# Influence of Global Free Trade Upon the Fastener Industry

by Kristy Chi, Industry Analyst of MIRDC



# When More Global Free Trade Agreements are Made, Those Not Included May be Marginalized

Free trade usually means tax exemption for goods/service traded among countries, which is contrary to trade protectionism (e.g., tariff barriers or antidumping duties). Should trade conditions in different countries are set to be equal, the global competitiveness of each country will become the key. For a country that adopts free trade policies, imported goods not subject to tariffs can circulate freely in the market and enterprises focusing merely on domestic demand will be the first to face the impact, which may later cause the decline in industrial production and layoffs.

A country often adopts bilateral trade, regional economic protocols, free trade zones and agreements with other countries (such as tariff reduction/ exemption and cancellation of non-tariff trade barriers) to achieve the final goal of free trade. In Asia Pacific, the most well-known free trade agreements are ASEAN10+1 and Trans-Pacific Partnership (TPP), etc. See **Figure 1**.

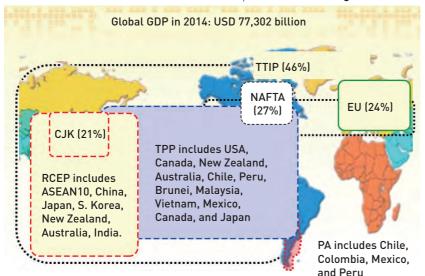


Fig. 1 Global Major Regional Integration in 2014 Data source: "Taiwan's Current Strategy & Status to Join TPP (Aug./12/2015)", Ministry of Economic Affairs (Taiwan)

Due to certain political reasons, Taiwan' seeking to make free trade agreements (FTA) or economic cooperation agreements (ECA) with other countries has not yet made a significant progress. Its negotiations with representatives of other countries can be only done under the table. In some

national-level negotiations, its voice is often neglected. Should more and more regional trade agreements are made, Taiwanese industries will face pressure in the competition of tariffs, labors, and capital. While Taiwanese government is trying its best to be included as a member of regional trade agreements, let's first explore if Taiwanese fastener industry will be influenced under the framework of TPP and discuss possible ways to react to it in the future global free trade.

## The Global Fastener Trade Shows Almost No Impact from TPP

TPP originally comprised 11 member countries incl. Chile, Singapore, New Zealand, Brunei, Australia, Malaysia, Peru, USA, Vietnam, Mexico, and Canada, There have been 12 member countries since Japan was accepted in 2013. Noticing the increasing economic scale of TPP, Taiwan and S. Korea then expressed their will to join in 2013 but were not accepted. 12 member countries of TPP shared about 36% of the global GDP in 2014 with their combined trade value being 25% of the global totals. The proportion of these TPP countries in Taiwan's total trade value was also increased to 34.82% (see Table 1). TPP's requirements on high quality and standards are stricter than those of WTO. Besides basic requirements of FTA, increasing concerns for environmental protection and labors' interests are also included. Vietnam, for example, must

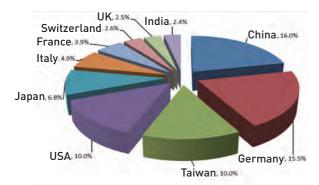


Fig. 2 Top 10 Fastener Exporting Countries in 2014

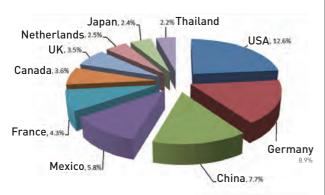


Fig. 3 Top 10 Fastener Importing Countries in 2014
Data source: International Trade Centre/ compiled by
MIRDC MII (Dec. 2015)

allow the organization of independent unions after joining. Or, member countries which do not adopt strict measures to crack down on smuggling of endangered species may be subject to sanctions in the future.

TPP (12 Member Countries)	% of Total Value
% of Global Total Trade Value in 2014	25.35
% of Taiwan's Total Trade Value in 2014	34.82
% of Taiwan's Export Value in 2014	32.83

Table 1. TPP Member Countries' Proportions in Global & Taiwan's Total Trade Values Data source: WTO Statistics Database, compiled by MIRDC MII (Dec. 2015)

# (a) Top 10 Fastener Exporting Countries in 2014

Figure 2 shows top 10 fastener exporting countries: China (16.0%), Germany (15.5%), Taiwan (10.0%), USA (10.0%), Japan (6.8%), Italy (4.9%), France (3.9%), Switzerland (2.6%), and UK (2.5%). The total export value of these 10 countries amounted to USD31.7 billion, USD7.1 billion of

which were shared by USA and Japan (22.4% of the top 10's totals). In contrast, the export value of Taiwan was USD4.2 billion and the export value of China was USD6.8 billion (totaling USD11 billion and representing over 30% of the total export value of the top 10 countries). According to export conditions of the top 10 countries in 2014, the general performance of TPP countries in the fastener segment has not yet outrun that of Taiwan or China.

