

# Analyzing the Developing Trend of Indonesia's Fastener & Related Hardware

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## 1. Introduction

According to the forecast of "Global Insight", the average annual economic growth rate of ASEAN and the six countries in South Asia from 2017 to 2021 will be 4.9% and 6.0% respectively, much higher than the global economic growth rate (3.1%). Of all the countries in ASEAN, Cambodia, Laos, Indonesia and Myanmar have the highest growth. Each of these countries shows the average annual economic growth rate above 6%; in South Asia, India also has the high growth rate up to 7.7%. ASEAN and South Asian countries still have outstanding performances while the global economy is in recession. If Taiwan wants to gradually get rid of the dependence on China, ASEAN and South Asian countries are definitely the markets that Taiwan has to focus on for its future long-term economic development.

In ASEAN, Indonesia may not be the one with the greatest economic performance, due to the factors including, the prices of international products and the rapidly declining demand in 2015, China's dropping demand due to its economic slowdown and the hazes resulted from forest fires in Sumatra and Kalimantan which affected the economic operation, plus, the poor national tax revenue, dramatic devaluation on Indonesian

rupiah and foreign investments leaving Indonesian stock market have caused the lack of funds for Indonesia's public construction plans. Companies felt so pessimistic toward the future and postponed their plans. The expenditure of the general public was conservative, which caused the economic growth rate to be only 4.79% in 2015. However, according to the statistics of Indonesia Investment Coordinating Board (BKPM), though the global economy slowed down in 2015, the investment in Indonesia still totaled 545.4 trillion IDR (about 42 billion USD), which grew by 17.8% compared to 2014. The outstanding performance shows that the investors still value Indonesia's labor force, have confidence in Indonesia's economy and politics and hold an optimistic attitude toward Indonesia's long-term economic growth. In 2015, the main areas in which the foreign investors directly invested included: mining, shipping and storage, metal machinery, electricity & gas, food & implantation, chemistry, shipping equipment, food & beverage, non-metallic materials, construction and so on. The article will expound on fastener and related hardware for domestic metallic machinery applications as the main study subject, which will focus on two sub-categories: fasteners and fastening tools.

## 2. The Current Development of Fastener and Related Hardware in Indonesia:

### a. The Fastener Market

**Table 1** shows the import/export trend of Indonesia's fastener industry during 2011-2015. In 2015, Indonesia imported 622 million USD worth of fasteners from the world, with a CAGR of -0.92%; its total fastener export value with the world in the same year was only 84 million USD, with a CAGR of -7.49%. Hence, Indonesia is a "demand>supply" market in the fastener area. The drop in the growth rate of fasteners export means that the demand for fasteners in Indonesian market is mostly satisfied via imported products; Taiwan's fastener export value with Indonesia dropped from 228 million NTD in 2011 to 128 million in 2015, and the CAGR in the past 5 years was about -13.40%. It is conjectured that there may be many competitors trying to take Taiwan's market share in Indonesia.

Table1. Import/Export Trend of Indonesia's Fastener Industry During 2011-2015

	2011	2012	2013	2014	2015	CAGR
Indonesia's Fastener Import Value with the World (USD 100 million)	6.45	7.67	7.62	7.60	6.22	-0.92%
Indonesia's Fastener Export Value with the World (USD 100 million)	1.15	1.03	0.83	0.94	0.84	-7.49%
Taiwan's Fastener Import Value with Indonesia (NTD 100 million)	0.00	0.02	0.00	0.00	0.00	N/A
Taiwan's Fastener Export Value with Indonesia (NTD 100 million)	2.28	2.99	1.86	2.19	1.28	-13.40%

Unit : USD 100 million; NTD 100 million ; %

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

**Table 2** shows the trend of Indonesia's fastener import trade with the world during 2011-2015. The top three categories of Indonesia's fastener import from the world in 2015 were as follows: other screws and bolts (224 million USD), other iron and steel non-threaded articles (107 million USD) and nuts (66 million USD), among which, other iron and steel non-threaded articles still remained a strong CAGR at 9.91%, showing Indonesia's strong demand for this category; the top

three fasteners with the highest 5-year CAGR were: copper screws, bolts and nuts (21.35%), iron and steel automotive screws (20.53%), other iron and steel threaded articles (18.28%). Iron and steel automotive screws reflect the recent growth trend on Indonesia's automobile, motorcycle and bicycle parts markets, which are potential products with growing demand in the future Indonesian market.

