

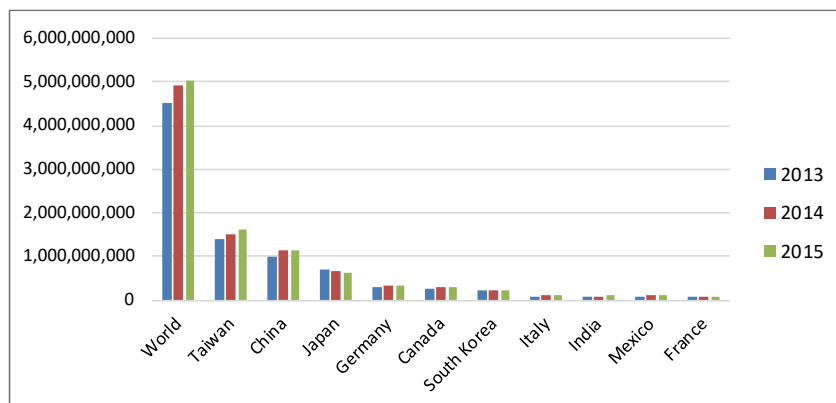


Fastener Trade Data Express from USA/ Canada/EU/Taiwan/Japan Over Past 3 Years

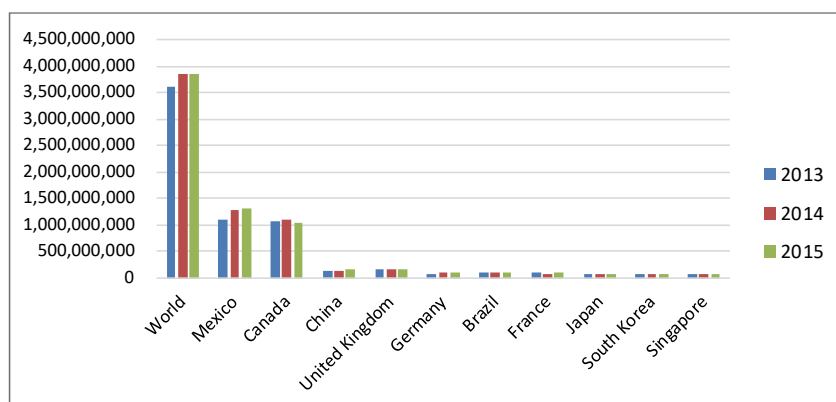


(in USD), in descending order according to
figures of 2015

Import				
HS 7318 Iron and steel screws, bolts, nuts, washers, etc.				
Rank	Partner	2013	2014	2015
	World	4,504,206,352	4,921,220,507	5,024,459,658
1	Taiwan	1,387,985,965	1,512,443,294	1,604,119,571
2	China	979,724,090	1,142,251,413	1,141,601,612
3	Japan	686,114,166	653,391,633	622,736,616
4	Germany	282,619,045	351,771,639	352,557,790
5	Canada	248,833,750	289,653,400	302,969,267
6	South Korea	216,480,913	216,187,615	237,869,471
7	Italy	95,390,391	118,038,662	113,447,623
8	India	80,900,661	81,044,041	105,874,566
9	Mexico	85,299,361	100,318,510	104,261,987
10	France	62,891,402	68,928,962	70,927,299



Export				
Rank	Partner	2013	2014	2015
	World	3,611,531,670	3,841,901,340	3,835,607,838
1	Mexico	1,102,913,401	1,276,883,493	1,320,882,348
2	Canada	1,083,290,731	1,098,492,268	1,029,178,327
3	China	141,422,790	145,709,542	169,661,420
4	U. K.	159,198,886	165,130,993	161,203,906
5	Germany	85,496,852	111,425,654	109,931,076
6	Brazil	97,770,818	101,927,132	98,522,703
7	France	101,747,027	91,144,601	95,257,867
8	Japan	85,698,069	82,410,306	82,663,042
9	South Korea	64,566,603	69,227,276	73,569,037
10	Singapore	87,571,967	78,738,164	68,338,147



