Analysis of Indian Fasteners and Related Hardware Industry

1. Foreword

The Indian economy has been forecast by World Bank and IMF since the beginning of 2014 to rise back to the "high economic growth rate" level. Most institutes all hold good expectation that the Indian government would adopt continuous reduction in budget deficits, expand investment in infrastructure like roads and electricity, boost foreign investment, develop manufacturing and increase export. It is estimated that its annual economic growth rate in 2017-2018 would reach 7.2% and 7.5% in 2019-2020. The Indian government has already put the development of the domestic manufacturing in its priority work list, including National Manufacturing Policy proposed in 2011, which aims at increasing the ratio of manufacturing in its GDP from the current 16% to 25%. In 2014 Indian Prime Minister Narendra Modi proposed a "Made in India" policy, which has drawn the attention of many investors from around the world.

In terms of natural resources, India is one of the top 10 countries richest in natural resources including iron, copper, zinc, gold, magnesium, etc. As a result it can supply the fastener and related hardware industry with abundant materials. Taiwanese companies and government should seriously consider how to utilize the Indian ever-growing economy and high domestic demand to compete with Chinese low-price fasteners and fastening tools in India. This article will focus on the analysis of two industries, which are fasteners and fastening tools.

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2. The Current Development of Indian Fastener & Fastening Hardware/Tools Industry

a. India's Fastener Market

Table 1 shows the import/export statistics of Indian fastener industry in 2012-2016. In 2016 India's fastener import from the world was USD 0.727 billion with a -1.9% five-year CAGR. In the same year, India's fastener export to the world was USD 0.515 billion with a -3.99% five-year CAGR. As a result, India is a net fastener importing country. In terms of Taiwan, Taiwan's fastener export to India increased from NTD 0.723 billion in 2012 to NTD 1.043 billion in 2016 with a 9.59% five-year CAGR. As India is a developing country and borders China, it is estimated that Taiwan's fastener export to India (calculated in value) will face significant influence from China's low-price fastener export to India.

	2012	2013	2014	2015	2016	CAGR
India's Fastener Import from the World (USD 0.1 bn)	7.85	7.71	7.61	7.28	7.27	-1.90%
India's Fastener Export to the World (USD 0.1 bn)	6.06	8.38	10.29	6.12	5.15	-3.99%
Taiwan's Fastener Import from India (NTD 0.1 bn)	0.14	0.09	0.05	0.14	0.53	39.49%
Taiwan's Fastener Export to India (NTD 0.1 bn)	7.23	6.99	8.47	8.78	10.43	9.59%

Source: ITC/TIER Import/Export Statistics/compiled by MII-ITIS

Table 2 shows India's fastener import from the world in 2012-2016. The values of the top 3 fastener categories India imported from the world and their respective CAGR in 2016 were: Other Screws & Bolts (USD 0.331 bn; a 4.61% CAGR), Nuts (USD 0.127 bn; a -10.62% CAGR) and Other Iron & Steel Non-threaded Articles (USD 0.093 bn; a -4.23% CAGR). India has great demand for these 3 product categories; however, fasteners that India used in its infrastructure are mostly of middle to low level and India is also rich in steel. Many fasteners are manufactured and sold by Indian companies in the local Indian market. As a result, the actual market demand is higher than its import value. The top 3 fastener categories with the highest 5-year CAGR growth rates are: Other Copper Threaded Articles (26.73%), Copper Nails, Flat-head Nail, Thumbtacks and Staples (16.93%) and Rivets (13.13%), showing the fact that India is rich in copper, but it still has great demand for copper fasteners, which may be used for special applications. Taiwanese companies can continue to pay attention to these potential products and make their own prior deployment in order to tap into the Indian market in the future.

