



# U.S./China Trade War

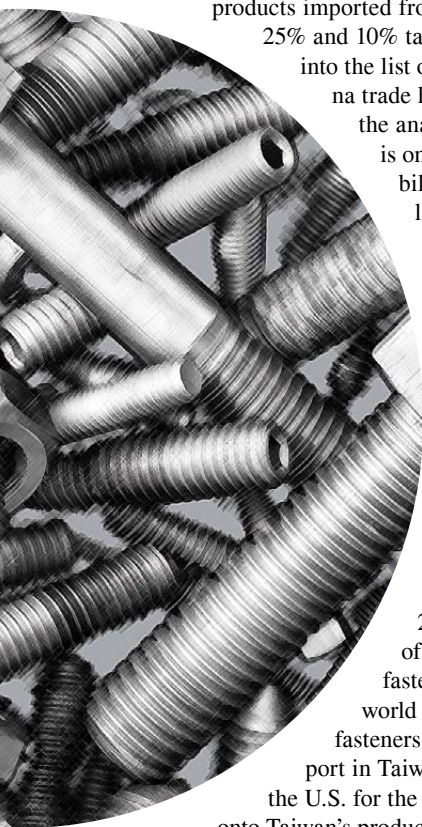
## Analysis of its Influence on Taiwan's Fastener Industry

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### Introduction

Since July 2018, the U.S. started by imposing a tariff of 25% on USD 34 billion worth of products imported from China, followed by a 25% tariff on USD 16 billion worth of products, and then expanded the scope with a 10% tariff on USD 200 billion worth of products. In May 2019, Trump announced another 25% tariff on USD 200 billion worth of products. So far, the U.S. has tarified over USD 250 billion worth of Chinese products with a rate of 25%.

According to Section 232 released by the U.S. in March 2018, Taiwan launched anti-dumping and anti-subsidy investigations on products imported from China in anticipation of gaining an exemption permit from the U.S. after the U.S. imposed respective 25% and 10% tariffs on steel and aluminum products imported from certain countries. However, Taiwan did not make it into the list of exemption. Taiwan's annual production value of the steel industry is over NTD 2 trillion. The U.S./China trade has largely affected the general supply chain of metal and steel industries in Taiwan. This article focuses the analysis on Taiwan's fastener industry which targets the U.S. as the primary destination of export. Fastener is one of Taiwan's most important foreign-exchange-earning industries with a production value of NTD 156.3 billion, import value of NTD 5 billion, export value of NTD 146.1 billion, and an export volume of 1.6 million tons. The total production value and export value both set a new record in 2018. Taiwan is known as the "fastener kingdom" for quality fasteners and a short lead time. Gangshan District in Northern Kaohsiung City is dubbed the "heartland of Taiwan's fasteners". With the challenges from the trade war between the U.S. and China, the approach that Taiwanese companies take to leverage the co-opetition between the U.S. and China to maintain Taiwan's industrial competitiveness in the world and reduce impact, has become a major task for the future development of Taiwan's fastener industry.



### Fastener Import & Export Trend Between Taiwan/China and the U.S. for the Past Several Years

#### (I) Analyzing Fastener Import & Export Trend Between Taiwan and the U.S.

**Table 1** shows the overseas trade performance of Taiwan's fasteners during the observation period 2012-2018. In terms of import, Taiwan imported NTD 4.95 billion worth of fasteners from the world in 2018, which translated to a CAGR of 1.4% for the past 7 years. Taiwan imported NTD 790 million worth of fasteners from the U.S., which translated to a CAGR of 7.8%. The U.S. shared around 16.0% of the total fastener import in Taiwan. In terms of export, Taiwan exported NTD 146.06 billion worth of fasteners to the world which translated to a CAGR of 4.4% for the past 7 years. Taiwan exported NTD 57.48 billion worth of fasteners to the U.S. which translated to a CAGR of 5.2%. The U.S. shared around 39.4% of the total fastener export in Taiwan. The influence of nearly 40% of export proportion is not negligible. The CAGRs between Taiwan and the U.S. for the last 7 years will be taken as a basis to discuss whether the extent of benefit or impact from the trade war onto Taiwan's products is normal or abnormal.

