

The performance of Taiwanese fastener industry always takes the lead in the global market. It can offer various products including fasteners for basic construction, furniture, do-it-yourself application, and even those with high added values for motor vehicles, vessels, medical treatment, oil & gas, wind/solar power or aerospace. In the global fastener market, Taiwan and other major fastener manufacturing countries (e.g., China, India, Japan, Germany, USA, UK, and Canada) are all the sourcing origins for fastener distributors. In addition, the clustering effect and high quality products with reasonable prices in Taiwanese fastener industry both offer Taiwan a competitive edge in the global fastener market.

## Statistics & Analysis of Taiwanese Fastener Export & Import from 2010 to 2014

by Gang Hao Chang, Fastener World Inc.

### Transboundary Development and Focus on High Added Value

Different from other emerging countries which only focus on the production of standard parts, Taiwan has been very active in recent years in promoting the development of fasteners with high added values, and the stress on high C/P ratios of products has been the consensus of Taiwanese manufacturers. Many manufacturers gradually turn to the fields of cars, medical care, and aerospace. As a result, big companies in Europe and the US are willing to shift some of their orders to Taiwan or other Asian countries with lower manufacturing costs, because manufacturing these low/medium end products in their countries is not cost effective. Taiwan, under this circumstance, can not just remain its dominance in the production of standard parts, but also gain many orders for high value-added products with its technical advantages accumulated over the past decades.

Take automotive bolts and nuts for example, lots of Taiwanese companies in recent years have been certified by ISO/TS 16949 (which can cover all the criteria of U.S. QS9000, German VDA 6.1, Italian AVSQ, and French EAQF, formulated by all respective associations), making them one of the fastener suppliers for European/U.S. car manufacturers. In addition to Taiwanese companies like Chan Hsiung, Chun Yu, Chong Cheng, Fang Sheng, Fwu Kuang, San Shing, Sumeeko, and Ying Ming, which have been dedicated to the development of automotive fasteners for years, more and more Taiwanese fastener manufacturers also try to tap into this field, which will definitely contribute a lot to Taiwanese fastener export values.

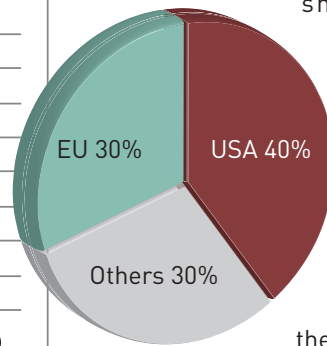
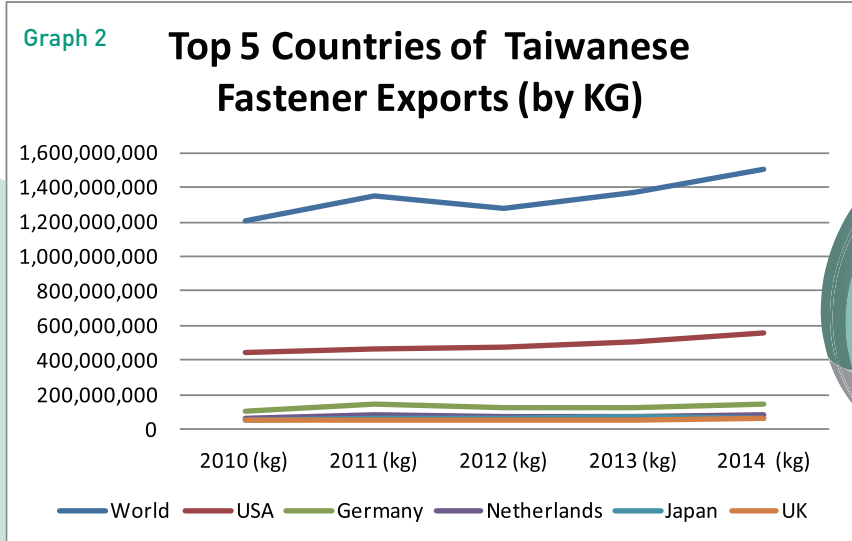
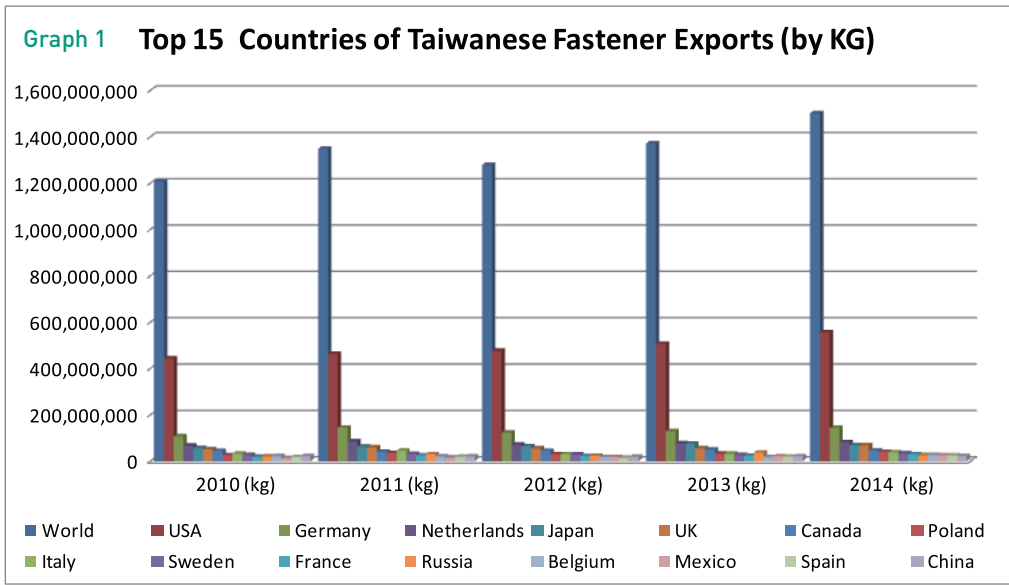
### Export Major Markets Still Being Europe and the US, With Further Focus on Emerging Markets

