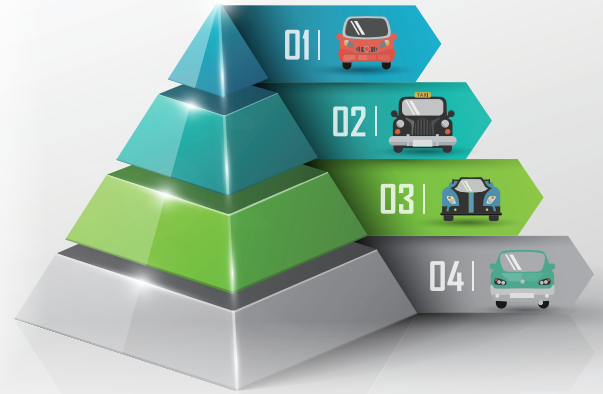


# Global Automotive Fastener Import & Export Statistics & Trend Analysis

by Tanya Shih, Fastener World Inc.



## Global Automotive Capacity to Reach 100 Million Units 4 Years in Advance

Early this year, the French investment consulting firm Euler Hermes released a research report reading that the global automotive capacity will break 100 million units by 2017. This is 4 years ahead of the time frame forecast by IHS Automotive, an American automotive statistics provider. Although there are different versions of forecasts, all of them point to the “growth” trend. These positive forecasts encourage automotive and peripheral manufacturing industries to make investments.

If we look at the market conditions in particular, over the past few years the car production has shifted from Europe, the U.S., Japan, towards emerging markets. In addition to changes in car production sites, car markets have shown changes, too. China, for instance, is not only the most important car producing country in the world, but also the world’s most important car consuming market regarded by global carmakers. Thus, China has the highest car production and sales records in emerging markets. Sources point out that China’s car production will reach 40 million units by 2020. If we match this with the global car market forecast, China’s capacity takes one fourth of the global car production. In response to that, China Association of Automotive Manufacturers (CAAM) announced its vision to turn China into an automotive giant. According to statistics, China’s car production rose 149% and India’s rose 72% during 2007 and 2013.

Corresponding to the global industry trend, Taiwanese automotive industry does not fall behind. Taiwan Institute of Economic Research (TIER) released an industry performance report forecasting the industry performance for the upcoming 6 months. Outperforming the service and construction sectors, last year the manufacturing sector became a critical sector driving Taiwan’s national competitiveness. The automotive and related component industries demonstrate modest-to-optimistic performance.

As the aforesaid, the booming automotive market vitalizes Taiwanese automotive industry. Taiwan is an important automotive fastener exporter for the world. This article will analyze the export figures of Taiwanese automotive fasteners and analyze the dynamics of the global automotive fastener demand based on the figures of primary importing countries to locate the next key partner country for Taiwanese automotive fastener makers.

Note: There are numerous types of fasteners used for automotive applications. This article will only focus on coach screws within HTS Code 73181100000.

## Global Automotive Demand to Reach USD 26 Billion by 2018

According to the Freedonia Group’s forecast released in November 2014, the global industrial fastener demand will grow 30% to USD 93.8 billion by 2018, among which global automotive fastener demand accounts for 27.8% (USD 26 billion). The automotive fastener demand from Asia Pacific is the strongest in particular, taking as much as half (USD

Table 1. Global OEM Automotive Fastener Demand

Unit: Million USD

Particulars	2003	2008	2013	2018(f)	2023(f)
Global Industrial Fastener Demand	39250	65450	72000	93800	123500
Proportion of Automotive Fasteners (%)	29.9	27.6	28	27.8	27.1
Global Automotive Fastener Demand	11750	18250	20150	26050	33450
North America	3555	3990	4530	5175	5980
U.S.	2670	2700	3055	3440	3870
Canada & Mexico	885	1290	1475	1735	2110
Western Europe	3380	4345	3570	4375	5060
Asia Pacific	3785	6815	9100	12000	16200
China	552	1515	3530	5470	7980
Japan	2040	3120	2660	2555	2665
Other Regions in Asia Pacific	1193	2180	2910	3975	5555
Latin America	340	941	1085	1625	2320
Eastern Europe	460	1305	1330	1915	2475
Africa & Middle East	230	654	535	960	1415