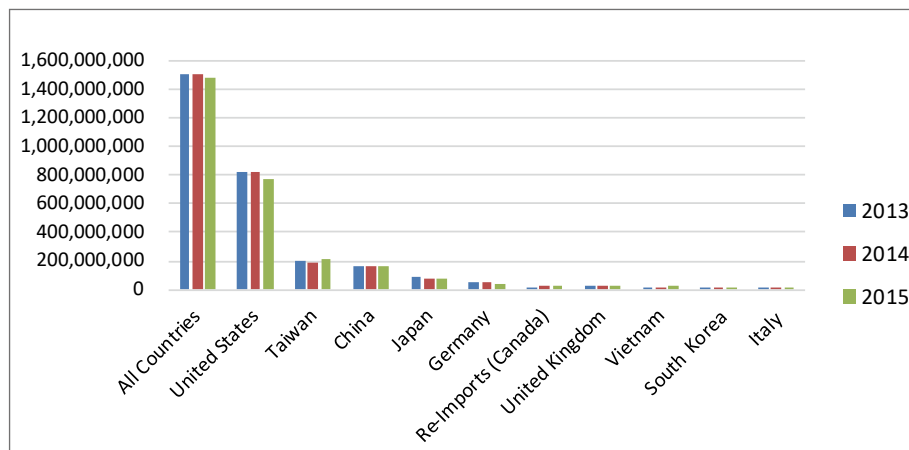
In the past 3 years the annual fastener import values of the U.S. all showed growth, reaching about USD 4.5-5.1 billion. The top 3 import origins were from Asia and Taiwan was ranked the 1st place. Every year roughly 30% of the total fastener import were from Taiwan and the proportion was increasing year after year. China, ranked in the 2nd place of the import origin, represented 22-23% of U.S. total fastener import value. Although the import value from China was getting closer to that from Taiwan, it still showed a slight decline in 2015. China and Taiwan represented more than 50% of U.S. total fastener import value. Japan in the 3rd place represented roughly 12-13% of U.S. total import value; however, the value was decreasing year after year. In terms of Germany, Canada, and S. Korea, ranked in the 4th, 5th, 6th place respectively, each contributed USD 0.21-0.36 billion to U.S. fastener import value and showed growth, but all of them still could not compete with those values contributed by Taiwan, China, and Japan. As for Italy, India, Mexico, and France, ranked in the 7th, 8th, 9th, and 10th place respectively, each contributed less than USD 0.12 billion to U.S. total fastener import value.

USA not only showed significant fastener import values, but also had an impressive record in its fastener export values. In terms of the global fastener demand in the past 3 years, U.S. contributed USD 3.6-3.9 billion. Its export value grew from 2013 to 2014, but revealed a slight decline in 2015. U.S. top 3 export destinations were Mexico, Canada, and China. According to the data, Mexico and Canada (showing the advantages of proximity to the U.S. and being members of NAFTA) altogether represented more than 60% of U.S. total fastener export, leaving China ranked in the 3rd place (less than 5% of U.S. fastener export) far behind, and revealing that U.S. fastener export was mainly for satisfying the demand in N. America. On the other hand, though China did not represent a very large proportion in U.S. fastener export, it had outpaced UK to be the 3rd largest export destination of U.S. fasteners.

