

## Win the Definitive Battle in the Four Emerging Countries Analysis on Fastener Imports/Exports of India, Mexico, Russia and Brazil



Data sources: Bureau of Foreign Trade / Tables compiled by the author / Ranking based on the 2014 statistics by Dean Tzeng, Fastener World Inc.

### The Emerging Markets, the Next Decisive Battlefield

In the analysis article on global automotive production and sales in the previous issue (Issue 152), we have come to a conclusion that the presence of major automotive makers in the emerging countries has become increasingly apparent and concentrated. One can imagine that this will drive the flow of fastener demand. The fastener markets in the advanced countries in Europe and North America have been more saturated than ever while the emerging markets, with the population and demand for automotives, construction, machinery and equipment rapidly growing, continue to lure investment from the developed countries. In a most recent example, China, as a highly promising emerging country and with its national leader Xi Jinping eyeing Southeast Asia as the next decisive region, is accelerating its efforts in promoting the "Asian Infrastructure Investment Bank (AIIB)" this year. It is well known that AIIB is the best platform to raise funds for building an emerging market centered on the Maritime Silk Route. When the idea of AIIB was announced, an impressive number of countries (especially the European and Southeast Asian countries) flocked in to apply for membership. These countries rushed in order to claim a spot and grab the investment opportunities in China and Southeast Asia. In addition to AIIB, the BRICS countries have created the "BRICS Development Bank" (also known as "New Development Bank BRICS") to provide financial support to the infrastructure and sustainable development projects in the member countries and

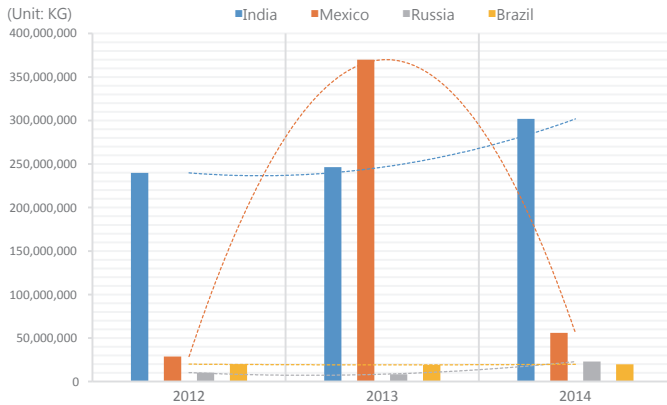
developing countries. A massive influx of funds into the emerging markets in Asia and Latin America can be expected when the AIIB and the New Development Bank BRICS begin their formal operation. This involves not just the mushrooming construction projects but also automotive, high-speed railway, airports, etc., which are closely related to fasteners. When these sectors are developing explosively in the emerging countries, the sales and foreign exchange revenues from the fasteners will be more impressive. The emerging markets are global big shots waiting for the aspirators around to develop. Therefore, this article especially focuses on the flows of fasteners demand in the BRIC countries over the past three years and looks into four most representative countries in emerging regions: Latin America (Mexico, Brazil), Russia, Southeast Asia (India) selected as the main objects for trend analysis.

### Total Annual Fastener Imports and Exports of Four Emerging Countries (India, Mexico, Russia and Brazil)

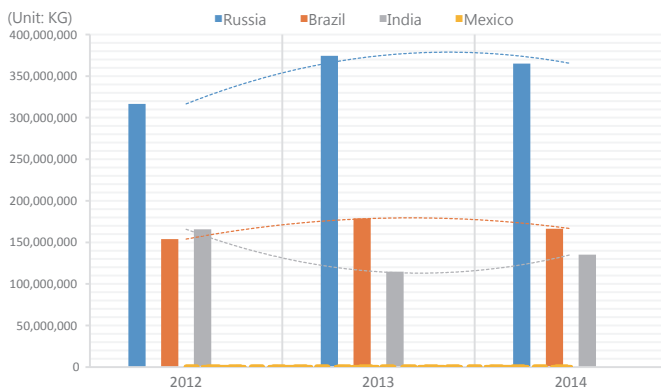
Over the past three years, the total volume of India's fastener export kept staying over 200,000 tons and showed a steady upward trend. The export growth rate jumped 22.5% to reach 300,000 tons in 2014. The export value also showed a significant growth with the growth rate increasing by 6.5 percentage points in 2013 to reach 26.2% and in 2014 the growth rate reached 32.6%, totaling USD 980 million. Between 2012 and 2014, the total volume of India's fastener import was maintained at over 100 thousand tons, rising from a 30.8% decline in 2013 to an increase of 17.8% in 2014 and totaling 135 thousand tons. Despite an apparent recovery, the figure was

Annual Fastener Export Volume of Select Countries (Unit: KG)						Annual Fastener Import Volume of Select Countries (Unit: KG)					
Rank	Country	2012	2013	2014	2014/2013 YOY Growth (%)	Rank	Country	2012	2013	2014	2014/2013 YOY Growth (%)
1	India	239,852,965	246,357,081	301,823,244	22.51	1	Russia	316,563,344	374,411,204	365,176,539	-2.47
2	Mexico	28,799,954	369,824,277	56,074,649	-84.84	2	Brazil	153,900,128	178,939,388	166,443,767	-6.98
3	Russia	10,351,439	8,452,191	22,935,389	171.35	3	India	165,813,348	114,649,010	135,119,466	17.85
4	Brazil	20,020,876	19,205,249	19,930,573	3.78	4	Mexico	N/A	N/A	N/A	N/A
Annual Fastener Export Value of Select Countries (Unit: Millions USD)						Annual Fastener Import Value of Select Countries (Unit: Millions USD)					
Rank	Country	2012	2013	2014	2014/2013 YOY Growth (%)	Rank	Country	2012	2013	2014	2014/2013 YOY Growth (%)
1	India	587.15	741.44	983.66	32.67	1	Mexico	2,169.57	2,293.35	2,499.74	9
2	Mexico	138.11	142.58	171.17	20.05	2	Brazil	878.42	995.48	907.55	-8.83
3	Brazil	133.70	122.49	120.57	-1.57	3	Russia	710.24	797.59	756.99	-5.09
4	Russia	54.55	61.61	82.45	33.84	4	India	743.83	727.15	721.79	-0.74

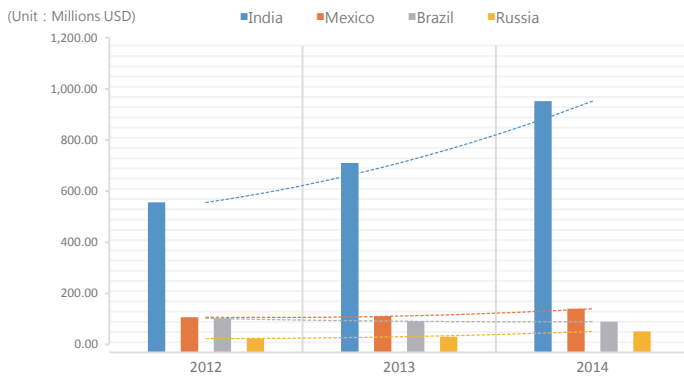
**Total Fastener Export Volume of Select Countries (Annual)**



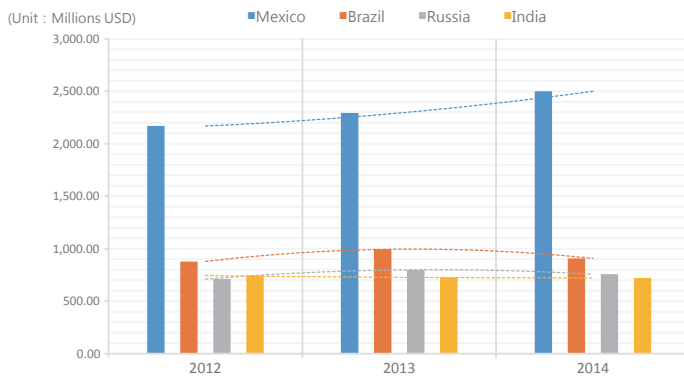
**Total Fastener Import Volume of Select Countries (Annual)**



**Total Fastener Export Value of Select Countries (Annual)**



**Total Fastener Import Value of Select Countries (Annual)**



lower than the 2012 record of 165 thousand tons, showing a decreasing trend as a whole. The imports remained flat of USD 700 million with only 1 to 2% fluctuations.

The total volume of Mexico’s fastener exports showed a strong fluctuation, once soaring 13 times from 28 thousand tons to 369 thousand tons and then plunged to 56 thousand tons and saw a decline rate as high as 84.8% in 2014. The future room for growth is still expected to be limited. The growth of exports remained significant, up from 3.2% in 2013 to 20.05% in 2014, totaling US\$ 170 million. However, the future growth may be limited owing to the declining trend in the total exports. The country’s imports showed a steady growth with the growth rate up from 5.7% in 2013 to 9% in 2014, settled at US\$ 2.49 billion, surpassing the US\$ 2 billion mark for three consecutive years.

The total volume of Russia’s fastener exports surged after falling, which is opposite to Mexico’s situation as in deep plunge after dramatic increase, falling to 8 thousand tons from 10 thousand tons and then increasing by 171% in 2014 to reach 22 thousand tons. It remains to be seen whether the total export volume this year will fluctuate strongly. The export value saw a fair growth rising by 20 percentage points from 12.9% in 2013 to 33.8 % in 2014, totaling USD 82 million. The export value is expected to reach the USD 90 million or even USD100 million mark if it maintains a growth rate of more than 10% this year. Russia’s total fastener import volume rose by 18.2% in 2013 and dropped slightly by 2.47% in 2014, totaling 365 thousand tons. Generally speaking, the growth still exceeds decline. The import value fluctuated, growing by 12.2% in 2013 and falling by 5.09% in 2014 to total US\$ 750 million. The growth momentum of Russia’s imports in 2014 was limited.