### (b) Top 10 Fastener Importing Countries in 2014

Figure 3 shows the top 10 fastener importing countries, which were USA (12.6%), Germany (8.9%), China (7.7%), Mexico (5.8%), France (4.3%), Canada (3.6%), UK (3.5%), Netherlands (2.5%), Japan (2.4%), and Thailand (2.2%). Among these top 10 countries, USA, Mexico, and Japan are all TPP members and the total import value of these 3 countries shared 20.8% of the top 10 fastener importing countries. Countries with a great deal of fastener demand are usually highly industrialized. Mexico, for example, has become a manufacturing base for USA in recent years, which is mainly for car manufacturing; The aerospace industry in France was also developing well and the market demand for aerospace fasteners was also higher than that of the previous year; Thailand was newly added into the top 10. It continued to be a focus of foreign investors who were car manufacturers or from other machinery industries such as manufacturing facilities and precision instruments. As a result, there showed a significant growth in fastener demand.

## **Current Taiwan's Export to TPP Countries** and Changes in TPP Countries' Import from Taiwan

**Figure 4** shows data for the production, import, and export values of Taiwanese fastener industry during 2008-2014. Production and export values over the past 7 years were in a growing trend and the dependence-on-import ratio remained at 30%. Over 90% of the products were exported and roughly 70% of the domestic Taiwanese demand could be satisfied by Taiwanese suppliers.

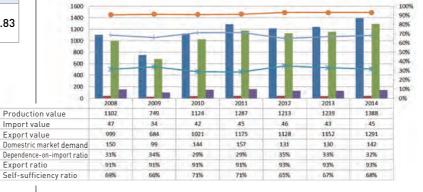


Fig. 4 Data for Taiwanese Fastener Industry During 2008-2014
Data source: International Trade Centre/ compiled by MIRDC MII (Dec. 2015)

**Figure 5** shows that Taiwan's export to 12 TPP countries looked similar to its export to the entire world during 2008-2014. The number

of TPP countries established in 2005 accumulated to 12 in 2013. Although Taiwan is not part of TPP, its fastener export to TPP countries in recent years has also demonstrated growth as is its export to the entire world. Its total export value to TPP countries in 2014 amounted to NTD65.1 billion (It's global export value reached NTD129.1 billion, two times the export to TPP countries). Hence, it can be said that almost half of the export of Taiwanese fastener industry went to TPP. The current status of Taiwanese fastener export continues to perform well and hasn't been influenced by the formation of TPP.

#### Unit: NTD0.1 billion



Fig. 5 Comparison of Taiwan's Export to TPP and the World During 2008-2014 Data source: International Trade Centre/ compiled by MIRDC MII (Dec. 2015)

Among the TPP countries, USA, Japan, and Canada were also in the top 10 countries of Taiwan's main export destinations. USA was particularly Taiwan's biggest customer. The total value of Taiwan's export to USA in 2014 was USD47.8 billion (sharing 37% of Taiwan's total export value); Japan was the 2nd largest customer of Taiwan and shared 5% of Taiwan's total export; Canada shared 3% (Please see **Table 2**). USA, Japan, and Canada will be used as examples to analyze if there appeared certain influence from TPP and the reasons why TPP did not cause any impact to them.

Unit: NTD0.1 billion

Ranking	Country	Export Value	Export Ratio	
1	USA	478	37%	
2	Germany	115	9%	
3	Netherlands	69	5%	
4	Japan	68	5%	
5	UK	56	4%	
6	China	41	3%	
7	Canada	36	3%	
8	Sweden	31	2%	
9	Italy	28	2%	
10	France	25	2%	
Ot	Other		20%	
To	Total		93%	

Table 2. Taiwan's Top 10 Export Destinations in 2014
Data source: International Trade Centre / compiled by MIRDC MII (Dec. 2015)

#### (a) USA

**Table 3** shows U.S. top 10 import origins, including Japan, Canada, and Mexico of TPP countries. The CAGR in 2008-2014 shows that import from Germany demonstrated the most significant growth at 8.2%, followed by

Mexico (6.8%), S. Korea (6.7%), Italy (2%), and India (1.8%), and among these countries only Mexico was a TPP member. The reason for such growth was due to relocations of U.S. car manufacturing bases to Mexico. Taiwan was still the biggest import origin of USA and continued to demonstrate stable growth every year exclusive of those in the financial crisis. U.S. import from Taiwan was 3 times its import from Japan, 5 times its import from Canada, and 13 times its import from Mexico. Iron and steel screws and nuts were main imported items.