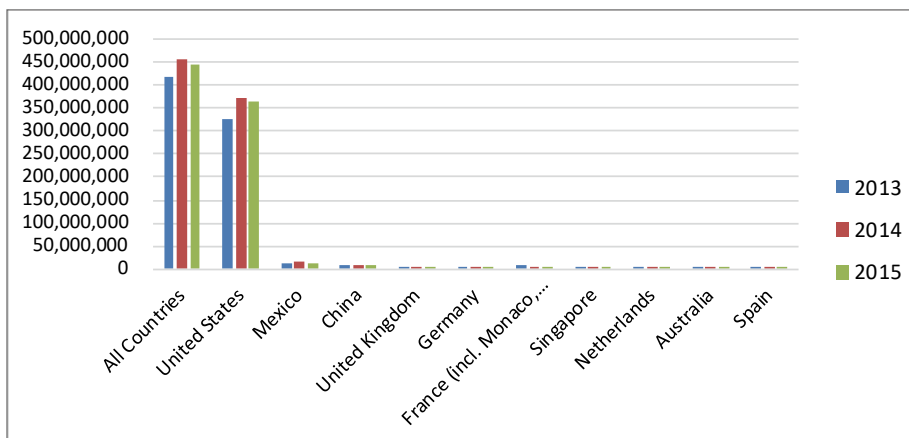


(in USD), in descending order according to
figures of 2015

Import				
HS 7318 Iron and steel screws, bolts, nuts, washers, etc.				
Rank	Partner	2013	2014	2015
	World	1,508,856,908	1,505,073,233	1,477,010,908
1	United States	823,832,998	823,087,762	768,502,842
2	Taiwan	202,975,514	194,643,327	210,477,526
3	China	163,307,515	166,763,653	166,525,813
4	Japan	87,468,848	79,317,904	81,428,743
5	Germany	45,786,023	50,384,839	42,156,264
6	Canada	20,744,299	22,795,753	25,812,071
7	U.K.	22,584,128	22,540,617	22,468,268
8	Vietnam	11,769,618	13,792,405	21,498,831
9	South Korea	19,460,413	18,411,379	19,999,297
10	Italy	19,565,839	19,295,325	17,708,489



Export				
Rank	Partner	2013	2014	2015
	World	417,920,626	455,781,812	445,358,024
1	United States	326,800,602	370,119,782	364,562,853
2	Mexico	12,732,093	15,100,446	12,399,720
3	China	7,291,517	7,373,419	7,288,419
4	U. K.	6,135,054	6,658,217	6,622,582
5	Germany	5,617,889	5,519,533	6,060,487
6	France	9,271,380	6,255,815	5,068,197
7	Singapore	1,916,559	2,514,086	3,496,772
8	Netherlands	3,149,708	3,259,723	2,793,000
9	Australia	1,724,913	2,056,516	2,792,365
10	Spain	1,247,255	1,912,016	2,448,957



Canada is the 2nd largest fastener importing country in the entire American continent (only second to USA). In the past 3 years, its annual fastener import landed at about USD 1.5 billion, but the total import value was decreasing year after year. Its major import origin was USA (more than 50%). Taiwan, ranked in the 2nd place, contributed USD 0.2 billion to its total fastener import (about 1/4 of U.S. contribution). The import from China was about USD 0.16 billion, showing slight fluctuations in the past 3 years, but still keeping at a certain level, as in the case of Taiwan. Although Canada also imported from other major fastener manufacturing countries such as Japan, Germany, UK, Vietnam, S. Korea, and Italy, the import value from each of these countries was only less than USD 0.1 billion, far less than the values contributed by USA, Taiwan, and China listed in the top 3.

In the past 3 years, the fastener export value of Canada reached about USD 0.41-0.46 billion (significantly far less than its fastener import value), which revealed that the fastener demand of Canada was mainly satisfied by import from other countries. The fastener export value of Canada, like its fastener import, was mainly contributed by the U.S. Data showed that more than 70% of fasteners were exported to the U.S. This result also showed significant reliance of Canada on trade with the U.S. Although Mexico was the 2nd largest fastener export destination of Canada, its export values were far less than the values for the U.S. In addition to USA and Mexico, the fasteners of Canada were also exported to major European fastener demanding countries such as UK, Germany, France, Netherlands, and Spain.

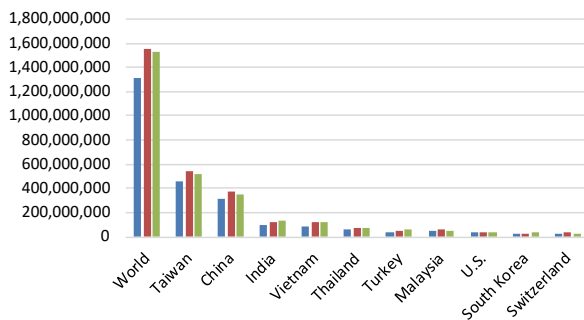


Import

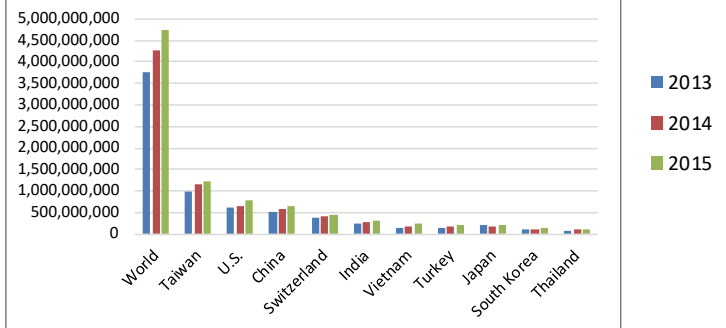
HS 7318 Screws, bolts, nuts, coach screws, screw hooks, rivets, cotters, cotter pins, washers (including spring washers) and similar articles, of iron or steel