Table 1. Taiwanese Fastener Exports During 2010-2014 (by KG)

Rank	Country	2010	2011	2012	2013	2014
	World	1,206,369,710	1,347,746,764	1,278,585,161	1,371,098,506	1,501,697,033
	N. America	487,147,645	502,944,723	520,454,819	554,707,997	601,141,241
	EU	420,726,960	523,236,202	448,554,297	467,754,181	552,214,103
	Asia	167,518,105	172,500,621	166,212,588	183,506,394	184,678,453
1	USA	442,990,656	462,669,904	476,177,456	505,637,832	555,453,198
2	Germany	107,017,587	144,043,090	123,205,551	128,611,411	142,884,207
3	Netherlands	66,655,181	85,275,179	71,755,937	76,652,277	81,869,436
4	Japan	55,966,345	62,100,072	64,276,397	74,876,154	68,728,882
5	UK	51,349,996	59,117,272	55,228,313	54,516,214	67,758,478
6	Canada	44,154,524	40,274,819	44,275,218	49,070,165	45,688,043
7	Poland	25,007,661	34,204,554	29,752,669	31,856,094	39,582,609
8	Italy	31,750,070	44,997,090	29,752,669	31,856,094	38,482,125
9	Sweden	26,881,160	31,082,069	28,882,778	26,297,561	33,456,841
10	France	18,401,979	25,464,648	21,970,086	23,165,620	29,488,861
11	Russia	20,237,938	29,677,154	23,242,247	36,762,702	25,752,697
12	Belgium	21,286,446	20,239,998	18,154,646	18,121,519	25,689,526
13	Mexico	12,686,646	16,028,076	17,723,164	21,037,244	24,954,235
14	Spain	17,949,414	18,963,959	14,563,199	19,509,248	24,614,637
15	China	21,433,812	20,258,735	18,721,707	20,943,273	21,549,315

