*, <<https://databank.worldbank.org/source/world-development-indicators>>.

Taiwan’s robust economic growth can be attributed to two key factors. First, there is abundant investment momentum. Since the Executive Yuan launched the “Welcome Taiwanese Businesses Back to Taiwan Investment Initiative” in 2019 until October 2023, 299 Taiwanese businesses in China have responded, collectively investing USD 40.448 billion and creating 87,039 job opportunities domestically. During this period, Taiwan also attracted USD 49.518 billion in foreign direct investment (FDI), with notable preferences from Japan, the Netherlands, the U.S., the United Kingdom, and Australia, accounting for 34.7% of Taiwan’s total FDI (see Table 2).

Taiwan’s robust economic growth is largely attributed to its flourishing foreign trade. The total value of Taiwan’s merchandise trade significantly increased from USD 618.799 billion in 2018 to USD 907.498 billion in 2022, with an impressive compound annual growth rate of double digits (10.2%). Consequently, Taiwan’s share of the global merchandise trade increased by 0.2 percentage points to 1.8%, placing it

**Table 2. Direct Investments from Taiwanese and Foreign Businesses in Mainland China**

Unit: Million US dollars

Time (The Year)	Return of Taiwanese Businesses from China	FDI	Total
2019	23,014	11,196	34,210
2020	2,796	9,144	11,940
2021	8,761	7,476	16,237
2022	2,324	13,303	15,627
2023	3,553	8,399	11,952
Total	40,448	49,518	89,966

Note: Data for the first 10 months of 2023. Conversion of Taiwanese businesses returning to Taiwan is based on the average exchange rate.

Source: Compiled by author using data from Department of Investment Review, Ministry of Economic Affairs, R.O.C., “Monthly Report on Approved Overseas Chinese and Foreign Investments, Mainland Chinese Investments in Taiwan, Foreign Investments, and Investments in Mainland China,” November 24, 2023, accessed, *Ministry of Economic Affairs, Taiwan*, <[https://dir.moea.gov.tw/chinese/news\\_bsAn.jsp](https://dir.moea.gov.tw/chinese/news_bsAn.jsp)>; Economic Development Bureau, Ministry of Economic Affairs, R.O.C., “Three Major Investment Promotion Programs in Taiwan,” November 24, 2023, accessed, *Invest Taiwan*, <<https://investtaiwan.nat.gov.tw/showPagecht1135?lang=cht&search=1135&menuNum=58>>.

18<sup>th</sup> position among the largest trading nations in the world. Within this context, the import ratio has steadily climbed from 1.4% to 1.7%, while the export ratio has risen from 1.7% to 2.0% before experiencing a slight dip of 0.1 percentage points in 2022 (see Table 3).

Taiwan's foreign trade has not only expanded in quantity but has also seen an enhancement in quality. As shown in Table 4, the export ratios of high-capital and technology-intensive goods increased from 60.7% and 62.0% in 2018 to 63.2% and 68.5% in 2022, respectively. In contrast, the export ratios of low-capital and technology-intensive goods correspondingly decreased by 1.0 and 2.0 percentage points. During this period, the export ratio of high-labor-intensive goods declined from 29.7% to 23.3%, whereas the export ratio of low-labor-intensive goods simultaneously decreased by 0.4 percentage points. This could be attributed, in part, to the return of some Taiwanese businesses from China to Taiwan for production.

**Table 3. Taiwan's Foreign Merchandise Trade**

Unit: Million US dollars

Time (The Year)	Total Trade		Export		Import	
	Million US dollars	Ratio (%)	Million US dollars	Ratio (%)	Million US dollars	Ratio (%)
2018	618,799	1.6	334,007	1.7	284,792	1.4
2019	614,809	1.6	329,157	1.7	285,651	1.5
2020	631,274	1.8	345,126	1.9	286,148	1.6
2021	828,329	1.8	446,371	2.0	381,958	1.7
2022	907,498	1.8	479,415	1.9	428,083	1.7

Note: Ratios represent the proportion of Taiwan's share in the world's total imports and exports.

Source: Compiled by author using data from Ministry of Finance, R.O.C., "Trade Statistical Data," November 24, 2023, accessed, *Ministry of Finance, R.O.C.*, <<https://web02.mof.gov.tw/njswww/WebMain.aspx?sys=100&funid=defjsptgl>>.

