



Analyzing the Impact of CPTPP on Taiwanese Fastening Tools Industry

CPTPP對台灣扣件緊固工具產業之影響分析

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1. Foreword

After the outbreak of Covid-19, the global political and economic situations have appeared many changes. The Trans-Pacific Partnership (TPP), initially led by the U.S. and Japan, has been also renamed by Japan as well as the other 11 member countries to Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) since the U.S. declared to withdraw in 2017. In the post-Covid era and in face of the two major various factors (i.e., U.S.-China trade war and the Covid), the global industrial supply chain has been also reshuffled, which also showed a significant influence of the free trade on the global economies. CPTPP comprises 11 member countries and the Agreement was already signed on Mar/08, 2018 and has come into force in 8 countries since Dec/30, 2018. Taiwan submitted its official application on Sep/22, 2021 and has gain the support from Japan and Australia. In addition to Taiwan, UK, China, and S. Korea have also respectively submitted their own applications since 2021. CPTPP is a high-quality free trade agreement and the percentage of the final tariff-free items in the member countries' total industrial goods will be 99.64%.

Although China and S. Korea may cause some variables to Taiwan's participation in CPTPP, with the ever-changing market, whether Taiwan can make the most of negotiations to strive for more favorable tariff-free or tariff reduction conditions for Taiwanese fastening tools will be a critical issue. In this article, "fastening tools" are defined as "hand-held tools for fastening or loosening fasteners (e.g., screws, nuts, nails, bolts, and nuts)". This article will focus on Taiwan's trade statistics with CPTPP countries in recent years and analyze the impact before and after CPTPP was signed and offer solutions for reference to Taiwanese fastener and hand tool manufacturers.

2. Developments & Trends of Taiwanese Fastening Tool Industry in Recent Years

In 2020, the production value of Taiwan's fastening tools was NT\$ 34.62 bn, the import value was NT\$ 2.41 bn, the export value was NT\$28.72 bn, the domestic demand was NT\$8.32 bn, the export proportion was around 83.2%, the 6-year CAGR was around 0.5%, the import dependence was around 29.0%, and the degree of self-sufficiency was around 71.0%. However, due to the Covid-19, the export in 2020 dropped by around 9.6% from 2019. After the pandemic curve gradually became flattened in H2 2021, the orders from major domestic companies started to come back. **In Q1-3 2021, the export value was NT\$ 26.54 bn, up 25.2% from the same period of the previous year.** Table 1 shows the import & export of Taiwan's fastening tools in 2015-2020.

Item	2015	2016	2017	2018	2019	2020	CAGR
Production Value	341.0	383.0	366.8	383.6	387.3	346.2	0.31%
Import Value	18.1	19.5	19.2	20.3	22.5	24.1	5.89%
Export Value	280.1	275.9	291.6	308.8	317.7	287.2	0.50%
Domestic Demand	79.0	126.7	94.4	95.2	92.0	83.2	1.03%
Import Dependence (%)	22.9%	15.4%	20.3%	21.3%	24.4%	29.0%	4.82%
Export Proportion (%)	82.1%	72.0%	79.5%	80.5%	82.0%	83.0%	0.20%
Degree of Self-sufficiency (%)	77.1%	84.6%	79.7%	78.7%	75.6%	71.0%	-1.63%

Unit: NT\$0.1 bn ; %

Source: Taiwan Custom's Trade Statistics

3. Taiwan's Fastening Tool Import Value from CPTPP and Percentages

The value of fastening tools Taiwan imported from CPTPP countries in 2020 was NT\$ 0.52 bn, representing 21.53% of Taiwan's total fastening tool import from the world; main import origins were Vietnam (import value: NT\$ 0.272 bn, representing 52.36% of Taiwan's import from CPTPP or 11.27% from the world) and Japan (import value: NT\$0.244 bn, representing 46.97% of Taiwan's import from CPTPP or 10.11% from the world), which is an intensive import structure; Taiwan's average tariff for imported fastening tools is around 5-10%. If Taiwan can be accepted as a CPTPP member, it may only see a tariff income loss of around NT\$26-52 million based on its annual import value of NT\$0.52 bn. As Taiwan's fastening tools are of int'l standards compliant quality, opening the domestic market to the world won't influence the competitive edge of the domestic industry at all. Table 2 below shows the total import value and percentage of fastening tools Taiwan imported from CPTPP countries in 2020.