**Table 2. Taiwanese Fastener Exports During 2010-2014 (by USD)**

Rank	Country	2010	2011	2012	2013	2014
	World	3,066,814,297	3,808,037,696	3,586,618,369	3,679,741,858	4,053,691,383
	N. America	1,156,016,490	1,343,073,043	1,399,209,941	1,434,243,489	1,564,379,819
	EU	998,712,574	1,384,713,585	1,172,011,184	1,187,237,009	1,407,761,666
	Asia	585,119,220	670,852,271	615,936,150	634,783,658	642,540,555
1	USA	1,055,745,232	1,240,435,842	1,286,122,692	1,313,807,599	1,447,361,270
2	Germany	271,865,602	402,474,772	334,678,814	337,657,846	377,706,067
3	Netherlands	165,660,410	236,244,691	191,005,149	202,051,596	223,378,480
4	Japan	162,355,955	208,254,478	208,036,083	229,134,466	212,378,935
5	UK	119,897,919	156,076,037	149,773,373	143,726,891	180,719,632
6	China	112,648,762	110,405,804	102,105,450	112,548,024	122,980,282
7	Canada	100,264,274	102,637,201	113,072,509	120,435,890	119,941,997
8	Sweden	68,627,619	92,889,900	88,237,574	78,398,990	98,458,251
9	Italy	75,347,070	107,132,928	68,141,370	76,797,422	92,178,290
10	France	48,227,283	71,223,143	62,456,200	63,099,953	81,606,571
11	Poland	42,923,068	68,112,720	57,265,784	60,816,003	73,599,167
12	Belgium	52,808,665	55,807,503	51,085,634	49,207,941	69,430,104
13	Australia	63,331,171	73,794,180	67,574,924	64,187,689	67,322,837
14	Mexico	33,155,351	42,229,933	49,374,532	56,233,878	66,415,507
15	Spain	40,994,671	49,448,261	37,387,748	47,444,347	58,449,546

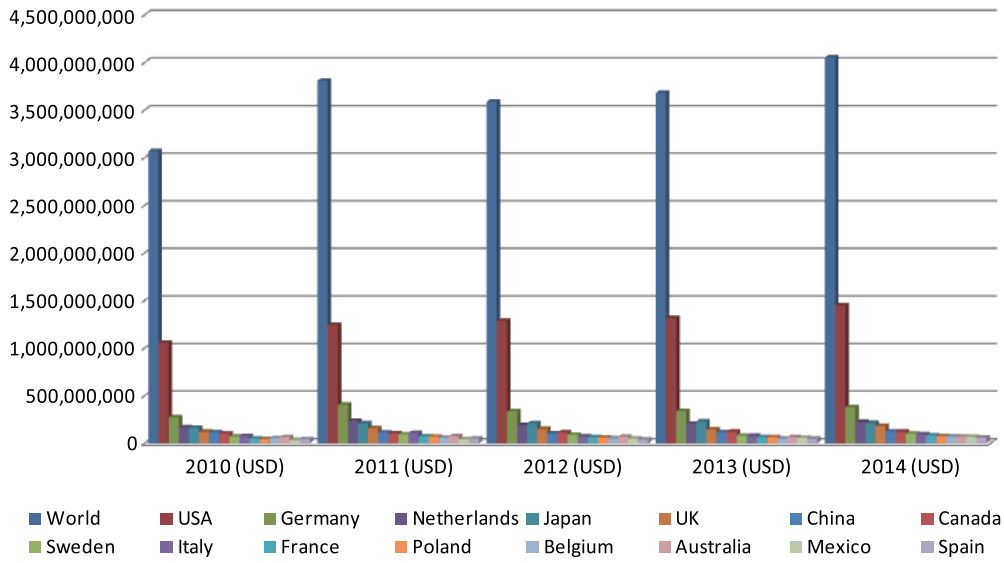


Pie Chart of Taiwan's Fastener Exports

The top 5 destinations of Taiwanese fastener exports in 2014 were the U.S.(1st), Germany(2nd), Netherlands(3rd), Japan(4th), and UK(5th). Basically, the U.S. shared the greatest proportion (roughly 40%) of Taiwanese fastener exports and every year it imported about 0.45-0.55 million tons (totaling USD 1.05-1.55 billion) of fasteners from Taiwan. If Canada is considered with the U.S. as a whole, Taiwan exported about 0.5-0.6 million tons to this region every year. The EU took the 2nd place and shared about 30% of Taiwanese fastener exports. Every year Taiwan exported about 0.4-0.55 million tons (totaling USD1-1.4 billion) of fasteners to the EU. However, the most interesting part