**Table 4. Structure of Taiwan's Export Products**

Unit: Ratio (%)

Time (The Year)	Labor-Intensive			Capital-Intensive			Technology-Intensive		
	H	M	L	H	M	L	H	M	L
2018	29.7	60.0	10.3	60.7	35.9	3.4	62.0	28.1	10.0
2019	28.2	61.5	10.3	59.5	37.3	3.3	63.5	26.7	9.9
2020	25.8	63.6	10.6	60.4	36.7	2.9	68.2	23.2	8.6
2021	25.6	63.6	10.9	61.4	36.0	2.6	67.8	23.9	8.3
2022	23.3	66.8	9.9	63.2	34.4	2.4	68.5	23.6	8.0

Note: H, M, and L respectively represent High, Medium, and Low.

Source: Compiled by author using data from Ministry of Finance, R.O.C., "Trade Statistical Data."

More importantly, Taiwan's international economic and trade activities are deeply embedded in the global value chain. As shown in Table 5, the ratio of Taiwan's merchandise trade exports used for intermediate goods increased from 79.3% in 2018 to 80.5% in 2022, averaging 79.4% over the period. Meanwhile, Taiwan's import ratio of intermediate goods remained relatively stable at around 73.4%. The fact that both the import and export ratios for intermediate goods exceed seventy percent underscores Taiwan's close ties with intra-industry trade with countries worldwide. This also reflects the close mutual investments between Taiwan and major economies.

**Table 5. Purpose of Taiwan's Exported Products**

Unit: Ratio (%)

Time (The Year)	Export			Import		
	Intermediate Goods	Final Goods	Capital Good	Intermediate Goods	Final Goods	Capital Good
2018	79.3	14.0	6.7	75.5	13.6	10.8
2019	78.3	15.0	6.7	72.3	16.7	11.0
2020	78.9	15.2	5.9	71.4	17.2	11.3
2021	79.9	14.2	5.9	73.5	17.0	9.5
2022	80.5	14.3	5.3	74.4	16.6	9.0
Average	79.4	14.5	6.1	73.4	16.2	10.3

Source: Compiled by author using data from Ministry of Finance, R.O.C., "Trade Statistical Data."

## II. Taiwan's Contribution to Global Supply Chains

This article uses an indicator system to assess Taiwan's contribution to the global supply chain, focusing on trade in intermediate and consumer goods. The system is based on the United Nations Statistics Division's Central Product Classification, integrating the World Customs Organization's Harmonized Commodity Description and Coding System (HS) six-digit codes, and the United Nations Department of Economic and Social Affairs' Broad Economic Category (BEC).

The data source for this study is the Global Trade Atlas (GTA) constructed by IHS Markit, with the observation period being the year 2022. Due to limitations in data accessibility, the research focuses on mature economies such as the U.S., Canada, the European Union (EU), and Japan, along with developing countries including mainland China, Vietnam, Thailand, and Indonesia. This selection is based on the fact that these four countries are the primary destinations for Taiwan's outward foreign direct investment (OFDI), accounting for 58.5% of Taiwan's total OFDI. Taiwanese data is sourced from the International Trade Bureau of the Ministry of Economic Affairs.

Table 6 illustrates Taiwan's direct contributions to trade with advanced countries. In 2022, Taiwan exported consumer goods totaling USD 21.363 billion to the U.S., accounting for 0.7% of the country's total imports. Following in sequence are

Japan, Canada, and the European Union, with proportions of 0.4%, 0.3%, and 0.2%, respectively. Overall, Taiwan exported consumer goods totaling USD 34.272 billion US dollars to major economies, representing a proportion of 0.4%.

**Table 6. Taiwan’s Direct Contributions to Trade with Advanced Countries(2022)**

Unit: Million US dollars, Ratio (%)

Category	Consumption Goods	Value of Import	Ratio
USA	21,363	3,155,010	0.7
Japan	3,449	897,242	0.4
Canada	1,798	569,713	0.3
EU	7,662	3,242,530	0.2
Total	34,272	7,864,495	0.4

Note: Ratios represent the proportion of the country’s total imports.

Source: Compiled by author using data from International Trade Administration, Ministry of Economic Affairs, R.O.C., “Import and Export Trade Statistics,” November 24, 2023, accessed, *International Trade Administration*, <<https://cuswebo.trade.gov.tw/>>; IHS Markit, “Global Trade Atlas,” November 24, 2023, accessed, *S&P Global Market Intelligence*, <<https://connect.ihsmarkit.com/home>>.