Table2. Trend of Indonesia's Fastener Import with the World During 2011-2015

Product Category	2011	2012	2013	2014	2015	CAGR
Other Screws & Bolts	229,741	257,461	291,586	281,180	224,892	-0.53%
Other Iron and Steel Non-Threaded Articles	73,261	118,271	102,304	125,636	106,907	9.91%
Nuts	96,765	98,186	97,406	96,494	65,600	-9.26%
Other Washers	67,987	73,354	73,114	60,553	51,665	-6.63%
Other Iron and Steel Threaded Articles	21,061	34,618	36,774	45,004	41,218	18.28%
Pins & Cotter Pins	40,306	33,624	26,897	28,179	19,292	-16.82%
Steel Nails, Tacks, Corrugated Nails, Staples, Thumbtacks	15,620	20,907	20,943	21,586	18,669	4.56%
Steel Anchors, Grapnels and Other Parts	21,723	18,555	19,491	17,327	16,315	-6.91%
Other Copper Threaded Articles: Screws, Bolts and Nuts	6,618	19,638	16,349	10,482	14,349	21.35%
Aluminum Screws and Bolts, Nails, Hooks, Pins and Washers	10,122	32,856	18,589	19,440	12,700	5.84%
Spiral Hooks and Spiral Rings	7,585	12,227	10,157	7,890	9,421	5.57%
Spring Washers and Other Locking Washers	17,644	11,683	11,441	11,191	8,442	-16.83%
Iron and Steel Self Tapping Screws	11,134	7,155	9,608	9,497	8,209	-7.34%
Rivets	4,768	5,770	6,502	6,451	6,272	7.09%
Base Metal Made Tubular Rivets or Bifurcated Rivets	5,941	5,211	6,385	5,449	4,039	-9.20%
Iron Steel Automobile Screws	1,356	5,147	2,504	2,931	2,862	20.53%
Copper Nails, Tacks, Thumbtacks, Staples	2,485	1,823	2,931	3,366	2,412	-0.74%
Other Copper Made Threaded Articles	1,874	2,426	2,614	1,688	2,331	5.61%
Copper Washers (Incl. Spring Washers)	1,794	3,094	3,043	2,138	2,188	5.09%
Other Wood Screws	5,338	2,892	2,346	2,419	2,127	-20.55%
Other Copper Alloy Screws, Bolts, Nails, Hooks, Pins, Washers	2,170	1,835	1,025	1,132	2,035	-1.59%
Total	645,293	766,733	762,009	760,033	621,945	-0.92%

Unit: Thousand USD ; %

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

## b. Indonesia's Fastening Tools Market

**Table 3** shows the trend of Indonesia's fastening tools import/export during 2011-2015. In 2015, the total import value of Indonesia's fastening tools with the world was 95 million USD, with a CAGR of 5.79%; its fastening tools export value was only 5 million USD, with a CAGR of 14.74%. Although both import and export values are not high, the growth margins cannot be underestimated. Furthermore, Taiwan's fastening tools import value with Indonesia was only 3 million NTD, and the export value with Indonesia was only 713 million NTD, with a CAGR of -0.74%, showing that Taiwan hasn't gained a firm presence in Indonesia's fastening tools market and that Indonesian market may have been taken by China and surrounding ASEAN countries. However, there are still opportunities for Taiwan to enlarge its export sale to Indonesia in the future.



Table 3. Import/Export Trend of Indonesia's Fastening Tools During 2011-2015

	2011	2012	2013	2014	2015	CAGR
Indonesia's Fastening Tools Import Value with the World (0.1 billion USD)	0.76	0.83	0.79	0.76	0.95	5.79%
Indonesia's Fastening Tools Export Value with the World (0.1 billion USD)	0.03	0.03	0.09	0.03	0.05	14.74%
Taiwan's Fastening Tools Import Value with Indonesia (NTD 100 million)	0.01	0.14	0.03	0.04	0.03	28.26%
Taiwan's Fastening Tools Export Value with Indonesia (NTD 100 million)	7.34	7.25	7.99	8.69	7.13	-0.74%

Unit: 0.1 billion USD; NTD 100 million; %

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

**Table 4** shows the trend of Indonesia's fastening tools import with the world during 2011-2015. The top two fastening tools Indonesia imported from the world in 2015 were electric socket wrenches (57 million USD) and hand-operated wrenches & spanners (15 million USD). The CAGR of the total import in the past five years was 5.79%, among which, the CAGR of electric socket wrenches was up to 21.01%, showing Indonesia's potential need of electric socket wrenches. The top two fastening tools with the highest CAGR in the past 5 years were: electric socket wrenches (21.01%) and boring, thread cutting or tapping tools (3.94%). The CAGR of the other products all decreased, which means that the demand of Indonesia for fastening tools has been heavily focused on certain categories. This can be a reference for Taiwanese companies interested in expanding its footprints to the market.

Table 4. Trend of Indonesia's Fastening Tools Import with the World During 2011-2015

Product Category	2011	2012	2013	2014	2015	CAGR
Electric Socket Wrenches	26,963	32,284	34,881	31,273	57,819	21.01%
Hand-Operated Wrenches & Spanners	22,430	20,689	18,927	20,214	14,943	-9.66%
Hand-held Pneumatic Wrenches	7,502	9,368	7,148	6,850	5,746	-6.45%
Screwdrivers	6,238	5,967	6,764	5,518	5,002	-5.37%
Interchangeable Wrench Sockets With or Without Handles	6,456	5,928	4,115	4,672	4,928	-6.53%
Boring, Thread Cutting or Tapping Tools	4,223	6,397	5,435	4,950	4,928	3.94%
Bolt Cutters & Similar Tools	2,126	2,807	2,192	2,137	1,736	-4.94%
Total	75,938	83,440	79,462	75,614	95,102	5.79%

Unit: Thousand USD; %

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

### 3. The Current Development of Fastening Hardware Related Industries in Indonesia:

#### a. The Machinery Industry

Indonesia's basic industries are not very well-developed yet. Its molds & dies, electrics & electronics, metal and plastic processing industries are left far behind others. Its manufacturing facilities are old-fashioned and various raw materials, components and molds depend on importing. According to "Economy Watch" statistics, Indonesia's top imported item is mechanical equipment, followed by chemical products, fuel and food. The imported mechanical equipment is mainly from Japan, Taiwan, South Korea and China. Taiwan can, based on the import and export trade of mechanical equipment between Taiwan and Indonesia, initiate integration of the supply chain and expand its export of fastening related hardware.