Table 1. Fastener Import and Export Between Taiwan and the U.S. During 2012 - 2018

Unit: NTD 100 Million; %

Trade Between Taiwan and USA	2012	2013	2014	2015	2016	2017	2018	CAGR
Import from the U.S. to Taiwan	5.1	5.7	5.5	6.2	8.0	7.2	7.9	7.8%
Import from the World to Taiwan	45.6	42.9	45.2	43.9	44.1	42.3	49.5	1.4%
% of USA in Taiwan's Fastener Import	11.1%	13.4%	12.1%	14.1%	18.1%	17.1%	16.0%	6.3%
Export from Taiwan to the U.S.	422.9	425.4	477.7	502.0	473.7	502.7	574.8	5.2%
Export from Taiwan to the World	1126.4	1150.4	1290.5	1296.3	1226.5	1307.4	1460.6	4.4%
% of USA in Taiwan's Fastener Export	37.5%	37.0%	37.0%	38.7%	38.6%	38.5%	39.4%	0.8%

Source: Taiwan customs trade data

## (2) Analyzing Fastener Import & Export Trend Between China and the U.S.

**Table 2** shows the overseas trade performance of China's fasteners during the observation period 2012-2018. In terms of import, China imported USD 3.52 billion worth of fasteners from the world in 2018, which translated to a CAGR of 1.7% for the past 7 years. China imported USD 450 million worth of fasteners from the U.S., which translated to a CAGR of 8.4%. The U.S. shared around 13.0% of the total fastener import in China. In terms of export, China exported USD 8.47 billion worth of fasteners to the world, which translated to a CAGR of 5.8% for the past 7 years. China exported USD 1.82 billion worth of fasteners to the U.S., which translated to a CAGR of 6.5%. The U.S. shared around 21.5% of the total fastener export in China. A single country taking up 20% of another country's total export signifies that U.S. market also has a certain degree of influence on China. It is noteworthy that China's export to the U.S. in 2018 increased 27.7% from 2017. A part of the reason is that Chinese companies sold a huge amount of fasteners to U.S. market before the U.S. raised the tariff. This caused an increase in inventory in the U.S. and no doubt indirectly affected Taiwan's order intake.

Table 2. Fastener Import and Export Between China and the U.S. During 2012 and 2018								
Unit: NTD 100 Million; %								
Trade Between China and USA	2012	2013	2014	2015	2016	2017	2018	CAGR
Import from the U.S. to China	2.8	2.9	3.2	3.7	4.0	4.6	4.6	8.4%
Import from the World to China	31.7	33.3	35.9	31.6	32.1	33.9	35.2	1.7%
% of USA in China's Fastener Import	8.9%	8.8%	9.0%	11.7%	12.5%	13.5%	13.0%	6.5%
Export from China to the U.S.	12.5	12.0	13.9	13.4	12.2	14.0	18.2	6.5%
Export from China to the World	60.4	61.5	68.2	67.1	60.4	66.3	84.7	5.8%
% of USA in China's Fastener Export	20.7%	19.6%	20.3%	20.0%	20.2%	21.1%	21.5%	0.6%

Source: Taiwan customs trade data/MIRDC

## Analyzing the Changes in Taiwan/China Fastener Trade with the U.S. After the Trade War

USTR listed 3 batches of products subject to a 25% tariff under Section 301, which include 818 items (valued at US\$ 34 bn), 279 items (valued at US\$ 16 bn) and 6031 items (valued at US\$ 200 bn). **Table 3** shows HS codes of these fasteners from the list. In May 2019 the U.S. still released the remaining tariff list worth US\$ 300 bn targeting 3,850 items of products originating in China, but continued public hearings and released a list of countries qualified for exemption. The final list is subject to unforeseeable factors of change after the trade talks between Trump and Xi and therefore is not taken into account.

If we base upon the tariffed fastener products exported from China to the U.S. in 2018, the value of export was USD 348 million (NTD 10.52 billion). Add a tariff of 25% to that, and China's fastener companies would have to pay an additional tariff cost of USD 87 million (approx. NTD 2.63 billion) every year.

Table 3. Fasteners Subject to U.S. Additional Tariffs Under Section 301	
HS Codes Involved	73160000, 73170020, 73170030, 73170055, 73170065, 73170075, 73181100, 73181200, 73181300, 73181410, 73181450, 73181520, 73181540, 73181550, 73181560, 73181580, 73181900, 73182100, 73182200, 73182300, 73182400, 73182900, 83082030, 83082060.

Source: USTR/Bureau of Foreign Trade

On 06/July/2018, Trump officially imposed a 25% tariff on products imported from China, which heralded the official commencement of Trump's tariff policy against China. This article cross-compares the 7-year CAGRs of U.S.-Taiwan and U.S.-China fastener trade statistics within the calculation period of July 2018 through May 2019 to determine the margin of abnormality in import and export. **Table 4** lists a comparison between fastener import and export in the period from July 2018 to May 2019 since the beginning of U.S./China trade war.