Ranking	CPTPP Countries	Taiwan's Avg. Import Tariff Rate	Taiwan's Import Value	Percentage in Total Import from CPTPP Countries	Percentage in Total Import from the World
1	Vietnam	5.0~10.0%	2.72	52.36%	11.27%
2	Japan		2.44	46.97%	10.11%
3	Canada		0.02	0.43%	0.09%
4	Singapore		0.01	0.12%	0.03%
5	Malaysia		0.01	0.10%	0.02%
6	Other CPTPP Countries		0.00	0.02%	0.00%
Taiwan's Fastening Tools Import from CPTPP Countries- Subtotal		--	5.20	100.00%	21.53%
Taiwan's Fastening Tools Import from Non-CPTPP Countries- Subtotal		--	18.94	--	78.47%
Taiwan's Fastening Tools Import from the World- Total		--	24.14	--	100.00%

Source: Taiwan Custom's Trade Statistics

4. The Value and Percentage of Fastening Tools Taiwan Exported to CPTPP

The value of fastening tools Taiwan exported to CPTPP countries in 2020 reached NT\$3.28 bn, representing 11.42% of Taiwan's total fastening tools export to the world. Main export destination countries were Japan (export value: NT\$ 1.167 bn, representing 35.58% of Taiwan's total fastening tools export to CPTPP or 4.06% to the world), Australia (export value: NT\$ 0.841 bn, representing 25.65% of Taiwan's total fastening tools export to CPTPP or 2.93% to the world), and Vietnam (export value: NT\$ 0.4 bn, representing 12.20% of Taiwan's total fastening tools export to CPTPP or 1.39% to the world). The value and percentage of Taiwan's fastening tools export to the other CPTPP countries were not high (only around NT\$ 0.351 bn, representing 11.42% of Taiwan's total fastening tools export to CPTPP). Most of the export were concentrated on the top 5 destinations, forming an intensive export structure; in addition to Japan carrying out tariff-free measure for fastening tools, other countries still impose around 0-20% of tariff rates. If Taiwan is accepted as a CPTPP member, the tariff expense to these countries may be reduced by around NT\$ 0.16-0.2 bn based on the annual export value of NT\$ 3.28 bn. As a result, participation into CPTPP will definitely elevate the global competitiveness of fastening tools of Taiwan, which is export-oriented; Table 3 shows the value and percentage of Taiwan's fastening tools export to CPTPP countries in 2020.

Ranking	CPTPP Countries	Avg. Tariff	Taiwan's Export Value	Percentage in Total Export to CPTPP Countries	Percentage in Total Export to the World
1	Japan	0.0%	11.67	35.58%	4.06%
2	Australia	0.0~7.0%	8.41	25.65%	2.93%
3	Vietnam	0~20.0%	4.00	12.20%	1.39%
4	Canada	0.0~7.0%	3.70	11.28%	1.29%
5	Mexico	15.0%	1.50	4.58%	0.52%
6	Other CPTPP Countries	0.0~20.0%	3.51	10.71%	1.22%
Taiwan's Fastening Tools Export to CPTPP Countries- Subtotal		--	32.80	100.00%	11.42%
Taiwan's Fastening Tools Export to Non-CPTPP Countries- Subtotal		--	254.39	--	88.58%
Taiwan's Fastening Tools Export to the World- Total		--	287.19	--	100.00%