Rank	Country	2013 (kg)	2014 (kg)	2015 (kg)	Country	2013 (Euro)	2014 (Euro)	2015 (Euro)
	World	1,315,889,000	1,558,297,000	1,525,090,000	World	3,773,737,688	4,265,273,905	4,758,003,851
1	Taiwan	460,459,000	545,925,000	523,203,000	Taiwan	971,768,436	1,150,021,894	1,241,161,108
2	China	318,314,000	372,016,000	347,494,000	U.S.	613,785,344	651,008,117	777,000,042
3	India	102,755,000	125,069,000	131,615,000	China	510,741,058	588,848,859	632,693,170
4	Vietnam	88,043,000	118,575,000	120,862,000	Switzerland	378,542,829	412,936,393	462,581,615
5	Thailand	57,588,000	76,720,000	69,208,000	India	234,370,261	264,467,662	309,811,312
6	Turkey	41,047,000	53,283,000	63,137,000	Vietnam	142,634,699	187,474,497	229,678,317
7	Malaysia	56,165,000	58,751,000	54,514,000	Turkey	144,956,828	182,917,965	204,119,994
8	U.S.	38,160,000	37,741,000	38,903,000	Japan	203,685,815	188,702,692	196,018,857
9	South Korea	29,989,000	30,257,000	33,508,000	South Korea	123,082,974	119,089,282	141,926,989
10	Switzerland	29,957,000	32,643,000	31,157,000	Thailand	86,596,922	120,649,893	112,670,593

EU Import (by KG)



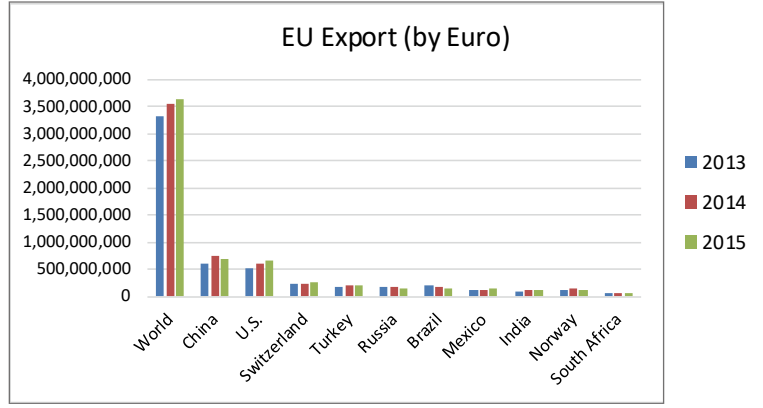
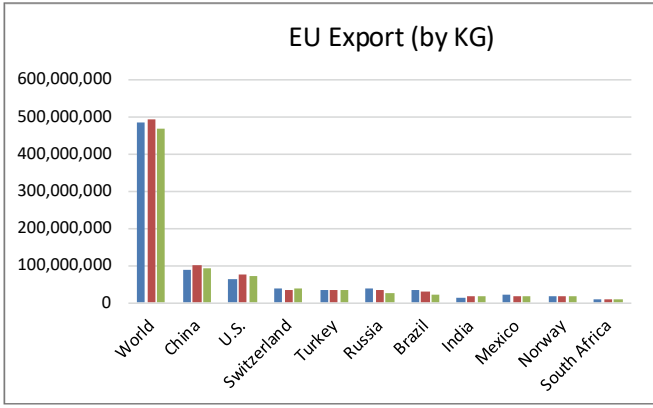
EU Import (by Euro)