Brazil’s fastener exports generally remained flat with a slight decline, amounting to 20 thousand tons with fluctuations of approximately 3%. The export value was not spectacular; however, it showed signs of rebound as the decline of 8.3% in 2013 was reduced to 1.5% in 2014. The exports are expected to return to positive growth this year. The total volume of Brazil’s fastener imports in 2013 significantly increased by 16.2% in 2013 and fell by 6.98 % in 2014 to amount to 166 thousand tons as the growth trend remains unstable. The similar trend was found in the import value which, after increasing by 13.3% in 2013, fell by 8.83% in 2014. The figure once almost reached US\$ 1 billion and dropped to the minimum level of USD900 million. Brazil’s import growth momentum was less powerful.

In general, India had the most powerful performance of fastener exports among the four emerging countries, showing a significant and stable growth in both volume and value. India’s fasteners, despite their low R&D elements and the fact that they are mostly standard types, have shown an increasing trend in exports year by year. The price and cost advantages have made it a supplier with a global market share not to be overlooked in the future. Brazil’s performance was flat with little ups and downs. This, however, is also a warning sign, as there was no major

breakthrough in Brazil's fastener export. Mexico's total volume and value are only second to India; its performance, however, is not more optimistic than Russia's growth momentum. Even there is still a gap between Russia and Brazil, the ranking of Mexico, Russia and Brazil may still be reshuffled.

By looking at the import and export data together, the total import volumes of fasteners in India, Russia and Brazil far exceed the total export volumes while the import values of Mexico, Russia and Brazil are much larger than the export values. In other words, fasteners of the four major emerging countries are mainly imported, which means that they purchase fasteners from overseas and this provides great supply opportunities to other countries (especially European countries and the US). Although fastener exports of the four emerging countries are far below the imports, readers should note that India's fastener export volume and value are rising sharply, which indicates that India's fastener exports are becoming stronger and should not be underestimated in the future, though they are still much lower than those of Taiwan, Japan, China, and the United States.

## Import/Export Details of Four Emerging Countries

After an overview of the import and export conditions, let's take a look at the import/export details of each of the four emerging countries.

### India

Among India's top 15 fastener export destinations by volume in 2014, aside from the United States, European countries accounted for 53 % (8 countries) and the Arabian Peninsula and African countries took up 40% (6 countries), showing that the Indian exports were focusing on advanced European and American countries and the two emerging markets of Arab Peninsula and Africa. The top five export destinations were Germany (accounting for 20% of India's total fastener exports in 2014), United Arab Emirates (14.7%), the United States (11.6%), the United Kingdom (10.2%), Saudi Arabia (6.5%). Among the top 15 destinations, Poland (1.5 times of growth) had the highest rate of export growth, followed by Tanzania (2.3 times) and Qatar (nearly 2 times). These countries have shown significantly increased demand for fasteners from India. In terms of export value of the same year, among the top 15 destinations, the United Arab Emirates took up the highest proportion (35.9% of India's total exports), followed by Germany (16.2%) while each of the remaining countries accounted for less than 10%. This shows that the United Arab Emirates is the main source of income for India's fastener exports.

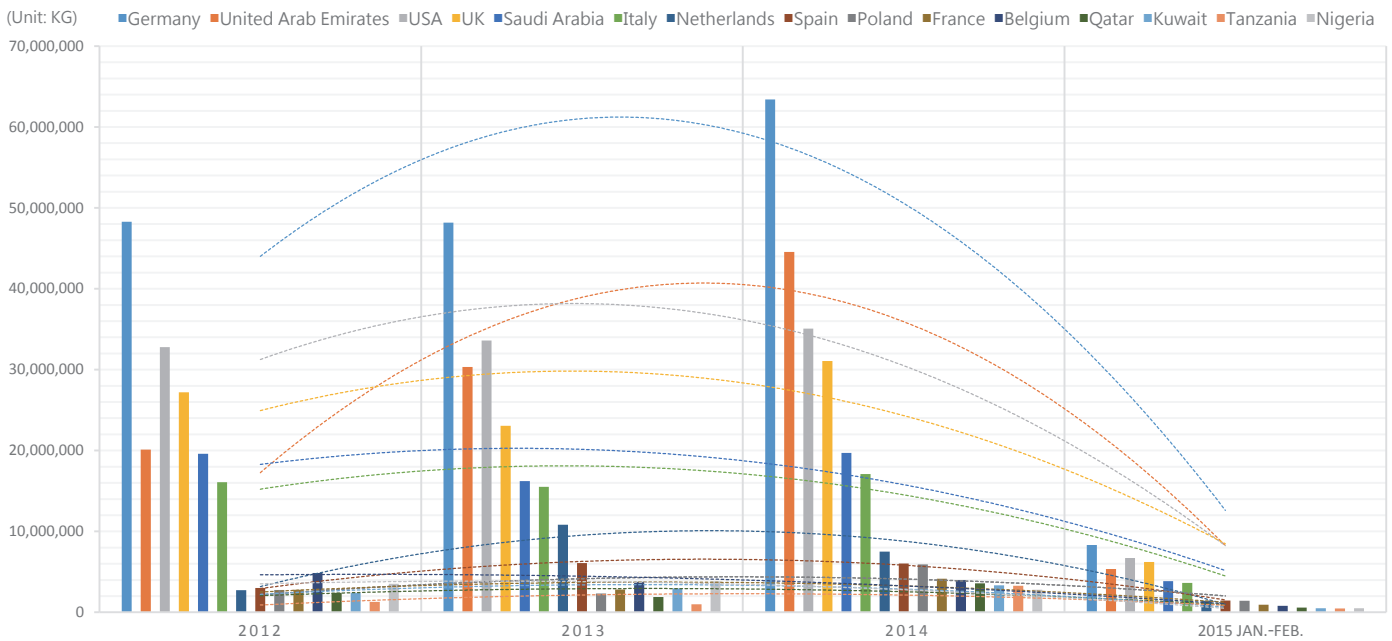
Among the top 15 source countries for India's fastener imports by volume in the same year, aside from the United States, Asia accounted for 46.6% (7 countries), Europe, 40% (6 countries) and the United States and Latin America 6.6% respectively, showing that Indian imported fasteners mainly from Europe and Asia. The top five sources for import were China (accounting for 39% of India's total fastener import in 2014), Japan

Export Volume of Indian Fasteners (Unit : KG)							Import Volume of Indian Fasteners (Unit : KG)						
Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)	Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)
<b>World</b>		239,852,965	246,357,081	301,823,244	49,242,209	22.51	<b>World</b>		165,813,348	114,649,010	135,119,466	22,674,136	17.85
1	Germany	48,281,249	48,179,554	63,418,088	8,317,042	31.63	1	China	51,578,809	38,792,260	52,827,172	10,230,134	36.18
2	United Arab Emirates	20,127,416	30,323,801	44,542,850	5,350,203	46.89	2	Japan	27,021,798	15,977,803	17,797,975	2,648,911	11.39
3	USA	32,779,743	33,590,041	35,068,200	6,701,812	4.4	3	Germany	17,089,523	10,616,372	14,413,672	2,094,076	35.77
4	UK	27,192,534	23,057,782	31,078,684	6,211,804	34.79	4	South Korea	18,278,798	12,425,242	12,158,893	1,729,731	-2.14
5	Saudi Arabia	19,594,172	16,213,218	19,709,725	3,849,244	21.57	5	Taiwan	6,221,929	5,805,072	8,417,340	1,457,905	45
6	Italy	16,086,489	15,515,818	17,102,119	3,624,797	10.22	6	Thailand	4,344,422	3,780,887	5,062,425	914,548	33.9
7	Netherlands	2,742,874	10,828,832	7,497,046	1,416,651	-30.77	7	Italy	4,778,970	3,424,995	4,883,096	443,050	42.57
8	Spain	3,000,494	6,095,522	6,019,446	1,461,486	-1.25	8	USA	10,725,071	5,532,216	4,838,256	660,984	-12.54
9	Poland	2,751,795	2,330,437	5,930,137	1,416,651	154.46	9	UK	5,001,197	3,493,195	2,983,438	707,155	-14.59
10	France	2,801,560	2,806,653	4,147,180	941,856	47.76	10	France	3,432,847	2,489,245	2,290,339	336,101	-7.99
11	Belgium	4,867,143	3,760,240	3,975,562	812,131	5.73	11	Spain	2,237,697	1,697,882	1,101,412	153,424	-35.13
12	Qatar	2,396,223	1,877,220	3,586,203	589,999	91.04	12	Singapore	1,802,206	1,052,945	930,981	137,915	-11.58
13	Kuwait	2,377,157	2,941,879	3,325,099	505,499	13.03	13	Malaysia	1,700,528	1,192,192	846,434	57,095	-29
14	Tanzania	1,289,820	982,742	3,288,977	478,581	234.67	14	Switzerland	2,204,318	1,846,466	841,369	97,103	-54.43
15	Nigeria	3,517,149	3,816,886	2,777,121	492,523	-27.24	15	Brazil	307,992	519,749	690,237	99,808	32.8