Table 7 presents Taiwan’s trade in intermediate goods with developing countries. In 2022, Taiwan exported intermediate goods totaling USD 13.020 billion to Vietnam, constituting 95.1% of Taiwan’s total exports and ranking highest among major investment destinations. Following in sequence are mainland China, Indonesia, and Thailand, with proportions of 95.0%, 92.1%, and 87.4%, respectively. Overall, Taiwan exported a total of USD 230.180 billion in intermediate goods to major investment destinations, accounting for a significant 94.7%. In other words, the vast majority of the foreign trade of these countries is largely driven by Taiwan.

Table 8 presents Taiwan’s indirect contributions to trade with Canada. In 2022, Vietnam, China, Indonesia, and Thailand collectively exported consumer goods totaling USD 39.458 billion to Canada. During this period, Taiwan’s export ratio of intermediate goods to these four countries was 94.5%. In other words, out of the USD 39.458 billion of consumer goods exported to Canada, 94.5% were manufactured by local Taiwanese businesses, amounting to USD 37.299 billion. This constitutes 6.5%

**Table 7. Taiwan's Intermediate Goods Trade with Developing Investment Countries(2022)**

Unit: Million US dollars, Ratio (%)

Category	Intermediate Goods	Value of Export	Ratio
Vietnam	13,020	13,697	95.1
China	208,323	219,371	95.0
Indonesia	2,707	2,940	92.1
Thailand	6,130	7,010	87.4
Total	230,180	243,018	94.7

Note: Ratios represent the proportion of the country's total imports.

Source: Compiled by author using data from International Trade Administration, Ministry of Economic Affairs, R.O.C., "Import and Export Trade Statistics;" IHS Markit, "Global Trade Atlas."

of Canada's total import amount. In summary, Taiwan's indirect contribution to trade with Canada is 6.5%.

**Table 8. Taiwan's Indirect Contributions to Trade with Canada(2022)**

Unit: Million US dollars, Ratio (%)

Category	Consumption Goods	Proportion of Intermediate Goods from Taiwan	Taiwan's indirect Contributions	Value of Import of Canada	Ratio
Vietnam	5,063	95.1	4,815	569,713	0.8
China	31,201	95.0	29,641		5.2
Indonesia	1,094	92.1	1,008		0.2
Thailand	2,100	87.4	1,835		0.3
Total	39,458	94.5	37,299		6.5

Note: Ratios represent the percentage of Taiwan's indirect contributions to the country's total import amount.

Source: Compiled by author using data from International Trade Administration, Ministry of Economic Affairs, R.O.C., "Import and Export Trade Statistics;" IHS Markit, "Global Trade Atlas."

Table 9 shows Taiwan's indirect contribution to trade with the U.S. in 2022. The combined export of consumer goods from Vietnam, China, Indonesia, and Thailand to the U.S. amounted to USD 383.796 billion. This figure, multiplied by Taiwan's export ratio of intermediate goods to these four countries (94.7%), results in a contribution of USD 363.455 billion by local Taiwanese businesses. This accounts for 11.5% of the total U.S. imports. In other words, Taiwan's indirect contribution to U.S. trade is 11.5%.

**Table 9. Indirect Contributions of Taiwan to Trade with the USA(2022)**

Unit: Million US dollars, Ratio (%)

Category	Consumption Goods	Proportion of Intermediate Goods from Taiwan	Taiwan's indirect Contributions	Value of Import of USA	Ratio
Vietnam	61,589	95.1	58,571	3,155,010	1.9
China	279,943	95.0	265,946		8.4
Indonesia	18,055	92.1	16,629		0.5
Thailand	24,209	87.4	21,159		0.7
Total	383,796	94.7	363,455		11.5

Note: The ratio represents the proportion of Taiwan's indirect contributions to the total import amount of the respective country.

Source: Compiled by author using data from International Trade Administration, Ministry of Economic Affairs, R.O.C., "Import and Export Trade Statistics;" IHS Markit, "Global Trade Atlas."