The fastener import value of the EU, the world's 2nd largest fastener demanding market (the 1st largest is USA) was increasing in the past 3 years, growing from +3.7 billion euros in 2013 to +4.2 billion euros in 2014 (a growth margin of about 13%). In 2015 the import value also revealed roughly a growth margin of 11% to about 4.8 billion euros. In terms of import volume, the total import volume of the EU grew from about 1.31 million tons in 2013 to about 1.52 million tons in 2015. Top 10 import origins were mainly Asian countries, especially Taiwan, China, and India. All these 3 countries represented more than 60% of EU's total import volume. In 2015, the import values of the EU from China and Taiwan all showed decline, but the import values from India and Vietnam were in growth. However, as the EU has terminated the antidumping measure against certain iron and steel fasteners from China since the end of Feb. of 2016, it is estimated that the import value from China will show significant increase and Taiwan will face fierce competition from China. On the other hand, Vietnam, Thailand, Turkey, and Malaysia were also listed in the top 10 countries as the quality of fasteners produced in these countries was improving, too. The import values showed that although the total export volumes of the U.S., Switzerland, and Japan to the EU were far less than Taiwan, China, or India, their fasteners with high added value helped them be listed as the top 5 countries.

Export

Rank	Country	2013 (kg)	2014 (kg)	2015 (kg)	Country	2013 (Euro)	2014 (Euro)	2015 (Euro)
	World	483,886,000	492,083,000	468,023,000	World	3,329,647,062	3,550,903,886	3,627,664,582
1	China	87,506,000	102,257,000	90,868,000	China	614,888,804	749,245,178	692,116,657
2	U.S.	61,896,000	75,818,000	72,873,000	U.S.	517,865,820	616,777,003	674,163,904
3	Switzerland	37,065,000	35,496,000	37,157,000	Switzerland	246,049,759	246,718,901	259,185,890
4	Turkey	32,625,000	33,346,000	35,922,000	Turkey	192,219,113	194,765,070	218,302,461
5	Russia	37,547,000	35,461,000	26,287,000	Russia	191,913,412	187,021,956	147,600,557
6	Brazil	36,048,000	29,325,000	22,811,000	Brazil	206,703,362	177,131,631	146,258,692
7	India	13,066,000	16,120,000	18,942,000	Mexico	135,181,615	132,531,175	141,601,420
8	Mexico	22,322,000	18,892,000	18,705,000	India	102,996,002	111,894,130	127,452,060
9	Norway	18,304,000	19,185,000	17,751,000	Norway	126,326,709	140,081,139	124,272,344
10	South Africa	9,561,000	9,539,000	9,990,000	South Africa	62,717,777	67,737,410	77,815,602



Source: EU trade export helpdesk

The top 10 fastener export destinations of the EU (whether it is calculated by volume or value) were China, USA, Switzerland, Turkey, Russia, Brazil, India, Mexico, Norway, and South Africa. These countries are all hot zones for industrial development. Its total annual export volume reached 0.46-0.5 million tons (roughly 1/3 of the total import volume) and the total annual export value landed at the range of 3.3-3.7 billion euros (very close to its import value). China and USA represented more than 30% of the total export of the EU, which might result from the current economy-stimulating policies that helped boost the local fastener (e.g., automotive, railway, and aerospace) demand in China and USA. In Europe, the fasteners of the EU were mainly shipped to Switzerland and Norway; in Asia, they were mainly shipped to China and India; in Latin America, they were mainly shipped to Brazil and Mexico. Of course, Turkey, Russia, and South Africa on the top 10 list were also important fastener markets in their own region. The most noteworthy point is, the fastener export of the EU to Brazil and Russia (whether it was calculated by volume or value) both showed decline in the past 3 years, which might result from the current economic recessions in these two countries.

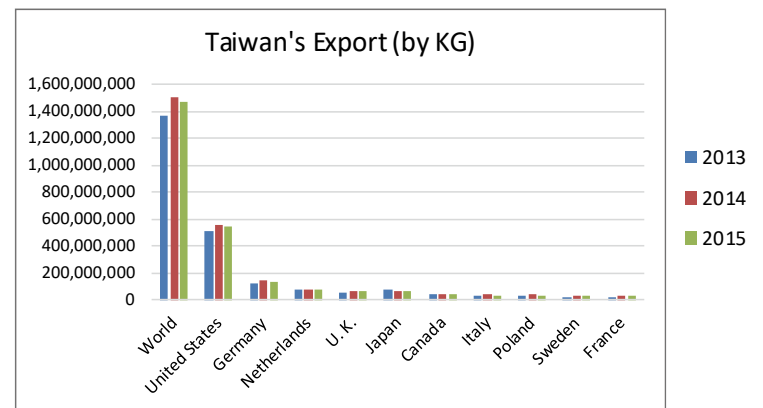
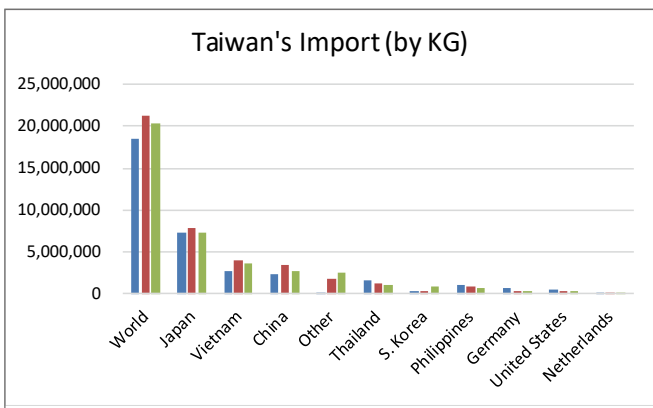