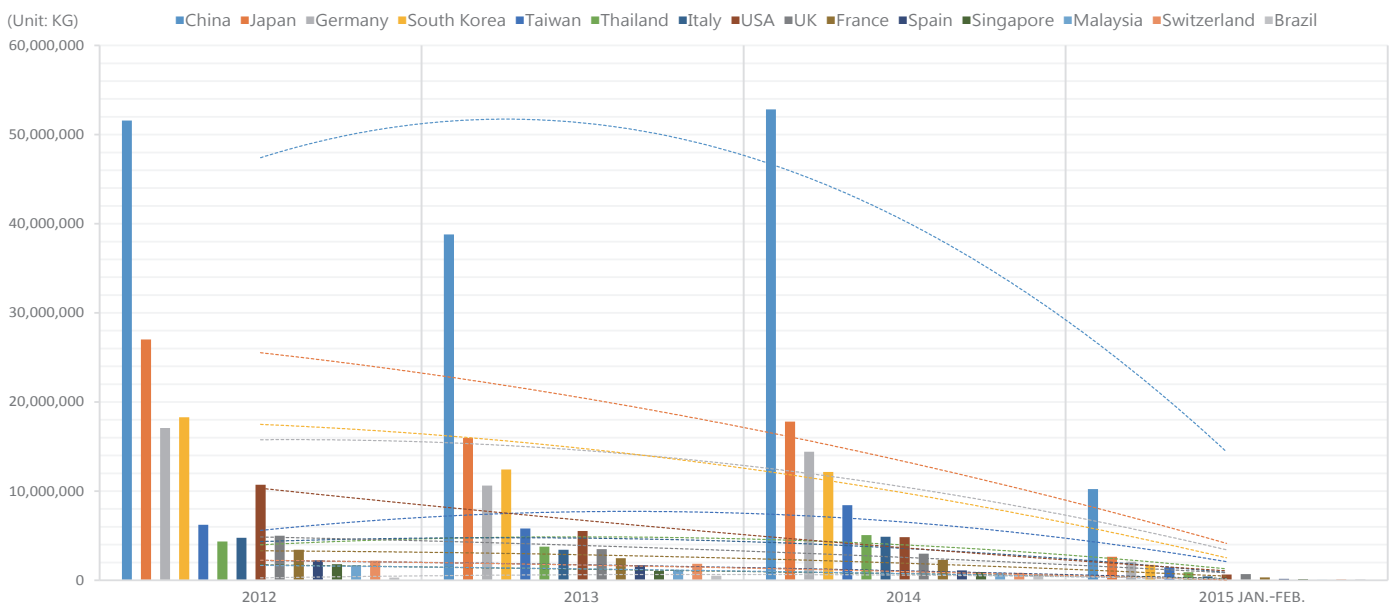
(13.1%), Germany (10.6%), South Korea (8.9%) and Taiwan (6.2%). Among the top 15 import source countries, Taiwan had the highest growth rate of imports (45%), followed by Italy (42.5%) and China (36.1%). It is worth noting that although India's highest demand for fasteners goes to China while Taiwan and Italy supplied less than one-sixth of fasteners supplied by China to India, India's demand growth rates for Italy's and Taiwan's fasteners were already higher than that of China. Another interesting phenomenon is that more than half of the top 15 largest import source countries (8 countries) showed a negative growth rate and the degree of decline was more than 10% for most of these countries. The largest decline was a plunge

nearly by half. This could mean a shift was taking place in India's import sources and the repositioning of the ranking of India's import source countries in the future. In terms of import value in the same year, among the top 15 countries of origin, Japan took up the highest proportion (accounting for 18.4% of India's total import value), followed by China (16.8%). Although India's fastener imports from Japan by volume are second only to China, Japan became the country on which India spent most for importing fasteners mainly because Japan's fasteners unit price (\$ 7.47 / kg) is higher than that of China (\$ 2.3 / kg).

### Export Volume of India Fasteners



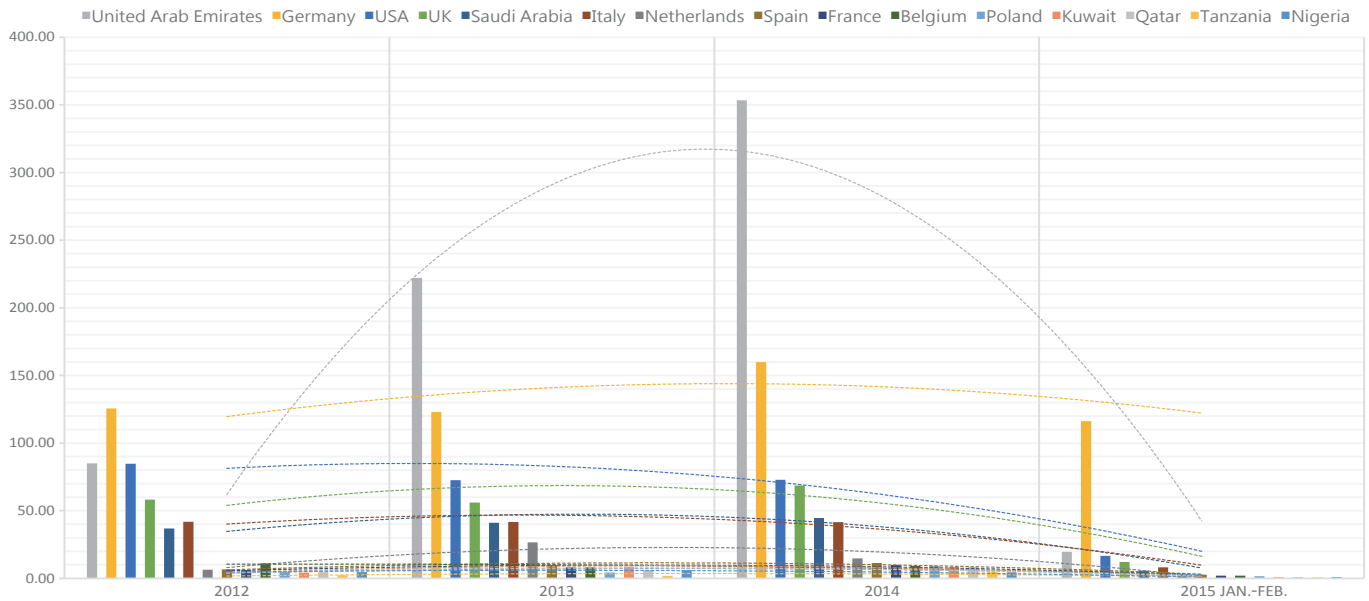
### Import Volume of India Fasteners



Export Value of Indian Fasteners (Unit : Millions USD)							Import Value of Indian Fasteners (Unit : Millions USD)						
Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)	Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)
	<b>World</b>	587.15	741.44	983.66	2,015.00	32.67		<b>World</b>	743.83	727.15	721.79	108.13	-0.74
1	United Arab Emirates	85.07	222.05	353.39	19.58	59.15	1	Japan	151.64	148.83	133.00	18.88	-10.64
2	Germany	125.56	122.93	159.77	116.15	29.96	2	China	133.86	126.03	121.67	22.55	-3.46
3	USA	84.74	72.62	72.81	16.60	0.25	3	Germany	90.40	89.64	99.08	14.42	10.53
4	UK	58.15	55.98	68.56	12.09	22.47	4	South Korea	76.90	78.19	70.32	10.42	-10.07
5	Saudi Arabia	36.78	41.13	44.61	5.60	8.46	5	USA	48.04	45.48	50.51	7.46	11.07
6	Italy	41.77	41.72	41.52	8.09	-0.48	6	UK	43.07	56.50	48.84	3.85	-13.55
7	Netherlands	6.33	26.65	14.72	2.95	-44.74	7	Thailand	18.96	20.58	32.00	5.65	55.5
8	Spain	6.70	9.89	11.36	2.67	14.84	8	Italy	28.92	26.22	31.71	3.80	20.95
9	France	6.04	8.21	9.87	2.03	20.18	9	Taiwan	25.52	24.21	27.57	4.57	13.88
10	Belgium	11.05	8.22	9.21	1.98	12.04	10	France	16.42	23.60	21.75	3.43	-7.85
11	Poland	4.72	4.35	9.18	1.55	111.14	11	Singapore	9.98	8.98	9.89	1.63	10.16
12	Kuwait	4.26	8.38	8.49	0.84	1.33	12	Malaysia	8.88	9.36	9.59	0.25	2.38
13	Qatar	4.58	5.92	8.39	0.92	41.72	13	Switzerland	14.87	11.96	9.38	1.11	-21.58
14	Tanzania	2.26	1.88	4.80	0.75	155.4	14	Spain	11.11	10.94	8.58	1.42	-21.53
15	Nigeria	4.66	6.12	4.47	1.03	-27.05	15	Brazil	1.69	3.62	5.53	1.14	52.6