Table 4. Comparisons Between Fastener Import and Export in the Period from July 2018 Through May 2019 Since the Beginning of U.S./China Trade War				
Unit: NTD 100 Million; %				
Taiwan-USA Trade and China-USA Trade	July 2017-May 2018	July 2018-May 2019	Growth Rates	7-Year CAGR
Import from the U.S. to Taiwan	7.18	8.06	12.3%	7.8%
Export from Taiwan to the U.S.	483.1	558.9	15.7%	5.2%
Import from the U.S. to China	127.4	120.0	-5.8%	8.4%
Export from China to the U.S.	444.0	453.8	2.2%	6.5%

Source: Taiwan customs trade data

Since July 2018 when the trade war between USA and China begins, Taiwan has exported NTD 55.89 billion worth of fasteners to the U.S. Considering the high and low seasons factor during the year, the year-on-year cost margin was 15.7%, a significant increase compared with the 7-year CAGR which was 5.2%. On China's side, China exported NTD 45.38 billion worth of products to the U.S., which was a 2.2% year-on-year growth and an obvious decline compared with the 7-year CAGR of 6.5%. The magnitude of impact could continue to add up if the U.S. officially implements the tariff measure against the items which are worth US\$ 300 bn.

## Analyzing the Change in Import & Export of Fastener Subcategories

### (1) The Change in Import & Export of Fastener Subcategories Between Taiwan and the U.S.

Not only does this article analyze Taiwan's fastener industry before and after the U.S./China trade war, it also digs into changes in the subcategories of fasteners. **Table 5** lists the top 3 fastener products with the largest abnormal differences. Taiwan's top 3 types of fasteners exported to the U.S. are HS code 731815 (other screws and bolts) with a growth of NTD 4.12 billion or 16.2%, 731814 (stainless steel self-tapping screws) with a growth of 1.23 billion or 26.2%, and 731816 (nuts) with a growth of NTD 1.02 billion or 10.2%. The decline of export was mainly apparent in 731700 (steel screws, flat-headed screws, corrugated screws) which dropped by NTD 74 million or 3.0%. The margin of decline was not significant.

The annual export volume and price increase in recent years has made fasteners an industry with the highest steel demand in Taiwan. If Taiwan continues to grow in export in the future U.S./China trade war, it will influence the downstream of steel industry and even the upstream of steel materials. Taiwanese companies mostly use wires from Taiwan's China Steel Corp. (including Dragon Steel). In 2018, Taiwan used a total of 3.85 million tons of wire rods, in which 2.12 million tons were supplied by Taiwan's China Steel (55%), 25% from import (including import from China which accounted for 6%), 20% from Taiwanese electric furnace companies. Of all the fastener materials consumed in Taiwan, 1.43 million tons (67%) came from Taiwan's China Steel, and 710 thousand tons (33%) from Taiwan and import. We cannot say that the effect of trade war on Taiwan's steel supply chain is not significant.

### (2) The Change in Import & Export of Fastener Subcategories Between China and the U.S.

Regarding the effect of fastener import and export between the U.S. and China, **Table 6** lists the top 3 fastener products with the largest abnormal differences. The top exported fastener types from China to the U.S. was 731815 (other screws and bolts) with a growth of NTD 1.38 billion or 9.3%, whereas the growth rates of other types were low. The decline of export was most apparent in 731700 (steel screws, flat-headed screws, corrugated screws) with a drop of NTD 1.65 billion, or 17.1%. Additionally, the declines in self-tapping screws and wood screws were not significant.

## Countermeasures of the Government and Companies

The U.S./China trade war has brought an impact on the industrial structure of China's fastener industry. China's fasteners used to have a large market share in the U.S. due to lower prices. Since the 301 tariff list was announced, many fastener companies from China reacted immediately and headed to Vietnam and other Southeast Asian countries where they invested in lands as their production bases. Among those countries, Vietnam is a member of CPTPP and RCEP and enjoys preferential tariffs in the trade with many countries. The influx of companies from China has caused a surge in land price in Vietnam. Despite their entrance to ASEAN, they still have to tackle the problem of material sources. The upstream of fasteners is wire rods, and the largest source of wire rods is China. If companies purchase wire rods from China, they will be taxed by the U.S. as well, unless they could find a source that is not from China and is a competitive material supplier.