in descending order according to figures of 2015

Import

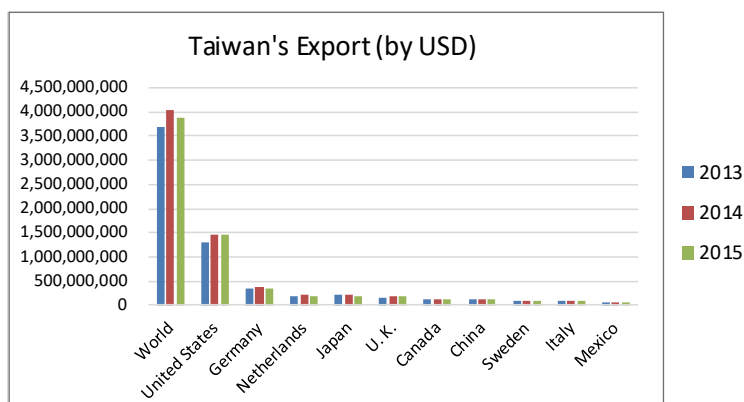
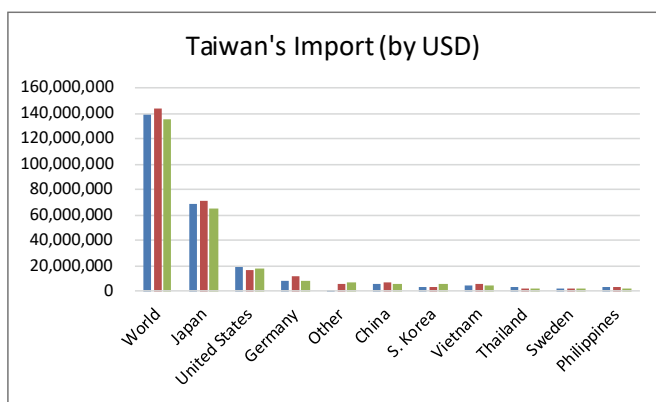
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Rank	Country	2013 (kg)	2014 (kg)	2015 (kg)	Country	2013 (USD)	2014 (USD)	2015 (USD)
	World	18,421,226	21,178,823	20,279,886	World	138,553,818	144,004,117	135,102,341
1	Japan	7,301,245	7,924,602	7,362,681	Japan	69,224,787	71,509,094	64,664,087
2	Vietnam	2,788,369	3,942,105	3,597,754	United States	19,539,407	16,507,768	17,767,147
3	China	2,421,181	3,538,676	2,794,326	Germany	8,497,224	11,407,572	8,125,637
4	Other	37,066	1,799,499	2,488,301	Other	457,646	5,803,898	7,428,451
5	Thailand	1,644,181	1,205,035	1,063,809	China	5,863,854	7,051,957	6,174,559
6	S. Korea	332,039	362,200	871,465	S. Korea	3,840,343	3,858,528	5,836,494
7	Philippines	1,163,976	947,427	620,619	Vietnam	4,324,313	5,410,098	4,731,102
8	Germany	636,770	424,919	338,164	Thailand	2,973,934	2,748,722	2,606,563
9	United States	581,746	266,651	263,696	Sweden	2,651,946	2,008,314	2,429,674
10	Netherlands	162,943	108,066	159,836	Philippines	3,719,982	3,442,057	2,011,848



Taiwan has a very complete and well-established fastener supply chain and its fasteners are mainly for export, so the fasteners imported to Taiwan are generally high quality and high value added fasteners from USA, Japan, and Germany, which Taiwanese fastener manufacturers do not produce and the volume is basically not too much. The total annual fastener import volume of Taiwan from the world in 2013-2015 was about 18-22 thousand tons. If calculated by value, it was about USD 0.13-0.14 billion. Japan was the main contributor to Taiwan's fastener import and it exported about USD 65-70 thousand worth of fasteners every year to Taiwan. Other contributors to Taiwan's fastener import were Vietnam, China, Thailand, Philippines, and South Korea (however, the volumes of these countries were much lower).