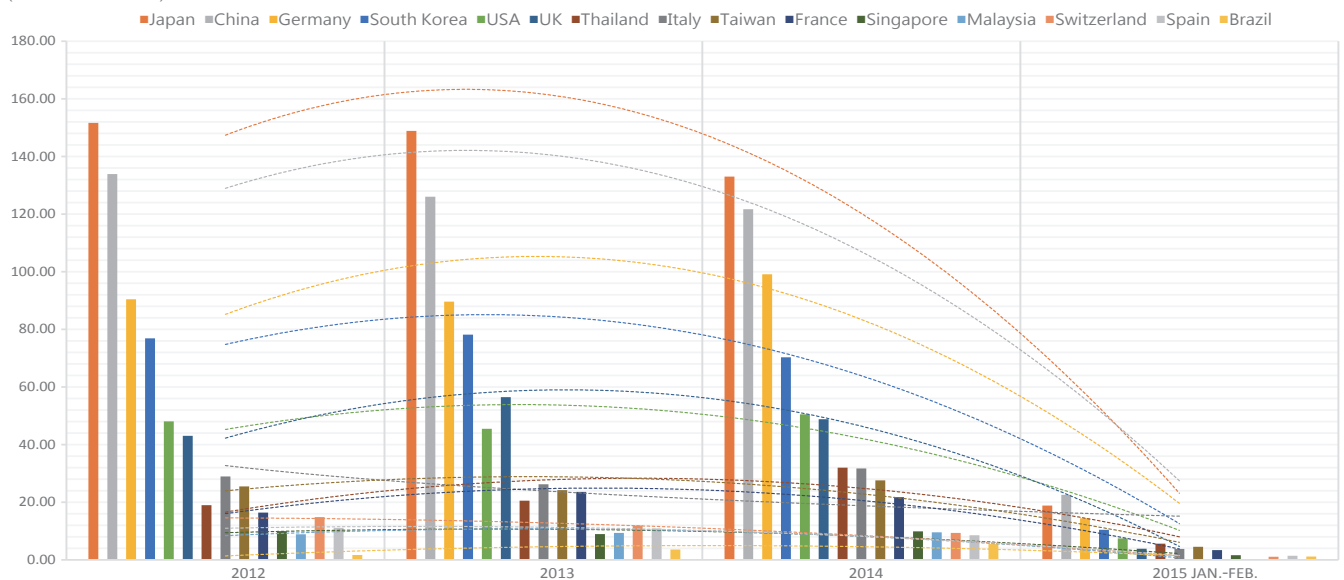
(Unit : Millions USD)

### Export Value of India Fasteners



(Unit : Millions USD)

### Import Value of India Fasteners



## Mexico

Among the top 15 destinations of Mexico's fastener exports in terms of value in 2014, aside from the United States, Latin America accounted for 53.3% (8 countries), Asia 26.6% (4 countries). The figures showed that Mexico's main export targets included the Americas and Asia. The United States took up the highest value of Mexico's fastener exports, amounting to USD 142 million, which was 30 times higher than other countries, and represented 82.9% of the total export value, indicating that the United States, as a fastener giant, was Mexico's top revenue source for fastener exports. It is worth noting that, although Mexico's exports to Latin American countries

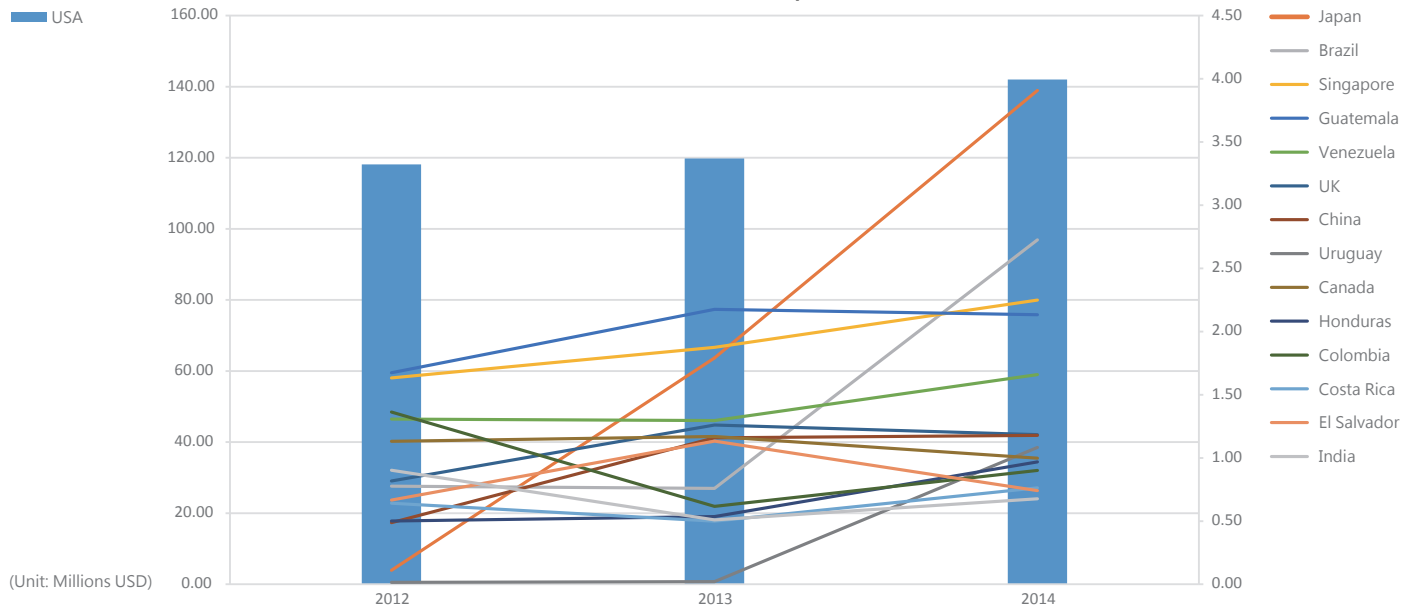
only accounted for 6.2% of the total export value, more than half of the top 15 export destinations were Latin American countries. This shows Mexico's fasteners are mainly sold to the domestic market. In overseas sales, the country concentrated almost all of its efforts on U.S. market. Mexico's fastener export strategy was "neighboring and powerful country" oriented, and allocated a small share of exports to Japan (2.2% of total exports), Singapore (1.3%), UK (0.6%), China (0.6%), Canada (0.5%), and India (0.3%).

In import value of the same year, among the top 15 countries of origin, aside from the United States, European countries accounted for 46.6% (7 countries) and Asian countries,

(Remark: The data of 2014 and 2015 Q1's export & import volume are unavailable)

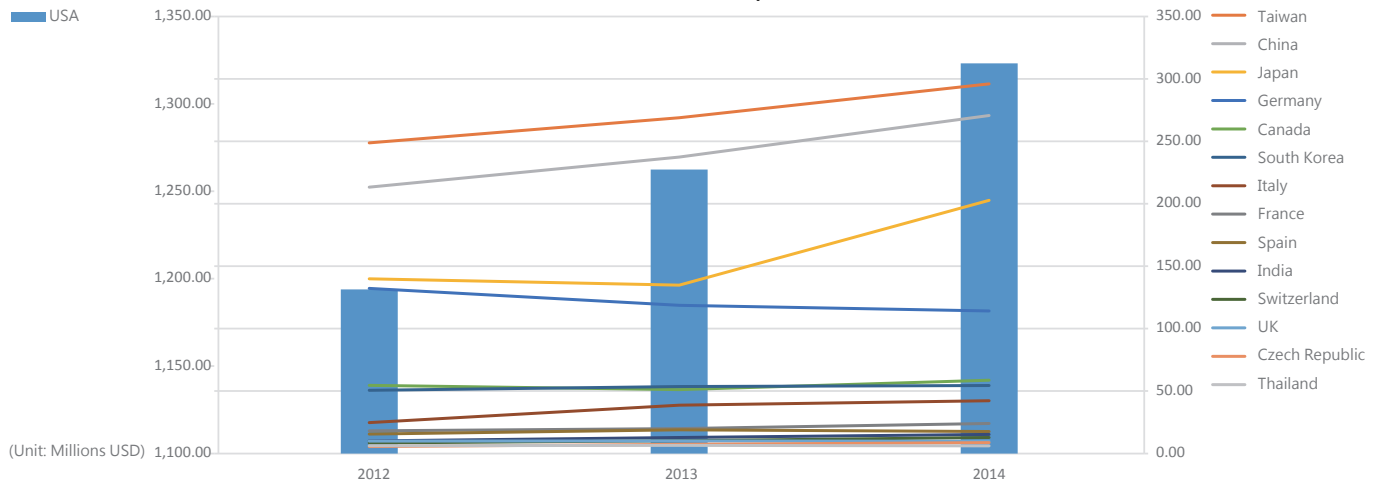
Export Volume of Mexican Fasteners (Unit : Millions USD)						Import Volume of Mexican Fasteners (Unit : Millions USD)					
Rank	Country	2012	2013	2014	2014/2013 YOY Growth (%)	Rank	Country	2012	2013	2014	2014/2013 YOY Growth (%)
<b>World</b>		<b>138.11</b>	<b>142.58</b>	<b>171.17</b>	<b>20.05</b>	<b>World</b>		<b>2,169.57</b>	<b>2,293.35</b>	<b>2,499.74</b>	<b>9</b>
1	USA	118.15	119.79	142.03	18.57	1	USA	1,193.88	1,262.47	1,323.18	4.81
2	Japan	0.11	1.79	3.91	118.15	2	Taiwan	248.82	268.91	296.00	10.07
3	Brazil	0.78	0.76	2.73	258.86	3	China	213.34	237.44	270.70	14.01
4	Singapore	1.63	1.87	2.25	19.99	4	Japan	139.92	134.91	202.75	50.28
5	Guatemala	1.67	2.18	2.13	-1.95	5	Germany	132.19	118.67	114.16	-3.8
6	Venezuela	1.31	1.30	1.66	28.1	6	Canada	54.59	51.16	58.64	14.62
7	UK	0.82	1.26	1.18	-6.12	7	South Korea	50.65	53.57	54.38	1.51
8	China	0.49	1.16	1.18	1.52	8	Italy	24.75	38.72	42.25	9.12
9	Uruguay	0.02	0.02	1.08	4,867.92	9	France	18.17	19.90	24.06	20.93
10	Canada	1.13	1.17	1.00	-14.72	10	Spain	15.49	19.05	17.57	-7.78
11	Honduras	0.50	0.54	0.97	80.5	11	India	10.08	12.86	15.28	18.82
12	Colombia	1.36	0.62	0.90	45.97	12	Switzerland	8.39	10.15	12.80	26.13
13	Costa Rica	0.64	0.50	0.76	52.94	13	UK	9.93	10.07	9.78	-2.89
14	El Salvador	0.67	1.13	0.74	-34.56	14	Czech Republic	5.55	7.39	8.64	16.92
15	India	0.90	0.51	0.68	32.87	15	Thailand	6.29	6.55	6.05	-7.63