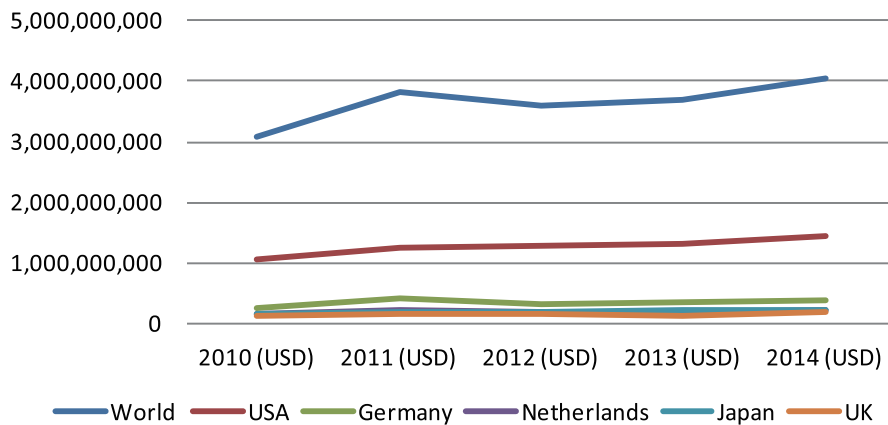
**Graph 3 Top 15 Countries of Taiwanese Fastener Exports (by USD)**



may be the fact that the EU once outperformed the U.S. in Taiwanese fastener exports in 2011, though the U.S. remained on a rise from 2010 to 2014. The remaining 30% was shared by countries like Japan, China, and Mexico. Taiwan exported about 0.165-0.185 million tons of fasteners to other Asian countries.

Netherlands, dubbed "the crossroads of Europe", is also worth noting. Its rank in the top 15 was after Germany but right before Japan, UK, and Canada.

**Graph 4 Top 5 Countries of Taiwanese Fastener Exports (by USD)**



Netherlands imported about 60-80 thousand tons of fasteners from Taiwan every year (Germany: 120-140 thousand tons). Large fastener importers like Eurobolt and Fabory can also be seen in the member list of Dutch Fastener Importers Association (NEVIB). As Netherlands is one of the transport hubs in Europe, fasteners can be transshipped to other European countries via the Europe's largest seaport in Rotterdam and Europe's 4th largest Amsterdam Airport Schiphol.

In addition to major markets like the EU, USA, and Japan, Taiwanese fastener manufacturers have begun to expand their business to other emerging markets in recent years. That is why markets like Russia, Mexico, and China are also included in the top 15. The total export volume Taiwan exported to these 3 countries amounted to 20-25 thousand tons, quite similar to the total amount Taiwan exported to Belgium or Spain. However, if the table is viewed by value, the average unit price of fasteners Taiwan exported to China was valued at USD5.7/KG (To Mexico: USD2.6/KG; to Russia: USD2.1/KG), while the average unit price of fasteners Taiwan exported to the U.S., Netherlands, Germany, and Japan was in the range of USD2.6-3.0/KG, which shows that the fasteners Taiwan exported to China mostly belonged to categories with higher unit prices. Australia is also a market valued by many Taiwanese companies. The data listed in the export volume of 2014 show that though Australia was only in the 16th place (not in the top 15), it could still outperform Mexico and Spain and be listed as the 13th, if calculated by value. The average unit price of fasteners originated from Australia was about USD3.4/KG.

Although fluctuations in exports have been observed in respective countries, the trend for all countries on a global perspective is still uprising. If the current growing trend continues, the total volume of fasteners Taiwan exports to the world may reach 1.61 million tons or achieve the level of USD4.5 billion by the end of 2015.

**Table 3 and 4 Show Taiwanese Fastener (HTS Code 7318) Imports During 2010-2014.**
**Import**
**Table 3.**

Rank	Country	2010	2011	2012	2013	2014
	World	16,623,480	18,599,732	18,934,007	18,421,226	21,178,823
	Asia	14,306,482	16,272,227	16,368,413	15,926,401	18,040,529
	EU	1,262,757	1,451,520	1,256,365	1,521,302	997,150
	N. America	868,632	643,471	673,709	587,718	269,299
1	Japan	7,775,432	7,740,231	7,415,579	7,301,245	7,924,602
2	Vietnam	3,028,759	3,375,471	3,329,435	2,788,369	3,942,105
3	China	1,537,123	2,188,319	2,018,408	2,421,181	3,538,676
4	Thailand	129,890	197,686	244,335	1,644,181	1,205,035
5	Philippines	1,213,509	1,991,889	2,589,611	1,163,976	947,427
6	Germany	574,193	654,069	519,531	636,770	424,919
7	S. Korea	295,551	449,838	365,606	332,039	362,200
8	USA	858,391	613,230	613,836	581,746	266,651
9	Sweden	89,260	140,192	143,367	122,595	115,294
10	Netherlands	101,864	102,154	107,364	162,943	108,066
11	U.K.	70,680	137,067	62,754	157,264	99,754
12	Italy	62,304	100,844	93,554	97,817	85,273
13	Spain	64,112	65,327	57,234	72,377	57,969
14	Malaysia	194,803	161,412	103,870	96,305	47,839
15	Switzerland	36,595	62,949	40,178	42,722	38,041