Export								
Rank	Country	2013 (kg)	2014 (kg)	2015 (kg)	Country	2013 (USD)	2014 (USD)	2015 (USD)
	World	1,371,098,506	1,501,697,033	1,470,992,279	World	3,679,741,858	4,048,948,068	3,880,596,255
1	United States	505,637,832	555,453,198	546,108,965	United States	1,313,807,599	1,447,361,270	1,450,778,261
2	Germany	128,611,411	142,884,207	136,122,818	Germany	337,657,846	375,886,200	336,411,067
3	Netherlands	76,652,277	81,869,436	81,760,831	Netherlands	202,051,596	223,378,480	197,018,892
4	U. K.	54,516,214	67,758,478	69,562,893	Japan	229,134,466	212,378,935	194,533,227
5	Japan	74,876,154	68,728,882	65,476,799	U. K.	143,726,891	180,719,632	178,366,592
6	Canada	49,070,165	45,688,043	48,611,896	Canada	120,435,890	117,018,549	126,340,252
7	Italy	33,389,729	38,482,125	35,188,254	China	112,548,024	122,980,282	110,656,184
8	Poland	31,856,094	39,582,609	31,093,106	Sweden	78,398,990	98,458,251	88,785,052
9	Sweden	26,297,561	33,456,841	30,940,353	Italy	76,797,422	92,178,290	81,573,152
10	France	23,165,620	29,488,861	27,390,219	Mexico	56,233,878	66,415,507	73,567,185



Source: EU trade export helpdesk

From 2013 to 2015, the annual fastener export of Taiwan to the world (by volume) landed at 1.37 million tons to 1.51 million tons and was USD 3.6-4.1 billion (by value). The period from 2013 through 2014 showed a growing trend, but the period from 2014 through 2015 was a decline. Top 5 largest fastener export destinations of Taiwan were USA, Germany, Netherlands, Japan, and UK (altogether representing more than 60% of Taiwan's total fastener export value and USA represented nearly 40%). The data revealed that Taiwanese fastener export was mainly for satisfying the demand in Europe, USA, and Japan (America: 40%, Europe: 30%) and did not focus too much on other emerging markets. However, according to the table, it showed that Mexico was already listed in the top 10 countries in the export value of Taiwan's fasteners. As Taiwanese fastener suppliers have been aggressively expanding their business to the development of automotive fasteners in recent years and Mexico shows substantial automotive fastener demand as well, in the future Mexico will be very likely to become the stepping stone for Taiwanese fastener companies to export to other Latin American countries.

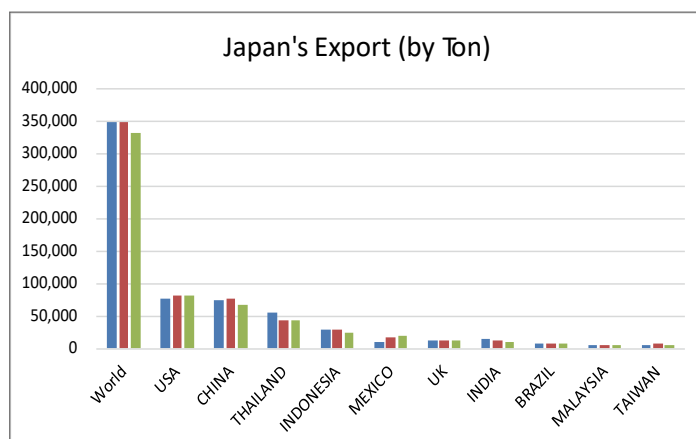
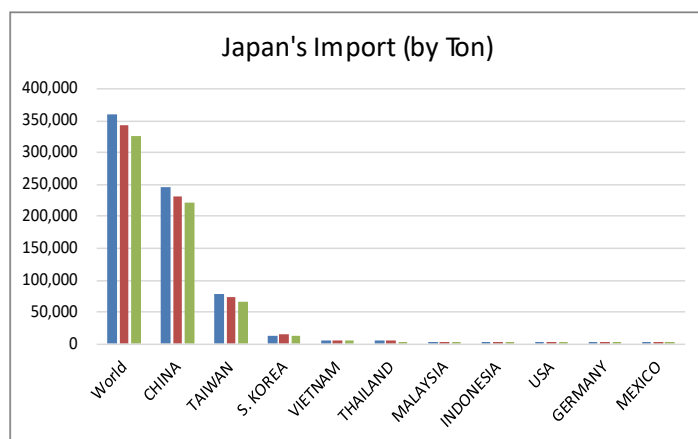