#### b. The Automobile and Motorcycle Industry

The parts demanded by Indonesia's automobile and motorcycle industries are mostly imported. These parts are imported mainly through "Semi Knock Down (SKD)". The parts manufactured domestically are those with higher demand and made from locally obtained materials, such as tires, metallic parts produced through

forging, casting and stamping, batteries and injected & extruded plastic parts. Others like automobile electronic products, chassis, engines, transmission, steering, brakes and suspension system parts all need to be imported.

Although Indonesia has a large automobile part market, the Japanese car manufacturers that dominate Indonesia's automobile market tend to select business partners within their group, and the supply of automobile and motorcycle parts are mainly controlled by their agents or joint ventures. Even the overseas automobile parts OEMs for

Japanese car manufacturers feel hard to get into their supply chain. As a result, I suggest that Taiwanese companies seek for collaboration with the representatives of Japanese car manufacturers in Taiwan or China and set up factories in Indonesia before they can get OEM orders.

As for the after-sales (AM) market, about two thirds of the parts are not from OEMs. So far, the automobile parts industry in emerging countries like China, Thailand, India are using price-cutting strategy to gradually increase their market share. Taiwanese companies should keep strengthening their R&D and using new technologies, materials and electronic parts to provide customized high added value products.

### c. The Construction Industry

The poor infrastructure in Indonesia is putting off Indonesia's economic growth. If Indonesia wants to maintain its growth rate at about 6-7% annually, the top priority is to improve its infrastructure to decrease its energy and logistics cost. Such improvement will require Indonesia's government to invest resources or reconstruct the old facilities. Among all, the most indicative public construction is Jakarta Mass Rapid Transit, and this large-scale project has been started since 2014. It is estimated that this public construction may drive the needs for fastening products. It will definitely become a potential market with a large demand for fastening-related products.

As for the demand for household products, so far large wholesale stores in Indonesia like Carrefour, Lotte Mart, Giant and Hypermart and other hardware & building materials and furniture chain stores like Ace Hardware, Index Furniture all report booming business results, and more operations of these stores have also been established. It is estimated that there will be substantial demand for fastening products for construction as well.

## 4. The Future Prospect of Indonesian Market

Consumption and investment are both main motives for Indonesia's economic growth. With Indonesia's government actively promoting improving infrastructure and developing economic and trade policies for island countries, it is expected to bring new atmosphere and attract foreign companies to keep investing. The number of the middle class gradually increases, which has pushed the domestic consumption to grow steadily. Indonesia's government speeds up the practice of its budget and increases the expense of government, which will effectively boost its economic growth and further make the consuming market prosper. In addition, the effect from Indonesia's central bank's cutting interest rates will gradually appear. With both financial and currency policies from Indonesia's government, its economy in 2017 should revive progressively. The World Bank estimates its growth rate will be 5.1%, while IMF estimates 4.9%.

The problems in Indonesia like insufficient infrastructure, low stability of policies, complicated policies and inadequate law enforcement and increasing labor cost still remain, and yet with the three advantages: having natural resources, export processing and domestic market (taking up to 70% of its GDP), Indonesia is still a good choice for Taiwan's fastening-related products companies interested in investing in South and Southeast Asia. In response to the ASEAN'S economic integration like AEC, which was started in the late 2015, and the changing market condition of China and other Southeast Asian countries, Taiwan's fastening-related products companies can choose Indonesia as a manufacturing base and can even consider Indonesia a springboard for expanding to South East Asia, the Middle East or even Africa, which can be an important part of their global strategy.

Although fasteners and fastening tools are Taiwan's advantageous exported product categories, the export/import values and proportions of these two product categories between Taiwan and Indonesia are not high. How can Taiwan compete with China's low priced fasteners and fastening tools in the less developed



Indonesian market is one of the major issues for Taiwanese government and the industry. In the future, Taiwan can try to change its unilateral communication with domestic businesses and consider turning to manufacturing in Indonesia and exporting through it directly. It can also utilize bilateral industrial investment and trade exchange to make Indonesia an extension of Taiwan's domestic market. Considering the local expense, growth potential of infrastructure, and the need for industrial transformation, the trade and financial collaboration between Taiwan and Indonesia should be focused on integrating the industrial value chain, connecting domestic markets and collaborating on infrastructure engineering. It should strive to eliminate market barriers, and foster economic collaboration and mutual prosperity for Taiwan and Indonesia by means of repositioning and improving the industrial value chain. ■