**Table 4.**

Rank	Country	2010	2011	2012	2013	2014
	World	124,807,233	144,683,324	143,192,857	138,553,818	144,004,117
	Asia	81,371,719	104,249,845	101,617,878	93,003,825	95,652,861
	EU	24,918,225	21,374,036	19,895,496	21,664,562	23,179,537
	N. America	16,362,956	15,303,247	17,223,824	19,634,627	16,566,441
1	Japan	64,003,113	81,223,366	78,259,035	69,224,787	71,509,094
2	USA	16,163,449	15,148,282	16,981,312	19,539,407	16,507,768
3	Germany	17,199,760	9,762,151	8,179,303	8,497,224	11,407,572
4	China	3,923,504	5,170,127	5,194,941	5,863,854	7,051,957
5	Vietnam	3,663,470	4,890,596	4,781,547	4,324,313	5,410,098
6	S. Korea	3,535,220	4,969,554	2,839,686	3,840,343	3,858,528
7	Philippines	3,934,346	5,435,191	5,861,089	3,719,982	3,442,057
8	Thailand	603,045	894,604	1,680,769	2,973,934	2,748,722
9	Sweden	1,297,356	2,121,386	2,423,543	2,651,946	2,008,314
10	Switzerland	1,115,550	2,378,678	1,432,119	1,535,207	1,755,543
11	Netherlands	827,139	1,161,389	1,093,724	1,324,769	1,598,075
12	U.K.	807,792	2,305,438	1,900,240	2,465,965	1,565,853
13	Italy	659,876	1,053,527	1,181,296	1,311,584	1,536,052
14	Denmark	1,364,412	1,345,002	1,149,151	1,333,528	1,212,159
15	France	1,068,493	1,087,961	1,415,220	1,446,982	1,081,690

Taiwanese fastener industry is basically export-oriented and the level of fastener imports of Taiwan is quite low. If the imports are viewed by volume, it is easy to find that major fastener import partners of Taiwan were Asian countries like Japan, Vietnam, China, Thailand, Philippines, and South Korea, followed by the EU at the 2nd place, and the U.S. at the 3rd place. As aforesaid, Taiwan has gradually turned to the development in fields with high added values, so it will import some products which it does not or won't produce due to concerns over excessive manufacturing costs, in order to fully satisfy the market demand. In 2014, Taiwan imported about 17,558 tons of fasteners from Japan, Vietnam, China, Thailand, and Philippines and the total volume represented about 83% of Taiwan's total fastener imports of the year. Taiwan imported about 18,000 tons from Asia and only a few in the total imports were from advanced countries like Germany, the U.S., Sweden, and Netherlands. The imports from China in the 3rd place in the past 5 years show a trend that it may drag Vietnam behind and climb to the 2nd place by the end of 2015.





## Conclusion

It has been so many years since Taiwan was first noticed in the global fastener market and its shares in the European and U.S. markets are high. Taiwan plays a very important role in the global fastener supply chain. As more and more competitors emerged in the markets and the illegal discharge of waste liquid used in electroplating resulted in the delay of fastener shipments last year, many companies have regarded "industrial upgrade"

and "environmentally friendly manufacturing procedures" as the major goals that should be achieved in the nearest future. Taiwanese companies are not only active in applying for certificates (e.g., ISO 9001, ISO/TS16949, ISO14001, and so on), but also try to enlarge their business networks through acquisitions, facility expansion, or setups of new factories to speak for themselves in the fastener industry with fierce competition. The niche of Taiwanese fastener companies relies on their years of R&D and innovation capabilities as well as the flexibility in satisfying customers' demands, and that is why Taiwanese fastener companies, facing the increasing challenges from China and ASEAN, can continue to grow further and become the priority choice of many European/U.S. fastener purchasers. ■

**Top 5 Countries of Taiwanese Fastener Imports (by USD)**