Mexican Fastener Export Value





Mexican Fastener Import Value



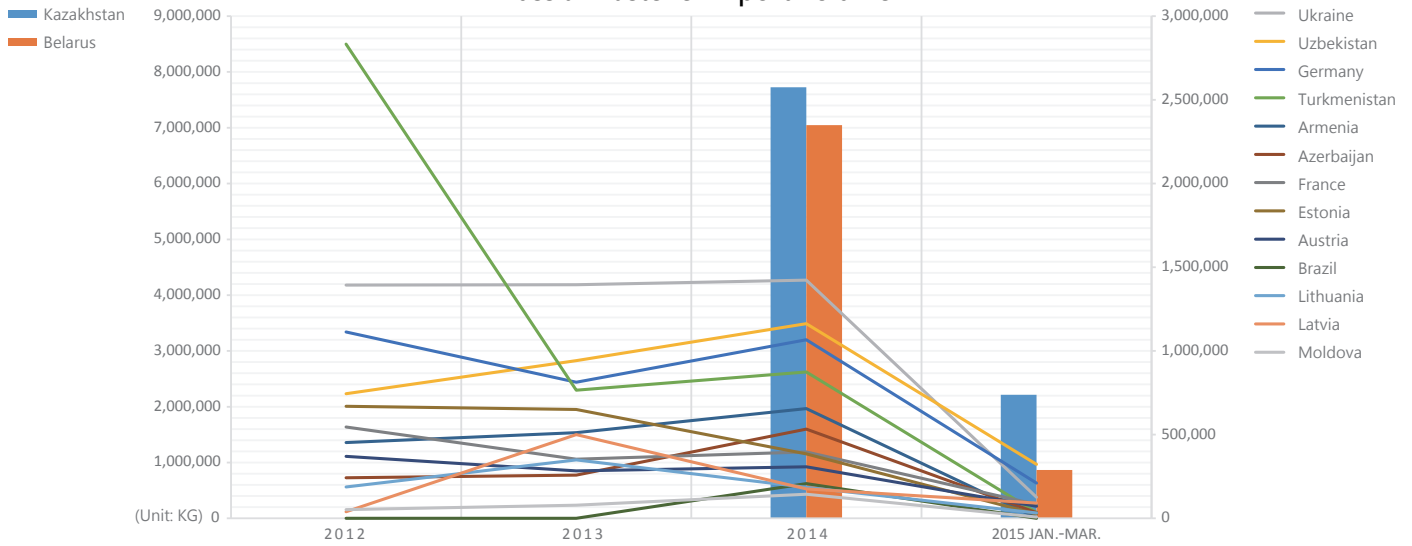
40 % (6 countries). This indicates that Mexico mainly imported fasteners from the United States, Europe and Asia, among which Mexico, and the United States took up the highest import value, reaching USD1.323 billion (or even nine times higher than that of the exports to the U.S.) and accounting for 52.9% of total imports and more than four times higher than the import from other countries. This shows that the United States, in addition to being the primary destination country for Mexico's fastener export, is the top source for the country's fasteners purchase. In other words, the United States is Mexico's most important trading partner for fasteners. Another noteworthy point is that Mexico showed a quite similar distribution of imports across the fastener giant ranked from second to fifth (Taiwan, China, Japan, Germany) with each country breaking the USD 100 million mark (from USD100 million to USD 300 million), an indication that Mexico attaches great importance to these countries which have a very powerful fastener industry and that they were given secondary priority as the purchase sources. To these countries with strong fastener exporting ability, the fastener business opportunities in Mexico are self-evident. Furthermore, since Mexico's main sources of imports are diverse, this is an opportunity to get a share of the cake to other fastener exporting countries.

## Russia

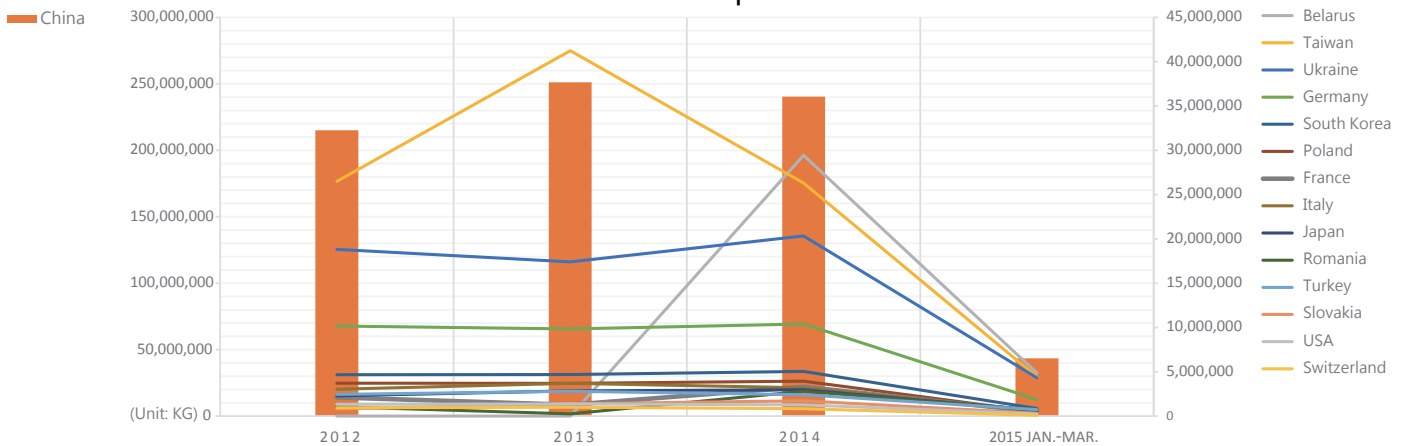
Among Russia's top 15 export destinations in terms of volume in 2014, European and Central Asian countries accounted for 93.3% and Latin America 6.7% (1 country). Russia exported almost all of its fasteners to the neighboring European and Central Asian countries and the top three countries were (Central Asia) Kazakhstan (33.6 % of total export volume), (Eastern Europe) Belarus (30.7%), (Eastern Europe) Ukraine (6.2%). The volume of fastener exports to each of these three countries has broken

Export Volume of Russian Fasteners (Unit : KG)							Import Volume of Russian Fasteners (Unit : KG)						
Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)	Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)
	<b>World</b>	10,351,439	8,452,191	22,935,389	4,275,281	171.35		<b>World</b>	316,563,344	374,411,204	365,176,539	66,899,404	-2.47
1	Kazakhstan	N/A	N/A	7,725,241	2,213,302	N/A	1	China	214,992,119	251,154,031	240,375,630	43,409,571	-4.29
2	Belarus	N/A	N/A	7,048,055	867,585	N/A	2	Belarus	2,579	N/A	29,428,150	4,861,950	N/A
3	Ukraine	1,393,142	1,395,376	1,423,086	125,852	1.99	3	Taiwan	26,502,030	41,240,181	26,313,505	4,417,561	-36.19
4	Uzbekistan	744,358	941,697	1,163,132	322,363	23.51	4	Ukraine	18,819,170	17,407,019	20,325,016	4,322,753	16.76
5	Germany	1,113,148	813,310	1,067,176	210,283	31.21	5	Germany	10,172,273	9,834,189	10,398,267	1,875,627	5.74
6	Turkmenistan	2,833,323	765,156	874,914	34,855	14.34	6	South Korea	4,670,513	4,702,155	5,051,513	852,612	7.43
7	Armenia	452,788	512,078	655,295	4,018	27.97	7	Poland	3,723,029	3,702,339	3,940,737	489,217	6.44
8	Azerbaijan	242,164	257,751	533,095	34,227	106.83	8	France	2,115,002	1,288,931	3,322,649	497,189	157.78
9	France	545,826	353,467	397,003	83,259	12.32	9	Italy	3,039,626	3,702,905	3,204,859	562,112	-13.45
10	Estonia	669,598	649,891	385,384	25,993	-40.7	10	Japan	2,292,243	2,857,261	2,978,222	653,395	4.23
11	Austria	369,946	283,134	307,798	72,468	8.71	11	Romania	1,054,714	262,470	2,800,799	713,876	967.09
12	Brazil	9	39	207,670	175	N/A	12	Turkey	2,456,241	2,797,959	2,410,756	738,577	-13.84
13	Lithuania	187,826	349,408	185,806	32,391	-46.82	13	Slovakia	813,814	1,403,458	1,721,212	324,730	22.64
14	Latvia	38,990	500,325	175,800	91,724	-64.86	14	USA	1,329,010	1,378,015	1,273,135	230,319	-7.61
15	Moldova	51,920	78,352	144,147	7,544	83.97	15	Switzerland	947,840	998,725	842,244	91,431	-15.67