Source: Taiwan Custom's Trade Statistics



Table 4. The Tariff Reduction or Exemption Calculation of Taiwan's Fastening Tools Export to the Top 3 Export Destinations in CPTPP					Unit: NT\$0.1 bn ; %	
Product	Japan	Japan's Tariff Rate	Australia	Australia's Tariff Rate	Vietnam	Vietnam's Tariff Rate
Pliers, hand vices, tweezers and similar tools	1.24	0.0%	1.01	6.5%	0.29	10.0%
Bolt cutters and similar tools	0.06	0.0%	0.00	6.5%	0.00	0.0%
Hand-held spanners and wrenches (not adjustable)	3.02	0.0%	1.18	7.0%	0.36	20.0%
Hand-held spanners and wrenches (adjustable)	1.61	0.0%	1.33	7.0%	0.40	20.0%
Interchangeable socket wrenches	2.39	0.0%	3.21	6.5%	0.96	20.0%
Drilling, threading, or tapping tools	0.09	0.0%	0.06	4.0%	0.07	5.0%
Hammers and long-handle hammers	0.26	0.0%	0.36	0.0%	1.18	20.0%
Screwdrivers	0.94	0.0%	0.66	7.0%	0.32	20.0%
Office Hole Punchers, Nailers	0.00	0.0%	0.01	2.5%	0.00	20.0%
Pincer Pliers, pliers, and similar tools	0.83	0.0%	0.21	0.0%	0.24	20.0%
Hand-held pneumatic screwdrivers	0.01	0.0%	0.01	0.0%	0.05	0.0%
Hand-held spanners and wrenches	1.05	0.0%	0.30	0.0%	0.10	0.0%
Power socket wrenches	0.17	0.0%	0.07	0.0%	0.03	10.0%
Total	11.67	--	8.41	--	4.00	--
Tariff expense Taiwan can save from its top 3 export destinations	0.0		0.50		0.73	

Source: Taiwan Custom's Trade Statistics

5. Tariff Reduction or Exemption Calculation of Taiwan's Fastening Tools Export After Joining CPTPP

Japan, Australia, and Vietnam are the top 3 destinations in Taiwan's fastening tools export to CPTPP countries. Japan ranked 1st place in Taiwan's fastening tools export to CPTPP countries, but as Japan carries out tariff-free measure on Taiwan's fastening tools, there'll be no difference to Taiwan before or after joining CPTPP. On the other hand, Australia and Vietnam respectively in the 2nd and 3rd places will help Taiwan save the tariff expense of around NT\$ 0.123 bn. Plus, with the tariff expense Taiwan can save from the other CPTPP countries whose total import from Taiwan is comparatively low, **it is estimated that Taiwan can save around NT\$ 0.123-0.2 bn of tariff expense per year after joining CPTPP.** Table 4 shows the tariff reduction or exemption calculation of Taiwan's fastening tools export to the top 3 export destinations in CPTPP.

Table 4 shows that the highest values of Taiwan's fastening tools export to Japan are "Hand-held spanners and wrenches (not adjustable), Interchangeable socket wrenches, and Hand-held spanners and wrenches (adjustable)." However, as Taiwan's hand tools export to Japan has been tariff-free, the impact is very small; the highest values of Taiwan's fastening tools to Australia are "Interchangeable socket wrenches, Hand-held spanners and wrenches (adjustable), and Hand-held spanners and wrenches (not adjustable)" and the tariff rate is 6.5%. As Taiwan has a stronger strength in socket wrench manufacturing, if the tariff can be reduced or exempted, Taiwan may be able to expand its sales to CPTPP countries. As for Taiwan's export to Vietnam, the highest value is the category of "Hammers and long-handle hammers," which is merely NT\$ 0.118 bn. However, **as Vietnam imposes higher tariffs and many fastening tools categories are subject to a rate of up to 20%, if Taiwan can become a CPTPP member, it is expected that it can enjoy the same tariff-free benefits brought by FTAs (e.g., RCEP) as other competing countries can and Taiwanese companies will have more niche to develop the local Vietnamese market.**