Product Category	2012	2013	2014	2015	2016	CAGR
Other screws and bolts	276,712	265,107	292,263	322,409	331,412	4.61%
Nuts	200,420	230,952	193,858	136,416	127,896	-10.62%
Other iron and steel non-threaded articles	111,195	100,790	97,106	96,406	93,533	-4.23%
Other washers	73,318	51,125	56,445	54,521	55,412	-6.76%
Pins & Cotter Pins	35,089	31,962	31,798	30,832	28,034	-5.46%
Rivets	9,688	10,699	11,566	12,351	15,869	13.13%
Aluminum bolts, nuts, nails, hooks, pins, washers, etc.	13,725	14,047	14,970	14,310	14,664	1.67%
Iron and steel self-tapping screws	12,384	11,678	10,145	10,871	12,048	-0.69%
Other iron and steel threaded articles	7,021	7,185	7,998	9,493	10,107	9.54%
Spring washers and other locking washers	9,065	7,845	7,352	6,441	7,284	-5.32%
Other copper threaded articles, screws, bolts and nuts	7,667	8,800	9,938	8,352	6,365	-4.55%
Iron and steel nails, flat-head/corrugated nails, staples/ thumbtacks	4,261	4,240	4,816	3,958	4,249	-0.07%
Other copper bolts, nuts, screws, hooks, pins, etc.	5,028	5,901	5,113	4,016	4,187	-4.47%
Tubular rivets or open-end rivets of base metals	6,545	5,866	4,030	4,135	3,413	-15.02%
Other wood screws	2,264	3,284	3,923	3,667	3,301	9.89%
Other copper threaded articles	1,000	777	1,673	1,812	2,579	26.73%
Copper washers (incl. spring washers)	5,991	7,317	3,737	3,973	2,205	-22.11%
Helical hooks and rings	1,618	893	1,065	1,407	1,535	-1.31%
Iron and steel automotive screws	1,246	1,312	1,188	1,540	1,392	2.81%
Copper nails, flat-head nails, thumbtacks, staples, etc.	650	909	1,233	1,076	1,215	16.93%
Iron and steel anchors, 4-claw anchors and parts	394	539	499	456	38	-44.27%
Total	785,281	771,228	760,716	728,442	726,738	-1.92%

Table 2. India's Fastener Import from the World in 2012-2016

Source: ITC/compiled by MII-ITIS of MIRDC

b. India's Fastening Hardware & Tools Market

Table 3 shows the import/export statistics of India's fastening tools in 2012-2016. In 2016 India imported USD 0.118 billion worth of fastening tools from the world, with a 6.71% five-year CAGR. India exported USD 0.140 billion worth of fastening tools to the world, with a -6.98% five-year CAGR. There are 45 large corporations in India's hand tools industry and the employment of each corporation is more than 500. However, the total revenue of these large corporations only represents 26% of the total revenue of the country. On the other hand, as the Indian government imposes less restrictions on new start-ups, the structure of India's hand tool industry mostly consists of SMEs. The same goes with the fastener industry where the fastening tools market can be mostly satisfied by local suppliers, which means most of the great

demand is dependent upon the production and supply of Indian companies and only a few high-end products are imported. In addition, Taiwan only imported around NTD 1 million worth of fastening tools from India, with a -7.73% CAGR, and it only exported NTD 0.267 billion worth of fastening tools to India, with a 10.07% five-year CAGR, implying that there are still potential opportunities for Taiwan to export medium-to-high level fastening tools to India with increasing demand. As a result, Taiwanese companies should accelerate their steps to make their deployment and reinforce the promotion of Taiwanese fastening tools in India's medium-to-high level tool market, in order to prevent the domestic market from being injured by Chinese products and other hand tools produced in India.

	2012	2013	2014	2015	2016	CAGR
India's Fastening Tools Import from the World (USD 0.1 bn)	0.91	0.81	0.96	0.97	1.18	6.71%
India's Fastening Tools Export to the World (USD 0.1 bn)	1.87	2.15	1.87	1.63	1.40	-6.98%
Taiwan's Fastening Tools Import from India (NTD 0.1 bn)	0.01	0.03	0.00	0.01	0.01	-7.73%
Taiwan's Fastening Tools Export to India (NTD 0.1 bn)	1.82	1.67	1.57	2.10	2.67	10.07%

Table 3. Import/Export Statistics of India's Fastening Tools in 2012-2016

Source: ITC/TIER Import & Export Statistics/compiled by MII-ITIS of MIRDC

Table 4 shows India's fastening tools import from the world in 2012-2016. In 2016, the values of the top 2 fastening tools India imported from the world and respective CAGR growth rates were: power socket wrenches (USD 0.118 bn, a -7.21% CAGR) and hand-held pneumatic screwdrivers (USD 0.01 bn, a 0.92% CAGR). The top 2 fastening tools with the highest five-year CAGRs were: power socket wrenches (4.86%) and screwdrivers (4.53%). Socket wrenches have become one of the major product categories of Taiwanese companies, so Taiwanese companies can follow this trend to tap into the Indian market.