Source: Research findings from the Freedonia Group, Inc. (Released in November 2014)

12 billion) of the global demand, followed by North America (USD 5.1 billion), Western Europe (USD 4.3 billion), Eastern Europe (USD 1.9 billion), Latin America (USD 1.6 billion), Africa and the Middle East (USD 900 million).

In other words, the automotive fastener demand of Asia Pacific (1st place) is 2.3 times more than the demand of North America (2nd place). The reason that Asia Pacific can generate such a high proportion of demand is because global car makers leverage advantages in cost and demographic dividend and choose to invest in Asia Pacific countries such as China, Thailand, Indonesia, and India. If we look at the figures in further detail, 2018 could be a critical year in which China’s automotive fastener demand may exceed North America for the first time.

## Taiwanese Automotive Fastener Export Grew 28% in 2014

### Stable Demand Growth in N. America, Demand Fluctuations in Europe, Strongest Demand in Africa & the Middle East

In comparison to the Freedonia Group’s research findings, **Figure 1** clearly indicates that North America and Europe are the two critical export destinations of Taiwanese automotive fasteners, followed by Asia, the Middle East & Near East, South America, Oceania, Africa, and Latin America. Among the destinations, North America takes as high as 59%, and Europe takes 21%,

both of which outnumbering other regions in a great deal. This explains why Taiwanese automotive fasteners can be widely admired by the two largest automotive markets, namely the U.S. and Europe.

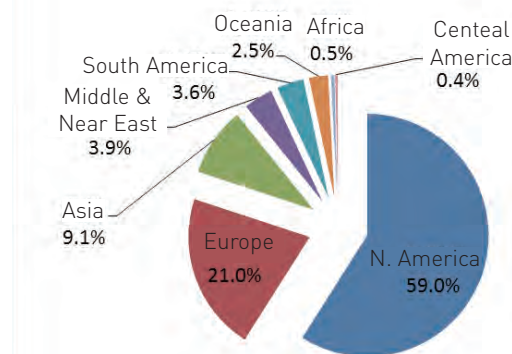


Figure 1. Export Proportion of Taiwanese Automotive Screws

As shown in **Table 2**, in 2014 Taiwanese Automotive fastener export grew 28% to USD 9.43 million. Although this value is a little lower than USD 10.79 million recorded in 2011, the export figures for the recent 3 years indicate that Taiwanese automotive fastener export is growing steadily. It is believed that the figures will exceed the record of 2011 by 2015. If we analyze the data further, North America is the top partner of Taiwanese automotive fastener export, and additionally, its demand has been growing for 5 straight years. In 2014 North America purchased a total of USD 5.56 million worth of automotive fasteners from Taiwan, up 30.6% from the previous period. Refer to **Figure 2** for the export trend.

Table 2. Export Values of Taiwanese Automotive Fasteners from 2010 to 2014 (by Continent)

Unit: USD

Rank	Continent	2010	2011	2012	2013	2014	13/14 Change (%)
1	N. America	1,135,325	3,441,160	4,157,401	4,262,104	5,569,536	30.67
2	Europe	508,417	3,864,766	2,218,857	1,476,459	1,986,797	34.56
3	Asia	644,277	2,267,842	1,762,235	882,837	863,372	-2.20
4	Middle & Near East	22,400	96,600	73,281	140,308	364,711	159.93
5	S. America	45,420	500,008	277,174	270,213	339,033	25.46
6	Oceania	46,168	273,188	201,375	225,890	238,906	5.76
7	Africa	230,303	334,920	34,055	57,093	43,366	-24.04
8	Central America	1,196	12,458	15,862	50,847	33,712	-33.69
<b>World</b>		<b>2,633,506</b>	<b>10,790,942</b>	<b>8,740,240</b>	<b>7,365,751</b>	<b>9,439,698</b>	<b>28.15</b>