Table 10 illustrates Taiwan's indirect contribution to trade with Japan in 2022. The combined export of consumer goods from Vietnam, China, Indonesia, and Thailand to Japan amounted to USD 99.845 billion. This figure, multiplied by Taiwan's export ratio of intermediate goods to these four countries (94.7%), results in a contribution of USD 94.553 billion by local Taiwanese businesses. This accounts for 10.5% of the total Japanese imports. In other words, Taiwan's indirect contribution to Japanese trade is 10.5%.

Table 11 depicts Taiwan's indirect contribution to trade with the European Union (EU) in 2022. The combined export of consumer goods from Vietnam, China, Indonesia, and Thailand to the EU amounted to USD 290.184 billion. This figure,



**Table 10. Taiwan's Indirect Contributions to Trade with Japan(2022)**

Unit: Million US dollars, Ratio (%)

Category	Consumption Goods	Proportion of Intermediate Goods from Taiwan	Indirect Contributions of Taiwan	Value of Import of Japan	Ratio
Vietnam	10,936	95.1	10,400	897,242	1.2
China	72,472	95.0	68,848		7.7
Indonesia	7,252	92.1	6,679		0.7
Thailand	9,185	87.4	8,028		0.9
Total	99,845	94.7	94,553		10.5

Note: The ratio represents the proportion of Taiwan's indirect contributions to the total import amount of the respective country.

Source: Compiled by author using data from International Trade Administration, Ministry of Economic Affairs, R.O.C., "Import and Export Trade Statistics;" IHS Markit, "Global Trade Atlas."

multiplied by Taiwan's export ratio of intermediate goods to these four countries (94.7%), results in a contribution of USD 274.804 billion by local Taiwanese businesses. This accounts for 8.4% of the total EU imports. In other words, Taiwan's indirect contribution to EU trade is 8.4%.

**Table 11. Taiwan's Indirect Contributions to Trade with European Union(2022)**

Unit: Million US dollars, Ratio (%)

Category	Consumption Goods	Proportion of Intermediate Goods from Taiwan	Indirect Contributions of Taiwan	Value of Import of EU	Ratio
Vietnam	21,889	95.1	20,816	3,242,530	0.6
China	249,301	95.0	236,836		7.3
Indonesia	7,712	92.1	7,103		0.2
Thailand	11,282	87.4	9,860		0.3
Total	290,184	94.7	274,804		8.4

Note: The ratio represents the proportion of Taiwan's indirect contributions to the total import amount of the respective country.

Source: Compiled by author using data from International Trade Administration, Ministry of Economic Affairs, R.O.C., "Import and Export Trade Statistics;" IHS Markit, "Global Trade Atlas."

In summary, Taiwan exported consumer goods totaling USD 34.272 billion to the U.S., Japan, Canada, and the European Union. This constitutes Taiwan’s direct contribution to trade with advanced economies. Additionally, Taiwan manufactures goods in Vietnam, China, Indonesia, and Thailand, which are then resold as consumer goods in major advanced economies, totaling USD 770.111 billion. This represents Taiwan’s indirect contribution to trade with advanced economies. The combined total of these two contributions is USD 804.383 billion, accounting for 10.2% of the total imports of major advanced economies (see Table 12).

**Table 12. Total Contribution of Taiwan to Trade with Advanced Countries (2022)**

Unit: Million US dollars, Ratio (%)

Category	Direct Contribution	Indirect Contribution	Total Contribution	Value of Import	Ratio
USA	21,363	363,455	384,818	3,155,010	12.2
Japan	3,449	94,553	98,002	897,242	10.9
Canada	1,798	37,299	39,097	569,713	6.9
EU	7,662	274,804	282,466	3,242,530	8.7
Total	34,272	770,111	804,383	7,864,495	10.2

Note: The ratio represents the proportion of the total import amount of the respective country.

Source: Compiled by author using data from International Trade Administration, Ministry of Economic Affairs, R.O.C., “Import and Export Trade Statistics;” IHS Markit, “Global Trade Atlas.”

It is worth noting that Taiwan’s mastery of several critical advantageous export products, including copper foil, other optical appliances and instruments, hot-rolled bars and rods of stainless steel, and tin bars. These products account for 26.4%, 23.7%, 15.2%, and 12.0% of global exports, respectively, all ranking at the forefront globally. In other words, Taiwan not only possesses expertise in information and ICT but also excels in the manufacturing of metal products and precision instruments—an aspect often overlooked by the market.