in descending order according to volumes of 2015

Japan's fastener import in 2013-2015 was mainly from China, Taiwan, South Korea, Vietnam, as well as Thailand, Malaysia, and Indonesia. China and Taiwan represented the greatest proportion of the total fastener import, almost 90% of its total annual import volume (0.34 million tons). You can even say almost all fastener import was from China and Taiwan. However, as the economic conditions of Japan in the past 3 years were not good enough to boost the demand and Japanese local suppliers could already satisfy most of the fastener demand in Japanese market, its import volume decreased year after year.



Import							
Japan P.C. Code 61703 Nails, Bolts, Nuts, Etc.							
Rank	Country	Metric Tons			1,000 Yens		
		2013	2014	2015	2013	2014	2015
	World	360,116	343,110	324,699	106,198,444	111,830,372	113,784,970
1	China	245,113	230,097	220,880	45,581,160	46,526,490	46,548,736
2	Taiwan	78,104	72,433	67,031	24,992,189	25,608,663	26,666,037
3	S. Korea	13,931	15,542	13,405	4,789,891	5,716,219	5,431,679
4	Vietnam	5,189	6,464	6,833	1,148,312	1,452,882	1,639,463
5	Thailand	6,333	4,630	4,381	2,992,089	2,690,741	2,939,342
6	Malaysia	2,748	3,389	3,797	1,150,103	1,468,313	1,778,994
7	Indonesia	2,764	3,481	2,517	1,346,028	1,638,487	1,317,100
8	USA	2,353	2,551	2,282	16,749,143	17,817,075	19,082,695
9	Germany	946	1,347	1,204	2,074,806	2,455,654	2,452,920
10	Mexico	398	996	470	185,773	486,693	332,613



■ 2013 ■ 2014 ■ 2015

Export							
Rank	Country	Metric Tons			1,000 Yens		
		2013	2014	2015	2013	2014	2015
	World	349,541	349,107	332,301	301,124,695	304,227,287	302,688,016
1	USA	78,223	82,194	81,347	66,744,560	71,390,104	75,246,059
2	China	74,970	76,385	68,677	68,541,742	69,260,182	65,372,338
3	Thailand	55,365	43,901	43,819	45,715,154	38,071,428	38,901,395
4	Indonesia	29,901	30,165	23,636	23,741,444	24,677,611	20,214,405
5	Mexico	11,339	18,176	18,967	8,012,157	13,119,220	15,749,552
6	UK	13,838	13,511	12,507	8,612,074	8,236,254	7,717,824
7	India	15,923	13,054	11,253	12,423,578	10,547,548	8,970,115
8	Brazil	8,382	7,921	7,668	7,668,035	7,330,340	7,496,641
9	Malaysia	6,180	6,149	6,220	5,822,170	6,161,711	6,678,000
10	Taiwan	5,600	6,951	6,060	4,356,662	5,297,753	5,021,080

Source: Ministry of Finance, Japan

In the past 3 years, Japanese fasteners were mainly exported to USA, China, Thailand, Indonesia, and Mexico, where many Japanese investors went to set up their own factories (e.g., the car manufacturing plants invested by Japanese Toyota or Nissan). Its annual export volume on average landed at 0.3-0.35 million tons, only slightly lower than the volume of the EU. Nearly 50% of fasteners were exported to USA and China. In addition, Thailand, Indonesia, and Mexico were all major countries which Japanese fastener exporters had paid more attention to. □