Product Category	2012	2013	2014	2015	2016	CAGR
Hand-operated wrenches and spanners	160,209	170,284	158,995	138,260	118,781	-7.21%
Hand-held pneumatic screwdrivers	9,474	28,641	13,426	12,250	9,826	0.92%
Power socket wrenches	3,594	3,365	3,655	2,391	4,346	4.86%
Bolt extractors and similar tools	4,522	6,667	5,355	4,657	3,115	-8.90%
Drilling & thread cutting/tapping tools	7,033	4,333	3,672	3,663	2,440	-23.25%
Interchangeable socket wrenches with/without handles	1,421	1,584	1,526	956	1,105	-6.09%
Screwdrivers	711	624	787	990	849	4.53%
Total	186,964	215,498	187,416	163,167	140,462	-6.90%

Table 4. India's Fastening Tools Import from the World in 2012-2016

Source: ITC/TIER Import & Export Statistics/compiled by MII-ITIS of MIRDC

3. The Current Development of Indian Fasteners & Hardware Industry

While India continues to show great demand for hand tools (mostly cutting tools for general use), Indian hand tool manufacturers have noticed the competition from other countries which has become fiercer, so they are now very active in improving their technology and quality of higher end power fastening tools in order to prevent Chinese fastening tools from taking all the market shares in India. Such a move may also impact the Indian hand tool industry, which mainly consists of SMEs. In addition, the issues Indian hand tool manufacturers have been recently facing, such as high interest rates, the lack of technical labor force, and drastically fluctuating steel prices are also some aspects Taiwanese companies should take into account.

On the other hand, the population of India that creates significant demand, insufficient supply of residential houses, increasing consumption and easier access to financial tools are all key reasons that can boost the demand for house construction in India. If DIY can become a trend in the Indian construction industry, the demand for fasteners and fastening tools in India will be very considerable. It is estimated that by 2025 India will become the 3rd largest construction market. 11.5 million houses will be built per year with a total value of USD 1 trillion. It is also estimated that the CAGR of the global construction market will be 4.7%.

The construction industry is the 2nd largest industry of India and the population of employment in the industry is only second to that of agriculture, which means the construction industry plays a key role in India's economic development. As the Indian government has been promoting industrialization, urbanization and economic development in recent years and the living quality of people are getting better, a fast and steady growth is observed in the construction industry. In 2005, the Indian government opened its construction market and allowed foreign investors to invest in its construction industry, creating a vibrant atmosphere in the Indian real estate market, which is no doubt good news to boosting the demand for hand tools in India. Moreover, as the annual growth rate of India's construction industry in recent years remains at 9-11%, the demand for related fastening hardware is also increased.

It is expected that the recovery of India's construction industry will boost the demand for fastening hardware, especially power hand tools and pneumatic hand tools. **Table 5** shows the estimated growth of India's fastening tools and hand tools production values in 2017-2019 and the estimated CAGR will land at around 11-12%.

Table 5. The Estimated Growth of India's Fastening Tools and Hand Tools Production Values in 2017-2019

Product Category	2017	2018	2019	CAGR
Cutting Tools	11.51	13.45	14.36	11.7%
General Hand Tools	33.09	38.71	41.40	11.9%
Mechanical & Power Tools	23.18	26.94	28.64	11.2%
Door Locks and Hinges	23.05	26.85	28.60	11.4%
Total	90.83	105.96	113.00	11.5%

Unit: USD 0.1 bn ; %

Source: compiled by MII-ITIS of NIRDC (2017.07)

4. Prospects of the Indian Market

Although Taiwan's CSC has suspended its secondphase investment in its cold-rolling plant located at the west region of India after the Indian government increased the tariffs, many national level construction projects will still be launched in the future, which can be the potential market for fasteners and fastening hardware. Thus far, there has been a complete manufacturing industry cluster for hardware and hand tool manufacturers in Puralia, near Kolkata, so this is a region Taiwanese fasteners and hardware companies can consider for their future investment or factory establishment.

Taiwan can consider investing manufacturing sites in local India and making the most of bilateral industrial investment and trade partnership in the future. Simultaneously, they can take India's growth potential of consumption and infrastructure and industrial transformation into account and reinforce the value chain integration with India's fastener industry, the connection to the local market and cooperation in infrastructure to keep the market clear of any barrier. Through re-positioning the value chain of India's fastener and hardware industry, both Taiwan and India can definitely enjoy the complementary economic benefits and prosperity together.