Furthermore, Taiwan’s exports dominate in 14 product categories globally, securing the second position worldwide. Among these, transportation equipment, textiles, and metal products each account for four categories, while the remainder

includes precious metals and miscellaneous products, such as slide fasteners and parts thereof. The top 5 export products collectively amount to 60 items, representing an average global export share of 10.0%. The top 10 export products doubled to 138 items, averaging a 7.4% share. The top 20 export products further doubled to 290 items, with an average share of 3.4% (see Table 13).

**Table 13. Critical Advantageous Export Products of Taiwan (2022)**

Unit: Ratio (%)

Category	Top 1		Top 5		Top 10		Top 20	
	quantity	ratio	quantity	ratio	quantity	ratio	quantity	ratio
Metal Products	3	17.9	15	11.4	40	6.2	78	3.9
Precision Instruments	1	23.7	5	12.4	14	6.8	29	3.8
Textile Products	0	0.0	11	5.7	20	4.2	45	2.4
Precious Metals	0	0.0	1	18.1	1	18.1	7	3.2
Machinery Equipment	0	0.0	18	8.6	41	5.9	82	3.6
Transportation Equipment	0	0.0	4	13.7	4	13.7	9	7.2
Miscellaneous Products	0	0.0	3	6.7	5	4.6	18	1.9
Artificial Products	0	0.0	1	5.9	4	3.6	7	2.4
Non-Metallic Products	0	0.0	2	7.2	9	3.5	15	2.5
Total	4	20.8	60	10.0	138	7.4	290	3.4

Note: The ratio represents the the proportion in relation to the global total.

Source: Compiled by author using data from International Trade Centre, "Trade Statistics," November 24, 2023, accessed, *International Trade Centre*, <<https://intracen.org/resources/data-and-analysis/trade-statistics>>.

### III. Cross-Strait Economic and Trade Relations in the New Global Supply Chain

China entered a "new normal" in its economy in 2014, further compounded by U.S. economic and trade restrictions and the challenges posed by the COVID-19 pandemic. The phenomenon of "consumption involution" has become more

pronounced. As shown in Table 14, the primary operational challenge for Taiwanese enterprises operating in China is the “Intense competition in the same industry,” with the ratio increasing from an average of 18.7% in the years 2008 to 2013 to 28.0% in the years 2018 to 2022, marking a significant 9.3 percentage point increase. The corresponding increase for the challenge of “difficulty in expanding the domestic market” is 4.0 percentage points. The inventory and “difficulty in loan recovery” ratios have each risen by 1.3 and 0.5 percentage points, respectively.

**Table 14. Assessment of Operating Environment for Taiwanese Enterprises in China**

Category	2008-2013	2014-2017	2018-2022
Intense competition in the same industry	18.7	24.0	28.0
Rising labor costs	24.1	23.3	21.8
Difficulty in expanding the domestic market	9.4	12.6	13.4
Difficulty in repatriating profits	3.7	3.6	5.8
Difficulty in financing	7.9	5.6	4.4
Difficulty in loan recovery	3.7	4.0	4.2
High inventory costs	2.6	2.4	3.7

Source: Compiled by author using data from Investment Commission, Ministry of Economic Affairs, R.O.C., “Analysis Report on the Operational Status of Overseas Investment Enterprises,” November 24, 2023, accessed, *Investment Commission, Ministry of Economic Affairs, R.O.C.*, <[https://www.moeaic.gov.tw/chinese/news\\_stRt.jsp](https://www.moeaic.gov.tw/chinese/news_stRt.jsp)>.

China’s foreign investment policies have undergone a rapid and drastic tightening. Since 2016, the Beijing authorities have successively promulgated 11 regulations, including the *Cybersecurity Law*, “Measures for the Security Review of Foreign Investment,” and “Measures for the Security Assessment of Outbound Data Transfer,” and amended the *Counter-Espionage Law*. As a result, Micron Technology faced allegations of cyber risks in 2023. National security units subsequently conducted searches on management consulting companies Capvision, Mintz Group, and Bain.

Unilateral legislation in this regard has also proliferated. The Chinese Communist Party (CCP) issued the “Party Branch Work Regulations” at the end of 2018, requiring companies with three or more CCP members to establish party branches. As a result, 70% of foreign-funded enterprises have successively established party branches, including Delta Electronics, Formosa Plastics, and Foxconn under the Hon Hai Group. The Beijing authorities have also targeted financial and sensitive institutions, including Standard Chartered, Qualcomm, and Pfizer. China leverages this to gain insights into the movements of foreign capital or even seize critical technologies.