HS Code : 7318110000 (coach screws, of iron or steel) / Source: Bureau of Foreign Trade

In contrast, although Europe outperformed North America by a demand growth of 34.5% in 2014, it is not hard to find that European demand has in recent years gone up and down frequently and drastically. Taiwanese fastener makers are strengthening their niche in purchase by improving and completing manufacturing techniques, quality, service, and international certification. This will help the sales and growth of Taiwanese automotive fasteners sold to Europe. It will be at least 3 years before the performance returns to the level in 2011.

Notably, the Middle and Near East marked 159% of growth that outstood other regions, and has grown for 5 consecutive years (2010-2014), as North America has done.

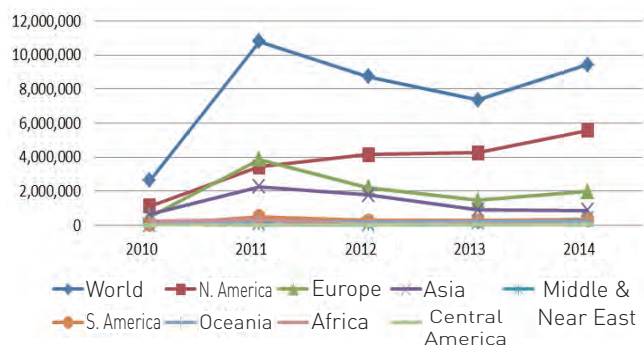


Figure 2. Export Trend of Taiwanese Automotive Fasteners

### Germany, a Critical Export Destination, Dropped from 3rd to 6th Place; Automotive Fastener Demand Emerged in Italy and Turkey

According to the data from Bureau of Foreign Trade (Taiwan), in 2014 there were a total of 50 countries purchasing automotive fasteners from Taiwan. The statistics of top 20 demand countries are displayed in **Table 3** for a more precise analysis. We can see that the total demand of top 20 countries accounts for 90% of the total export of Taiwanese automotive fasteners!

Let's look at the performance of individual market demands. The U.S. and Canada are the top one and 2nd largest export destinations of Taiwanese automotive fasteners. Specifically the annual growth rate of the U.S. is 35%. In 2014 the U.S. and Canada respectively purchased USD 4.92 million and USD 630 thousand worth of automotive fasteners from Taiwan. **Table 3** also indicates that Germany performed lower than expected with a decline of 29.4% in 2014, dropping from the 3rd to 6th place. This basically co-relates to ups and downs of European countries' demand performance, and corresponds to Europe's zigzagging demand curve.

On the other hand, the countries that purchase at more than 100% growth margin from Taiwan are Italy (443%), Turkey (226%), Iran (146%), and Denmark (159%). Those who want to gain new customers of automotive fasteners may as well focus marketing on those countries.

After examining the export figures, the following paragraphs will look at the automotive fastener purchase of the U.S. and Canada (the top two demand countries), and analyze the market share of Taiwanese automotive fasteners as well as other growth possibilities.