### Russian Fastener Export Volume



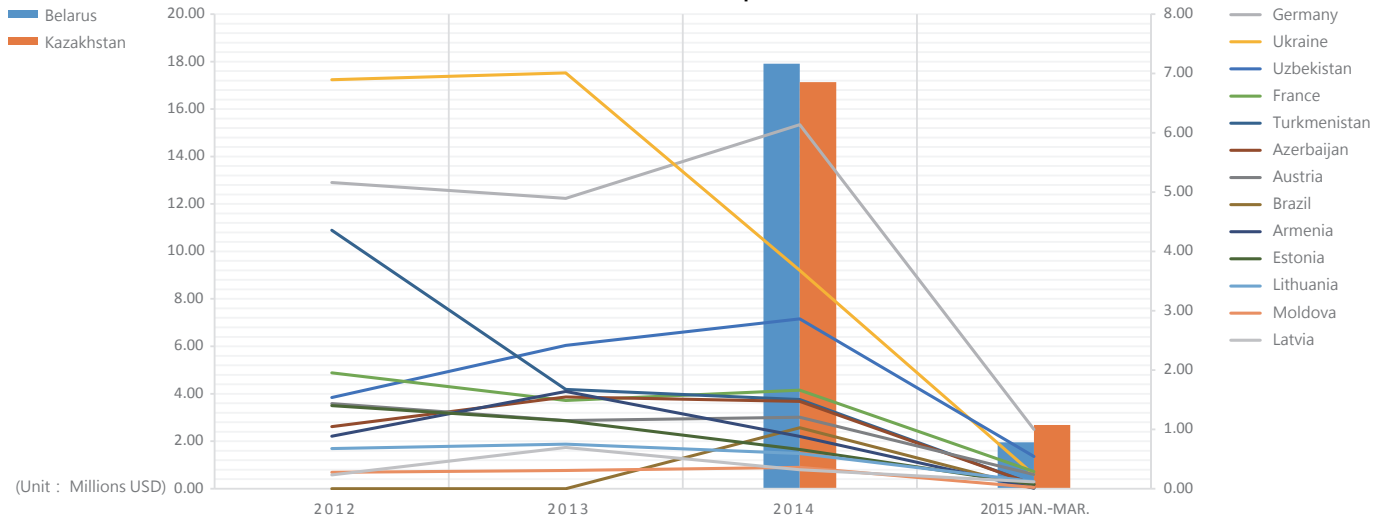
### Russian Fastener Import Volume



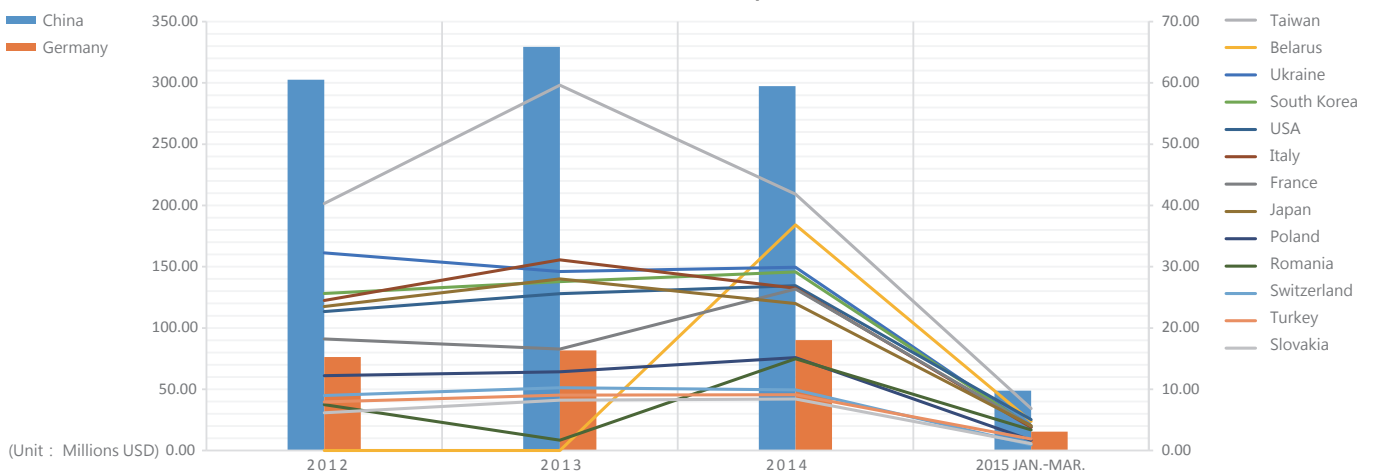
Export Value of Russia Fasteners (Unit : Millions USD)							Import Value of Russia Fasteners (Unit : Millions USD)						
Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)	Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)
	<b>World</b>	54.55	61.61	82.45	14.51	33.84		<b>World</b>	710.24	797.59	756.99	122.89	-5.09
1	Belarus	N/A	N/A	17.91	1.95	0	1	China	302.67	329.36	297.34	48.87	-9.72
2	Kazakhstan	N/A	N/A	17.14	2.69	0	2	Germany	76.29	81.71	90.06	15.39	10.21
3	Germany	5.16	4.89	6.14	1.00	25.42	3	Taiwan	40.31	59.65	41.83	6.85	-29.87
4	Ukraine	6.89	7.01	3.68	0.23	-47.53	4	Belarus	0.01	N/A	36.83	4.78	N/A
5	Uzbekistan	1.54	2.41	2.86	0.54	18.61	5	Ukraine	32.25	29.23	29.93	3.83	2.38
6	France	1.95	1.49	1.66	0.29	11.66	6	South Korea	25.62	27.57	29.15	3.83	5.7
7	Turkmenistan	4.36	1.67	1.50	0.07	-10.17	7	USA	22.67	25.60	26.89	5.04	5.06
8	Azerbaijan	1.05	1.55	1.47	0.07	-4.92	8	Italy	24.49	31.14	26.50	3.77	-14.9
9	Austria	1.43	1.15	1.20	0.24	4.74	9	France	18.21	16.56	26.36	4.04	59.12
10	Brazil	N/A	N/A	1.03	0.01	N/A	10	Japan	23.51	28.02	23.98	4.05	-14.4
11	Armenia	0.88	1.64	0.88	0.01	-46.26	11	Poland	12.22	12.86	15.16	1.68	17.87
12	Estonia	1.40	1.14	0.66	0.07	-42.26	12	Romania	7.48	1.69	14.98	3.36	784.56
13	Lithuania	0.68	0.75	0.59	0.12	-21.27	13	Switzerland	8.99	10.26	9.91	0.94	-3.45
14	Moldova	0.27	0.31	0.36	0.02	16.65	14	Turkey	7.94	9.03	9.11	1.89	0.87
15	Latvia	0.23	0.70	0.32	0.11	-54.33	15	Slovakia	6.14	8.21	8.41	1.12	2.39



## Russian Fastener Export Value



## Russian Fastener Import Value



the 10 thousand tons mark. In addition, the exports to Germany (4.6%), one of the fastener giants, have surpassed ten thousand tons as well while the volumes exported to other countries were much lower than those of the several aforesaid countries. From the perspective in data and geographic distribution, it is easy to see that the fastener export strategy of Russia, like that of Mexico, is obviously "neighboring and powerful country" oriented. On the other hand, it can also be found that Russia rarely sells fasteners to the United States and Asia. The R&D of Russia's fasteners is limited and the products are sold in European and the neighboring Central European markets to meet the nearest local needs. As compared with the Southeast Asian market which also has fasteners with less R&D of components, it is more favorable for Russia to supply to the near countries considering the cost and price competitiveness. The export value of the same year also reflects a similar strategic orientation. The top five export destination countries in terms of value were Belarus (21.7% of total exports), Kazakhstan (20.7%), Germany (7.4%), Ukraine (4.4%), and Uzbekistan (3.4%). The most neighboring countries and the European fastener giants have become the main sources of income for Russia's fastener exports.

Among the top 15 countries of origin of Russia's fastener imports by volume in the same year, European countries accounted for 66.6% (10 countries) and Asian countries, 26.6% (4 countries). Russia purchased fasteners mainly from European countries. In addition to buying from the nearest Belarus (8% of total imports) and Ukraine (5.5%) as the large sources for imports, Russia purchased from countries as far away as Asia, China (65.8%) and Taiwan (7.2%), which respectively ranked first and third, an indication of Russia's interest in the fastener products of these two major fastener exporters, which is a growth opportunity for China and Taiwan. However, the figures also show a warning sign that Russia's imports from China and Taiwan declined. The purchase from China fell by less than 10% while the purchase from Taiwan plunged by over 30%. The import value in the same year reflects a similar trend. In addition to the neighboring Belarus (4.8% of total imports), Ukraine (3.9%) and Germany (11.8%), China (39.2%) and Taiwan (5.5%) ranked first and third respectively but also experienced declines. Russia's fastener purchase will still bring business opportunities and Asian countries can step up to the development of the Russian market.