#### (b) Japan

Table 4 shows the top 10 import origins of Japan in 2014, including USA, Malaysia, and Vietnam of TPP countries. The CAGR in 2008-2014 shows that import from S. Korea demonstrated the most significant growth at 5.2%, followed by Taiwan (5.0%), Malaysia (4.1%), China (2.4%), and Indonesia (1.2%) and among these countries only Malaysia was a TPP member. In addition, it is observed that in recent years many Japanese car manufacturers have relocated their manufacturing bases to ASEAN and their demand for components were directly imported from ASEAN. Not only in Malaysia, import activities in Indonesia and Vietnam were also very active. China and Taiwan continued to be the largest import origins of Japan and iron and steel screws and nuts were main imported items.

#### (c) Canada

Table 5 shows the top 10 import origins of Canada in 2014 including USA, Japan, and Mexico of TPP countries. The CAGR in 2008-2014 shows that import from Mexico demonstrated the most significant growth at 30.8%, followed by Italy (12.2%), Japan (10.3%), Germany (8.9%), and China (5.9%), and among these countries Mexico was a TPP member. The reason for such growth was due to relocations of major car manufacturing bases in N. America to Mexico. USA was still the biggest import origin of Canada and continued

Unit: Million USD

Ranking	Import Origin	2008	2010	2012	2014	2008~2014 CAGR
1	Taiwan	1,553	1,216	1,546	1,647	1.0%
2	China	1,464	998	1,381	1,454	-0.1%
3	Japan	600	386	773	663	1.7%
4	Germany	234	189	301	376	8.2%
5	Canada	393	281	312	331	-2.8%
6	S. Korea	193	165	264	285	6.7%
7	Italy	110	80	108	124	2.0%
8	Mexico	81	62	113	120	6.8%
9	India	91	67	97	101	1.8%
10	UK	106	75	86	93	-2.2%

Table 3. U.S. Import and CAGR During 2008-2014

Ranking	Import Origin	2008	2010	2012	2014	2008~2014 CAGR
1	China	392	376	460	452	2.4%
2	Taiwan	181	189	244	243	5.0%
3	USA	280	155	188	213	-4.5%
4	S. Korea	42	42	58	57	5.2%
5	Thailand	25	22	27	26	0.7%
6	Germany	25	20	18	24	-0.7%
7	UK	19	13	15	19	0.0%
8	Indonesia	14	17	19	15	1.2%
9	Malaysia	11	10	13	14	4.1%
10	Vietnam	15	7	11	14	-1.1%

Table 4. Japan's Import and CAGR During 2008-2014

Ranking	Import Origin	2008	2010	2012	2014	2008~2014 CAGR
1	USA	81	74	89	89	1.6%
2	China	17	19	25	24	5.9%
3	Taiwan	17	18	20	20	2.7%
4	Japan	5	8	9	9	10.3%
5	Germany	3	3	5	5	8.9%
6	UK	3	2	3	3	0.0%
7	S. Korea	2	2	3	2	0.0%
8	Italy	1	2	2	2	12.2%
9	France	2	1	2	2	0.0%
10	Mexico	0.4	0.6	1	2	30.8%

Table 5. Canada's Import and CAGR During 2008-2014
Data source: International Trade Centre/ compiled by MIRDC MII (Dec. 2015)

to demonstrate stable growth every year exclusive of those in the financial crisis. Canada's import from USA was nearly 2 times its import from China and Taiwan, 10 times its import from Japan, and 40 times its import from Mexico. USA was also a TPP country, but Canada's import from USA did not show obvious changes caused by TPP. In terms of the fastener industry, there appeared no sign that it had been influenced by the formation of TPP.

# **Influence Analysis**

The main goal of free trade is to benefit every involved country through encouraging each country to provide products and service it is good at in return for inexpensive and high quality products and service provided by other countries. Under this framework, the manufacturing efficiency of each country can be

elevated, options for customers can be increased, and products & service can be more inexpensive and better in quality.

Take the fastener industry for example, whether a certain country has been a TPP member or not seemed to cause no obvious change in major trade areas. The reason for this was due to the strength of the industry. Taiwan has a very strong fastener industry, which has been globally well-known for its product quality and technology. Taiwan's biggest competitor is China, followed by S. Korea and Japan, whose fastener industries are all export oriented. Among these countries only Japan is a TPP country. According to the previous data, there shows no evidence that Japan's export to other countries was increased after it joined TPP in 2013.

#### Conclusion

Asian emerging markets under China's structural transition have started to share China's role as the World Factory. On the other hand, developed countries showing stagnancy in economic growth have been also devoted to looking for new momentum. Free trade has been a popular trend and emerging countries will become a critical force to drive the global economy. Although Taiwanese fastener industry shows competitive strengths and can still take its lead in the global fastener production with stable import/export and without being influenced by regional trade agreements, more challenges from TPP or RCEP will be definitely observed in the future, which means that if later on some of Taiwanese competitors such as China, S. Korea, or Thailand join any regional alliance successfully, the competitiveness of Taiwanese products will undoubtedly be influenced. When this happens, Taiwanese companies may become less competitive in the tax issue, even though they are good at facing challenges from the international market. Governments should continue to be active in joining free trade agreements, so industries won't be sacrificed under political wrangling.