Table 3. Top 20 Export Destinations of Taiwanese Automotive Fasteners

Unit: USD

Rank	Country	2012	2013	2014	13/14 Change (%)
1	U.S.A	3,691,066	3,628,508	4,929,855	35.86
2	Canada	466,335	633,596	639,681	0.96
3	Belgium	806,990	284,997	557,630	95.66
4	Netherlands	219,629	209,252	337,587	61.33
5	UK	394,987	238,787	277,325	16.13
6	Germany	347,108	389,640	274,902	-29.44
7	Brazil	226,927	216,223	269,827	24.79
8	Indonesia	176,738	239,893	231,792	-3.37
9	Italy	30,825	40,210	218,517	443.43
10	Japan	228,667	206,799	210,859	1.96
11	New Zealand	151,094	151,007	189,601	25.55
12	Iran	18,158	70,836	174,436	146.25
13	France	188,809	129,063	169,819	31.57
14	Turkey	4,553	41,641	135,946	226.47
15	Thailand	332,379	146,006	115,389	-20.97
16	Singapore	106,800	53,019	102,834	93.95
17	Sweden	150,053	136,221	59,173	-56.56
18	S. Korea	24,445	45,820	53,513	16.79
19	Australia	50,281	74,883	49,305	-34.15
20	Denmark	16,734	18,733	48,696	159.94
Top 20 Total		7,632,578	6,955,134	9,046,687	-
World		8,740,240	7,365,751	9,439,698	28.15

HTS Code: 73181100000 (coach screws, of iron or steel) / Source: Bureau of Foreign Trade (Taiwan)

Table 4. Import Sources of Automotive Fasteners for the U.S.

Unit: USD

Rank	Country	2010	2011	2012	2013	2014
1	China	13,472,958	14,882,973	15,774,350	12,429,857	16,572,295
2	Taiwan	2,128,791	2,529,065	3,269,299	2,717,095	4,241,910
3	Czech Republic	939,191	2,362,947	1,189,661	2,288,809	1,461,344
4	Germany	48,757	57,848	37,376	676,310	495,478
5	S. Korea	0	0	26,056	156,296	253,457
6	Canada	38,104	322,597	58,236	57,001	163,706
7	India	8,262	35,360	20,582	0	104,556
8	Italy	0	7,528	49,601	61,216	44,289
9	Netherlands	0	3,975	2,382	2,731	21,076
10	Singapore	2,238	2,665	0	3,240	20,563
11	Thailand	230,184	314,364	3,630	7,560	14,420
12	Japan	0	13,811	10,237	2,366	13,203
13	Sweden	8,187	0	10,696	2,065	12,901
14	Poland	2,313	2,116	6,166	47,718	12,738
15	Vietnam	0	2,740	0	4,916	10,988
16	Lithuania	0	0	0	0	6,190
17	France	3,538	0	2,280	5,905	5,594
18	New Zealand	0	0	0	0	4,000
19	Malaysia	0	3,218	3,267	0	2,743
20	UK	53,701	0	5,867	24,372	2,262
World		16,936,224	20,547,966	20,478,519	18,510,012	23,463,713

HS Code: 73181100000 (coach screws, of iron or steel) / Source: International Trade Administration, U.S. Department of Commerce

### Primary Import Sources of Automotive Fasteners for the U.S.: China, Taiwan, Czech Republic

As shown in **Table 4** and **Figure 3**, the U.S. purchased automotive fasteners mainly from China, Taiwan, and Czech Republic. China exported around USD 16.57 million (accounting for 70.6%) worth of automotive fasteners to the U.S.; Taiwan exported USD 4.24 million (18%) worth of automotive fasteners; Czech Republic exported USD 140 thousand (6.2%) worth of fasteners.

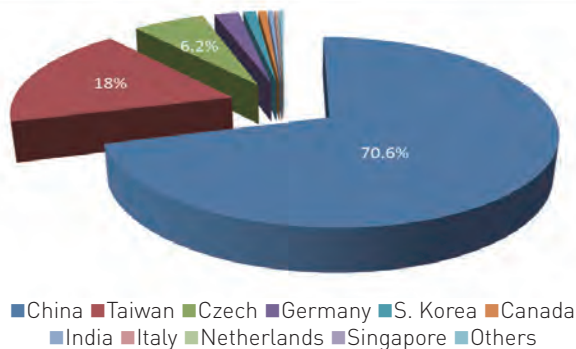


Figure 3. Primary Import Sources of Automotive Fasteners for the U.S.