6. Conclusions and CPTPP's Impact on Taiwan and Future Variables

(a) Conclusions

The population of CPTPP countries totals nearly 0.5 bn people (7% of the world's total), the total GDP of them exceeds US\$ 11 trillion (13.1% of the world's total), and the trade value with them represents over 24% of Taiwan's total trade value, which is an essential key to Taiwan's participation in the regional economic integration and is a vast and potential market for Taiwan to develop. Some Taiwanese exported products might face high tariff barriers in the past that restricted the export, however, Taiwanese steel, fasteners, various hand tools and relevant products and parts all demonstrated strong export competitiveness, creating a trade surplus with the world and CPTPP. If Taiwan can become a CPTPP member to enjoy the fair competition with reduced or exempted tariff benefit, it will create positive efficacy for related fasteners and fastening tools manufacturers to develop the global market.

After Taiwan joins CPTPP, some products may be influenced by the increase in import from Japan. For example, machine and iron & steel products manufacturers focusing on domestic demands and manufacturing similar products as their Japanese counterparts have to continuously be concerned about industrial activities and help guide the impacted manufacturers. In addition, As the cost of imported Japanese advanced fasteners or fastening tools declined, the scale of domestic product supply was also reduced. One should be also aware that if such a result will create negative impacts on domestic manufacturers' will to invest in the R&D of high-value added products. In terms of some sensitive products, the Government maybe can adopt tax reduction and guidance measures to earn more time for companies to complete the transformation.

(b) CPTPP's Impact on Taiwan

- 1. Accelerate transformation of the traditional metal processing industry:** traditional industries usually face higher tariffs in terms of export, making them difficult to expand the overseas market and forcing most Taiwanese manufacturers to adopt processing trade or overseas production to evade high tariffs and maintain profit and competitiveness. If Taiwan can become a CPTPP member, it will help traditional industries move away the high-tariff barriers, earn for Taiwanese manufacturers the fair competition in the domestic markets of CPTPP countries, and keep its HQ in Taiwan and increase production in Taiwan; in addition, while facing external competition from imported products, the domestic industries will be more willing to invest in the R&D of high-value added products, thus facilitating the multiple and balanced development of the domestic industries.
- 2. Facilitate the close tie of Taiwan with the global market to become one of the important members in the global supply chain:** U.S.-China trade war and Covid-19 speed up the reshuffling of the global supply chain and the importance of Vietnam, Malaysia, Mexico, and many others has become significant. Taiwan can integrate the domestic resources with overseas markets, deepen the close tie of Taiwan with the global supply chain, and strengthen the collaboration with CPTPP members.
- 3. A new economic system to connect to the world and maintain the industrial competitiveness of the next generation:** CPTPP is a high-quality FTA and a globally recognized paradigm. CPTPP members value digital economy and many other new issues for economic development a lot. If Taiwan can become a CPTPP member, it will be favorable for Taiwan to help the traditional metal industry to develop digital business opportunities.
- 4. Reinforce substantial issue discussions between Taiwan and other countries and the platform for economic negotiations:** after joining CPTPP, Taiwan can officially participate in substantial discussions as a member to keep updated with trends and negotiate with other CPTPP countries, which is also an important opportunity for Taiwanese metal industry to develop the int'l economic and trade market.
- 5. The withdrawal of the U.S. from TPP, without doubt, caused a decisive impact on the current CPTPP.** However, Biden's administration plans to release a new Asian-Pacific economic cooperation framework in Q1 2022 and tries not to partake in CPTPP again. The framework will be refocused on supply chain negotiations, export control over important products in the supply chain and the formulation of AI standards and target the participation of Japan, Singapore, Australia, New Zealand, as well as Malaysia, Vietnam, and Thailand; in the fierce global economic and trade competition, Taiwan should make early preparations for the new Asia-Pacific Economic Cooperation Framework led by the U.S. and also join CPTPP as early as possible in order to achieve the best synergy for Taiwan's metal industrial development. ■

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