China further exercises control through mixed ownership of state-owned enterprises and golden shares — holding 1% of crucial equity, ensuring control over board seats and decision-making power, and ensuring that corporate policies align with national interests. The Securities and Supervision Commission issued the “Trial Measures for the Administration of Overseas Issuance and Listing of Domestic Enterprises” in 2023, requiring first-time public offerings (IPOs) and secondary public offerings (SPOs) by companies in China to be registered for overseas fundraising. This severely disrupts the plans of Taiwanese businesses to return to Taiwan for listing.

Of particular note is China's increasing use of economic coercion against Taiwan. The Beijing authorities terminated individual travel in 2019, barred Chinese students from studying in Taiwan in 2020, and, in 2022, suspended the import of 2,066 products from over 100 Taiwanese food industry companies, citing the “Regulations of the People's Republic of China on the Registration and Administration of Overseas Manufacturers of Imported Food.” This indicates that Beijing's economic coercion against Taiwan has escalated from quarantine inspections to setting standards. In 2023, China initiated a trade barrier investigation, covering 2,455 products, including agricultural products, mineral and chemical products, and textiles.

China is also actively revising foreign economic and trade regulations, including the “Provisions on the Unreliable Entity List,” “Catalogue of Technologies Prohibited or Restricted from Export,” *Export Control Law* and “Measures for the Administration

on Import and Export License for Dual-use Items and Technologies.” Accordingly, the Ministry of Commerce controlled the export of gallium and germanium in 2023. Taiwan also needs to be cautious about the “Rules on Counteracting Unjustified Extraterritorial Application of Foreign Legislation and Other Measures,” where China fines Taiwanese businesses by citing compliance with U.S. export controls.

At this juncture, Taiwan’s economic and trade cooperation with Europe and the U.S. is deepening. Former U.S. Secretary of State Mike Pompeo announced the initiation of the Economic Prosperity Network (EPN) in April 2020, creating a coalition of trusted partners to prevent the theft of business secrets and forced technology transfer. In July, they released the 5<sup>th</sup> Generation Wireless Systems Clean Network list, involving 50 countries and 170 telecom companies, including Taiwan’s Chunghwa Telecom, Taiwan Mobile, Asia Pacific Telecom, and Taiwan Star.

In May 2022, U.S. President Joe Biden launched the Indo-Pacific Economic Framework for Prosperity (IPEF), with member countries including Japan, South Korea, Australia, New Zealand, India, Singapore, Malaysia, Indonesia, Thailand, Vietnam, the Philippines, Brunei, and Fiji. Meanwhile, Washington is organizing the Chip 4 Alliance, including the U.S., Japan, South Korea, and Taiwan. Particularly noteworthy is the first-stage agreement reached between Taiwan and the U.S. in May 2023, the U.S.-Taiwan Initiative on 21<sup>st</sup>-Century Trade.

Finally, countries in Europe and the U.S. have successively enacted *Supply Chain Laws*, requiring companies to ensure that their supply chains do not violate human rights or harm the environment. For instance, the U.S. Congress passed the *Uyghur Forced Labor Prevention Act* in December 2021, completely banning the import of products from Xinjiang, including petroleum, cotton, minerals, sugar, and solar panels. Importantly, Europe and the U.S. are working on the *Countering Economic Coercion Act*, indicating that the U.S.-China economic and trade conflict extends to political systems.

#### **IV. Conclusion**

In recent years, the international political and economic situation has undergone

rapid changes, yet Taiwan's economy continues to demonstrate remarkable resilience. The average economic growth rate of Taiwan from 2018 to 2022 stands at 3.6%, surpassing the global average by 1.2 percentage points. Currently, Taiwan firmly holds its position as the world's 21<sup>st</sup> largest economy. Two key factors contribute to the robust growth of Taiwan's economy. Firstly, there is abundant investment momentum, particularly evident in the return of Taiwanese enterprises from China and the support from foreign investments. Secondly, there is a thriving foreign trade, with an annual average growth rate reaching double digits (10.2%) from 2018 to 2022, elevating Taiwan's global share by 0.2 percentage points.