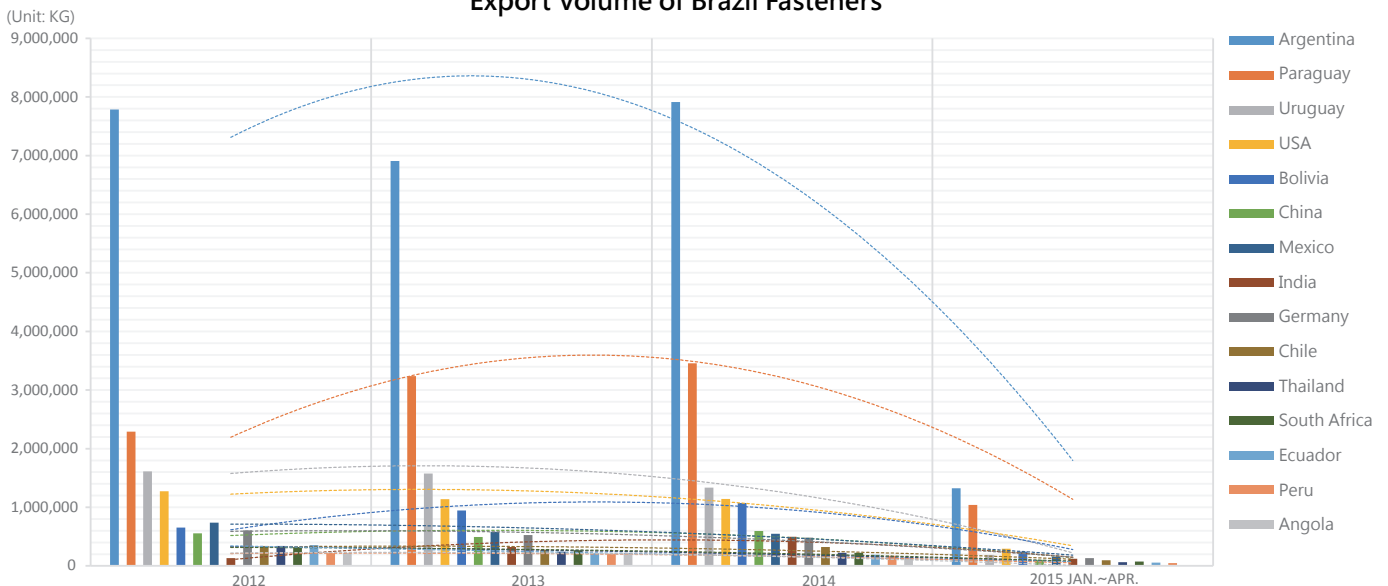
## Brazil

Among Brazil's top 15 fastener export destination countries by volume in 2014, aside from the United States, Latin America accounted for 53.3% (8 countries), Asia 20% (3 countries) and South Africa 13.3% (2 countries), showing that Brazil exported most of its fasteners to the neighboring Latin American countries. The top three destinations were Argentina (39.7% of total export volume), Paraguay (17.3%), and Uruguay (6.6%). The neighboring Argentina was Brazil's largest source of income for fasteners, while Mexico, which is going to transform into an automotive industry hub, ranked 7th (2.7%). Brazil also exported to the U.S. (5.7%, ranking 4th) and Germany (2.4%, ranking 9th), which have a larger fas-

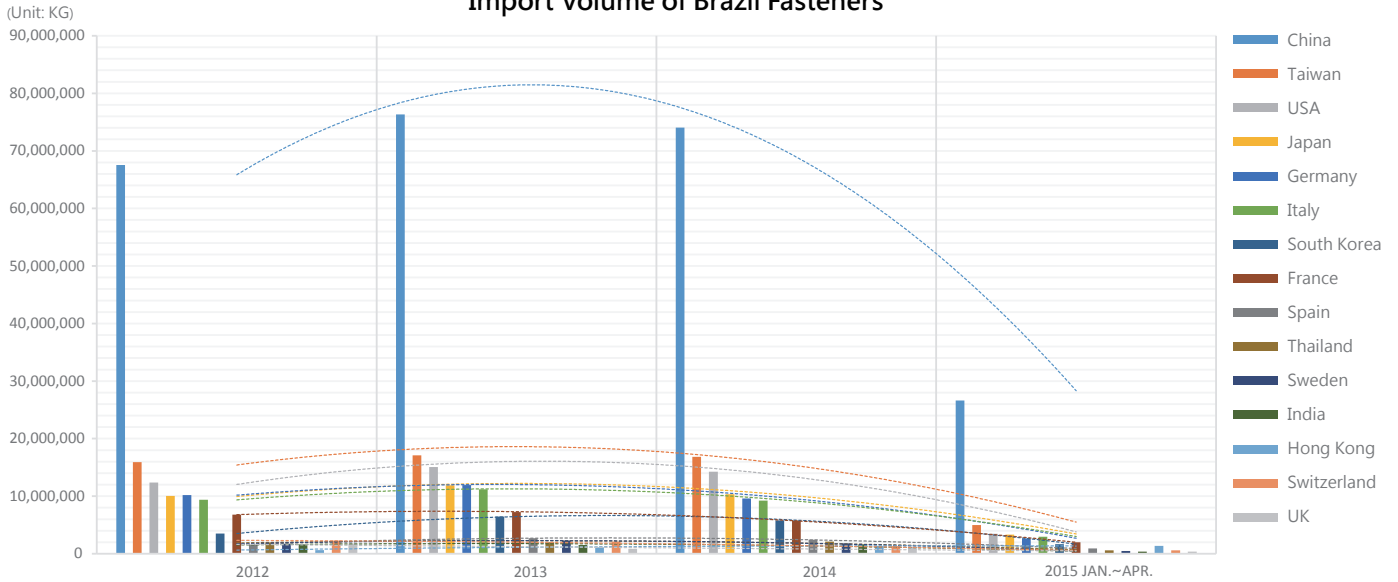
tener industries. In Asia, Brazil exported fasteners to China (2.9%, ranked 6th), India (2.4%, ranked 8th) and Thailand (1.1%, ranked 11th). Brazil's fastener export strategy is similar to that of Mexico and Russia, which is "neighboring and powerful country" oriented. India and Thailand are countries with the largest two fastener industries in Southeast Asia while South Africa has the largest fastener industry in Africa. In addition to supplying to Latin American markets, Brazil has been working intensively on emerging markets in Southeast Asia and South Africa. The total export value in the same year reflected a similar orientation and the top destination countries were Argentina (27% of total export value), U.S. (13%), Paraguay (7.9%), Germany (4.8%), India (4.8%), and China (4.8%).

Export Volume of Brazilian Fasteners (Unit : KG)							Import Volume of Brazilian Fasteners (Unit : KG)						
Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)	Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)
	<b>World</b>	20,020,876	19,205,249	19,930,573	4,407,663	3.78		<b>World</b>	153,900,128	178,939,388	166,443,767	54,765,975	-6.98
1	Argentina	7,785,433	6,909,643	7,915,458	1,325,565	14.56	1	China	67,548,051	76,326,610	74,045,064	26,626,703	-2.99
2	Paraguay	2,291,164	3,239,288	3,457,506	1,038,524	6.74	2	Taiwan	15,927,418	17,089,844	16,828,959	4,990,001	-1.53
3	Uruguay	1,611,503	1,577,200	1,334,218	187,457	-15.41	3	USA	12,359,919	15,076,194	14,274,374	3,473,627	-5.32
4	USA	1,273,319	1,136,912	1,142,169	292,761	0.46	4	Japan	10,043,766	11,906,339	10,349,273	3,330,181	-13.08
5	Bolivia	655,657	945,992	1,072,394	240,415	13.36	5	Germany	10,206,634	11,935,728	9,620,644	2,656,843	-19.4
6	China	555,544	492,999	595,202	103,415	20.73	6	Italy	9,384,621	11,208,048	9,232,740	2,966,569	-17.62
7	Mexico	737,031	582,667	549,942	159,918	-5.62	7	South Korea	3,504,600	6,470,316	5,815,219	1,673,649	-10.12
8	India	133,093	320,907	495,802	120,626	54.5	8	France	6,806,539	7,256,976	5,767,380	1,980,929	-20.53
9	Germany	606,482	525,905	481,388	134,265	-8.46	9	Spain	1,573,852	2,690,952	2,449,783	923,324	-8.96
10	Chile	339,892	273,010	321,045	94,967	17.59	10	Thailand	1,967,692	1,999,609	2,115,920	608,601	5.82
11	Thailand	340,581	242,260	225,508	63,095	-6.91	11	Sweden	1,739,280	2,307,901	1,822,660	481,224	-21.03
12	South Africa	320,926	267,801	223,521	75,063	-16.53	12	India	1,612,108	1,518,203	1,638,645	360,377	7.93
13	Ecuador	353,378	217,435	192,501	57,478	-11.47	13	Hong Kong	641,081	1,121,085	1,336,085	1,352,859	19.18
14	Peru	214,960	200,506	172,716	48,132	-13.86	14	Switzerland	2,295,691	2,107,629	1,324,040	597,844	-37.18
15	Angola	219,278	223,326	154,104	9,196	-31	15	UK	1,769,754	847,200	1,235,136	356,766	45.79