The trade war has pushed Taiwan's fastener export to grow in the short term. However, the recent large-scale sellout of China's fasteners to the U.S. piled up the stock in the U.S. and formed a hurdle against the orders coming from the U.S. to Taiwan. The impact is especially apparent on Grade-5 bolts and small screws and the consequence would gradually take shape in the third quarter of 2019, so Taiwanese companies need to react in advance. The trade war in essence targets the over-capacity of steel and technological products in China, but would still worsen the slowdown of world economy development and inevitably pose a large impact on the global economy and economic drives. The author expects the U.S. government's upcoming strategy would be to strike an agreement as soon as possible with China and force China to embark on a structural reform and repeal merchandise subsidies.

In Taiwan's standpoint, the government has coordinated with steel suppliers (such as Taiwan's China Steel Corp.) to cope with changing factors and industry predicaments in the midst of U.S./China trade war, and reduce future potential impact on the fastener industry. The measures taken include referencing international price trends/material cost/corporate international competitiveness, announcing wire rod prices quarterly for companies to take long-term orders, and reducing prices if necessary to reduce companies'



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**Table 5. Top 3 Fastener Categories with the Largest Abnormal Differences in U.S./Taiwan Fastener Trade Before and After the U.S./China Trade War.**

Unit: NTD 100 Million; %

Trade Between Taiwan and USA	Ranking of Difference	Items/HS Codes	Monetary Difference from Last Year	Growth Rates
Import from the U.S. to Taiwan	1st-place growth item	731815: Other screws and bolts	0.43	17.7%
	2st-place growth item	731816: Nuts	0.32	38.7%
	3st-place growth item	731824: Cotters and cotter pins	0.12	31.7%
	1st-place decline item	731829: Other non-threaded steel products	-0.13	-22.8%
	2st-place decline item	731822: Other washers	-0.04	-7.6%
	3st-place decline item	761610 Aluminum bolts, nuts, screws, hooks, pins	-0.02	-6.3%
Export from Taiwan to the U.S.	1st-place growth item	731815: Other screws and bolts	41.19	16.2%
	2st-place growth item	731814 Steel self-tapping screws	12.29	26.6%
	3st-place growth item	731816: Nuts	10.16	10.2%
	1st-place decline item	731700: steel screws, flat-headed screws, corrugated screws	-0.74	-3.0%
	2st-place decline item	741533 Copper threaded products including screws, bolts and nuts.	-0.17	-2.7%
	3st-place decline item	741510 Copper screw, flat-headed screws, thumbtacks, staples	-0.17	-63.8%

Source: Taiwan customs trade data

**Table 6. Top 3 Fastener Categories with the Largest Abnormal Differences in U.S./China Fastener Trade Before and After the U.S./China Trade War.**

Unit: NTD 100 Million; %

Trade Between China and USA	Ranking of Difference	Items/HS Codes	Monetary Difference from Last Year	Growth Rates
Import from the U.S. to China	1st-place growth item	731829: Non-threaded steel products	0.46	7.3%
	2st-place growth item	830820: Tubular rivets or cotter rivets of base metal	0.33	21.1%
	3st-place growth item	731700: Steel screws, flat-headed screws, corrugated screws	0.26	21.6%
	1st-place decline item	731815: Other screws and bolts	-6.48	-13.0%
	2st-place decline item	731816: Nuts	-1.41	-5.6%
	3st-place decline item	761610: Aluminum bolts, nuts, screws, hooks, pins	-0.74	-9.4%
Export from China to the U.S.	1st-place growth item	731815: Other screws and bolts	13.84	9.3%
	2st-place growth item	731816: Nuts	4.96	7.0%
	3st-place growth item	731819: Other steel threaded products	3.87	18.0%
	1st-place decline item	731700: Steel screws, flat-headed screws, corrugated screws	-16.46	-17.1%
	2st-place decline item	731814: Steel self-tapping screws	-1.25	-4.8%
	3st-place decline item	731812: Other wood screws	-0.75	-9.2%

Source: Taiwan customs trade data

inventory losses. The Taiwanese government is enhancing communication with fastener associations and seeking solutions to solve the predicaments in taking orders. The government contacted a steel plant in Vietnam for importing small steel billets which will be made into wire to provide low-price materials and an opportunity to retrieve lost orders. Companies should not focus on lowering prices just to tackle short-term business pressure, as this may cause pricing chaos and affect the market after the end of the trade war. No matter how the trade war progresses, Taiwan's downstream industries such as fasteners and tools must strive to transform, and actively develop high-value added metal products to improve the competitiveness of the steel industry, to turn crisis into opportunities for Taiwan's fastener industry under the trade war and let Taiwan retain its position in the world market. ■