Taiwan's foreign trade quality continues to improve, coupled with close investments from economic and trade partners, resulting in Taiwan being highly integrated into the global value chain. Empirical results show that Taiwan's total contribution to the U.S., Japan, Canada, and the European Union is 10.2%, where direct contribution is 0.4%, and the indirect contribution through Vietnam, China, Indonesia, and Thailand is 9.8%. Particularly, Taiwan's export ratio of intermediate goods to these four countries is as high as 94.7%. Therefore, if Taiwan faces severe external shocks, it may impact the global supply of essential goods.

Especially noteworthy is Taiwan's mastery of several key advantage export products. In 2022, Taiwan had a staggering 290 export products ranked among the world's top 20, spanning across textiles, metal and non-metal products, precision instruments, machinery, and transportation equipment. Among these, the top 5 export products encompassed 60 items, with four of them securing global leadership positions. In other words, besides its strength in the ICT industry, Taiwan also excels in other manufacturing sectors, clearly establishing Taiwan's irreplaceable position in the global industrial chain — a factor often overlooked by the market.

Several previous studies confirm the conclusions of this paper. The Rhodium Group estimates that if Taiwan were subjected to a military blockade by the People's Republic of China, the global loss would amount to USD 2 trillion. In particular, countries would immediately feel economic devastation, and no country would be spared, resulting in irreparable harm. The Institute for Economics and Peace (IEP) is

even more pessimistic. Their quantitative results indicate that if China were to block Taiwan, the global economic growth rate would contract by 2.8%, equivalent to USD 3 trillion.

The Economist Intelligence Unit (EIU) assesses the economic impact of the Taiwan Strait conflict on various Asian countries. Their models indicate that no economy would be spared, with Japan, the Philippines, and South Korea particularly vulnerable. Of particular concern is that no country can replace Taiwan's critical position in the semiconductor supply chain. Furthermore, Bloomberg notes that 48% of the global container fleet and 88% of the largest tonnage of ships pass through the Taiwan Strait, a route crucial for the supply chains of textiles, home appliances, smartphones, and semiconductors.

However, economic threats from China to Taiwan have become increasingly frequent, evolving from early instances related to tourism and education to inspections and quarantine, escalating to the establishment of standards. In 2023, a trade barrier investigation was initiated, revealing the internationalization of unilateral legislation by the Beijing authorities. Therefore, Taiwan should remain vigilant against the "Rules on Counteracting Unjustified Extra-territorial Application of Foreign Legislation and Other Measures," "Provisions on the Unreliable Entity List," *Export Control Law*, and "Measures for the Security Review of Foreign Investment," aiming to disrupt the normal operations of Taiwanese enterprises in China.

Particularly, the recent military risks across the Taiwan Strait have escalated rapidly. Hayman Capital has issued a warning, suggesting that China could potentially take military action against Taiwan as early as 2024. Retired Navy intelligence officer James Fanell estimates that an attack on Taiwan might not extend beyond 2030. Consequently, the Council on Foreign Relations (CFR) has elevated the Taiwan Strait military conflict to the world's top geopolitical risk. Business Environment Risk Intelligence (BERI) has also reduced Taiwan's political risk score from 52 points in 2017 to 34 points in 2022, highlighting concerns for foreign investment in Taiwan.

Fortunately, during the Asia-Pacific Economic Cooperation (APEC) meeting in



November 2023, U.S. President Joe Biden sternly warned Chinese leader Xi Jinping. Washington strongly opposes any unilateral changes to the status quo in the Taiwan Strait and is prepared to take necessary steps to uphold peace in the region. Xi's conservative response, indicating no immediate plans for military aggression against Taiwan, may help alleviate the geopolitical risks for foreign investment in Taiwan. However, the situation remains sensitive, and the issue requires close monitoring, especially considering the potential economic downturn in China or the emergence of brinkmanship strategies that could lead to conflict.

Prospecting the future, as production costs rise in China and coupled with tightened supervision by Beijing, Taiwanese enterprises in China have been gradually relocating or shifting their production capacities. Particularly, with the escalation of the economic, trade, and technological conflicts between the U.S. and China, cross-Strait economic and trade relations will continue to converge, entering a phase of normalization. Two key areas of concern for the future are: first, guarding against a financial crisis in China that could potentially have an impact on Taiwan; and second, the shift in international economic and trade focus from economic efficiency to economic security and resilience, marking the beginning of an era of Taiwan's globalized economic and trade relations.