Export Volume of Brazil Fasteners

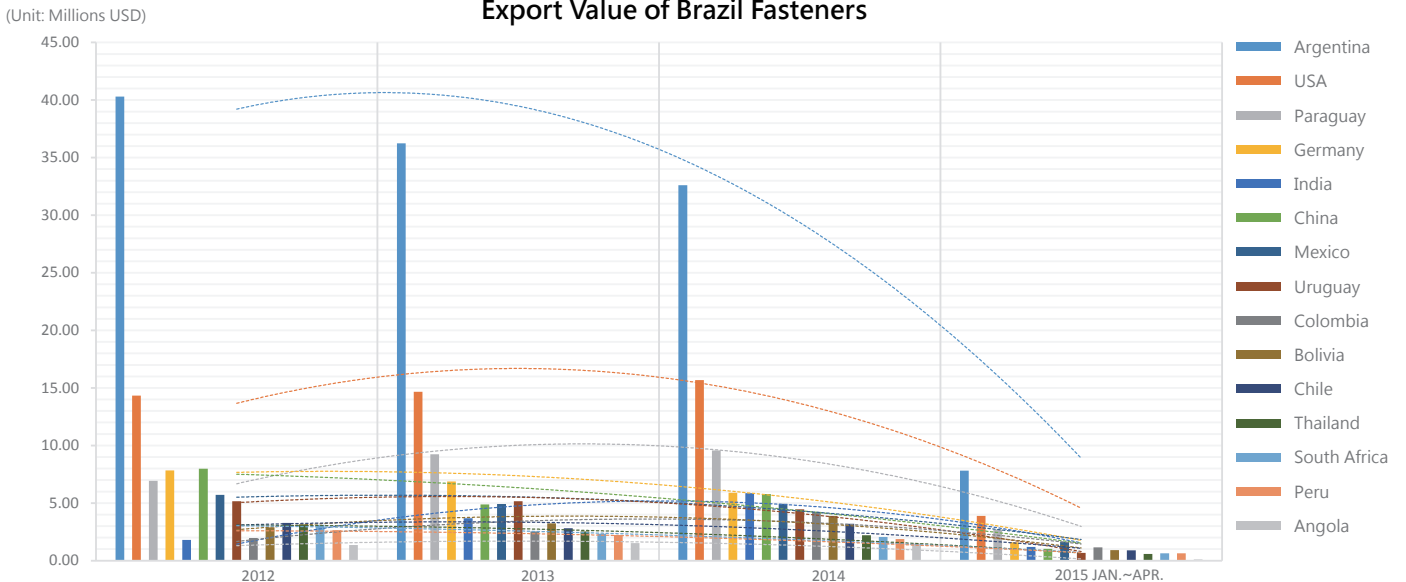


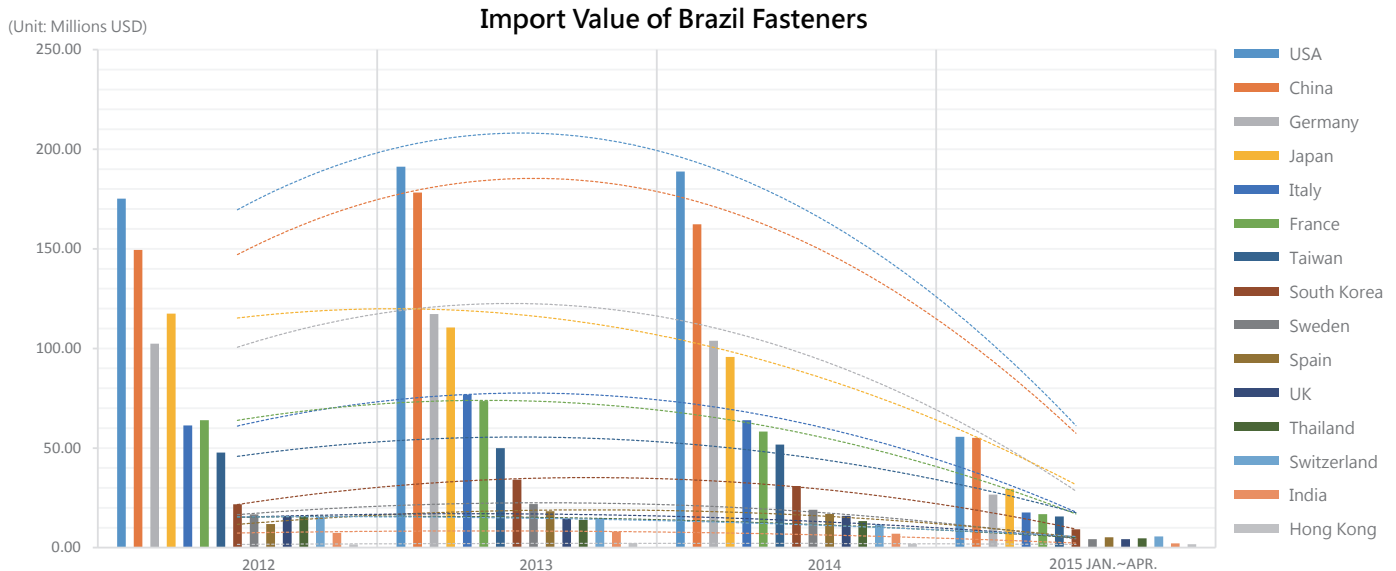
### Import Volume of Brazil Fasteners



Export Value of Brazilian Fasteners (Unit : Millions USD)							Import Value of Brazilian Fasteners (Unit : Millions USD)						
Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)	Rank	Country	2012	2013	2014	2015 Jan.-Feb.	2014/2013 YOY Growth (%)
	<b>World</b>	133.70	122.49	120.57	29.85	-1.57		<b>World</b>	878.42	995.48	907.55	272.58	-8.83
1	Argentina	40.30	36.24	32.61	7.82	-10.03	1	USA	175.24	191.23	188.84	55.66	-1.25
2	USA	14.34	14.67	15.68	3.88	6.92	2	China	149.44	178.28	162.27	55.09	-8.98
3	Paraguay	6.94	9.23	9.57	2.71	3.64	3	Germany	102.38	117.24	103.82	26.65	-11.45
4	Germany	7.83	6.88	5.89	1.60	-14.37	4	Japan	117.44	110.54	95.69	29.47	-13.43
5	India	1.80	3.68	5.87	1.19	59.34	5	Italy	61.33	76.82	63.98	17.64	-16.7
6	China	7.99	4.89	5.79	1.03	18.4	6	France	63.99	73.57	58.30	16.86	-20.75
7	Mexico	5.72	4.91	4.95	1.63	0.71	7	Taiwan	47.71	49.91	51.70	15.63	3.58
8	Uruguay	5.15	5.15	4.45	0.67	-13.61	8	South Korea	21.77	34.15	30.95	9.21	-9.38
9	Colombia	1.96	2.54	4.24	1.15	67.08	9	Sweden	16.75	21.91	19.00	4.25	-13.26
10	Bolivia	2.89	3.25	3.90	0.91	19.88	10	Spain	11.82	18.25	16.91	5.17	-7.32
11	Chile	3.27	2.81	3.21	0.90	14.04	11	UK	16.01	14.59	15.97	4.28	9.5
12	Thailand	3.16	2.54	2.21	0.59	-12.78	12	Thailand	15.74	13.95	13.30	4.64	-4.7
13	South Africa	3.12	2.33	2.06	0.63	-11.5	13	Switzerland	15.41	14.86	11.68	5.62	-21.42
14	Peru	2.64	2.22	1.87	0.64	-16.02	14	India	7.46	8.05	7.01	2.20	-12.91
15	Angola	1.36	1.53	1.48	0.10	-3.42	15	Hong Kong	1.57	2.29	1.96	1.68	-14.45

### Export Value of Brazil Fasteners





Among the top 15 source countries for Brazil's fastener imports by volume in the same year, aside from the United States, European countries and Asian countries each accounted for 46.6% (7 countries). It shows that Brazil bought fasteners mainly from Europe, USA and Asia. The first priority of purchase was given to the top 5 fastener giants: China (accounting for 44.4% of total import volume), Taiwan (10.1%), the United States (8.5%), Japan (6.2%) and Germany (5.7%) and the purchase from China is 4 times higher than the other four countries as China has become Brazil's largest source for fastener purchase. As mentioned in the beginning of this

article, the Brazilian fastener total import volume fell by 6.98% in 2014 and the decline was found in almost all of the import source countries. Among Brazil's top 15 import sources, 11 countries showed slight to medium negative growth (-1% ~ -37%). The import also showed the same downward trend. Regardless of whether this indicates Brazil's declining fastener demand, the Central & South America Niche Industry Delegation from Taiwan as well as the Delegation of Japan External Trade Organization (JETRO) are still interested in the Brazilian market, and the world should seize fastener business opportunities in Brazil.

### The Fastener Potential of Emerging Countries

To summarize, India ranks No.1 among the four emerging countries in the development prospect of fasteners. India tops the fastener total export which is three to five times more than those of three other countries and even reaches tentacles to the distant Arab and African markets. India has achieved a substantial growth in total export value, an indication of increase in the demand for the Indian fasteners by many markets and a very strong overall growth potential. Unlike India, the fastener strategy of Mexico, Russia and Brazil is "neighboring country and powerful country" oriented, to fastener giants like United States, the European Union (especially Germany), Taiwan, China and Japan, these are the countries on which they should put more emphasis. On the contrary, to other Asian countries and New Zealand and Australia, which are farther from these three countries, it is relatively difficult to enter the markets. At last, the fastener import scale of the four emerging countries is larger than the export scale and the purchase demand is greater than export demand. This provides huge potential business opportunities for other countries to sell fasteners to the four emerging countries. The future will be the era where fastener giants in Europe and Northern America compete for global market share. It will also be the age of rising Asian powers competing with Latin America and Eastern Europe for leadership in the emerging markets. Now is the time to compete in the next definitive battlefield!