### Primary Import Sources of Automotive Fasteners for Canada: The U.S., China, Taiwan

As shown in **Table 5** and **Figure 4**, Canada purchased automotive fasteners primarily from the U.S., China, and Taiwan. The U.S. exported around USD 2.75 million (accounting for 75%) worth of automotive fasteners to Canada; China exported USD 740 thousand (20%) worth of automotive fasteners; Taiwan exported USD 140 thousand (4%) worth of automotive fasteners.

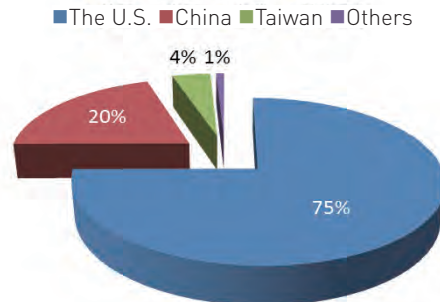


Fig 4. Import Sources of Automotive Fasteners for Canada

Table 5. Import Sources of Automotive Fasteners for Canada

Unit: USD

Rank	Country	2010	2011	2012	2013	2014
1	The U.S.	988,701	1,021,322	1,726,754	1,622,077	2,759,523
2	China	351,896	306,346	1,429,960	716,918	744,353
3	Taiwan	10,489	69,574	80,502	152,480	149,506
4	Canada (Re-import)	47	1,167	3,979	1,795	5,779
5	Germany	5,428	2,457	314	2,967	5,178
6	Japan	227	560	976	1,390	4,253
7	Denmark	-	27	-	-	4,129
8	Spain	500	54,195	113	643	2,801
9	S. Korea	262	53	22	335	2,439
10	UK	6,425	1,124	65,820	7,668	1,902
11	Thailand	65	49	2,136	2,181	1,434
12	Italy	41	842	16,119	41	1,221
13	Chile	-	-	-	-	346
14	India	62,735	6	2,243	2,260	209
15	Netherlands	-	33	-	16	187
16	Mexico	5,699	-	-	-	180
17	Israel	30	383	174	171	88
18	France	4	6,569	108,675	-	81
19	Belgium	17	-	120	-	73
20	Switzerland	-	-	111	-	31
21	Yemen	-	-	-	-	17
22	Sweden	-	-	12	4,668	13
23	Uganda	-	-	-	-	1
24	Poland	-	-	-	6,256	-
25	Norway	13	-	-	1,484	-
26	Vietnam	-	144	-	67	-
27	Austria	200	-	-	35	-
28	Czech Republic	36	-	-	17	-
29	Others	214	262	44	-	-
	<b>World</b>	<b>1,433,029</b>	<b>1,465,113</b>	<b>3,438,074</b>	<b>2,523,469</b>	<b>3,683,744</b>

## Conclusion

In summary, over the long term the overall demand for automotive fasteners remains a stable growth, except for some ups and downs in individual countries owing to local political and economic conditions. Basically, the automotive fastener industry still has large room for growth while the world's new car registrations in respective countries haven't been saturated yet.

In order to improve car manufacturing technology and grasp more market shares in the global market, carmakers and assembly plants set fasteners as one of their primary purchase targets that have to be handled carefully. Taiwanese fastener industry has a complete supply chain and continuously improves its R&D capability. With more and more fastener companies, which focus on the development of high value added products, automated manufacturing, and scale expansion of corporations,

coming into place, Taiwanese fastener industry has gradually turned from a world factory into a leading R&D center of the world. We can observe this and find proofs from the export destinations of Taiwanese automotive fasteners.

Based on the trading statistics, this article suggests that automotive fastener companies give it a try and target steadily growing markets like Netherlands, Brazil, New Zealand, Iran, or potential markets with leaping growth such as Italy and Turkey, in addition to Europe and U.S. markets. The overall automotive industry looks optimistic. If your company has the transition completed earlier than your industry peers, you will get orders earlier. The market keeps shifting and changing, but it is still there. We just have to diversify risks and adjust sales proportions appropriately. It is not impossible to reach another record high result with the automotive fastener business. ■

---