

Industrial Production Status

Indicators	2016	2017							2018							
	Year	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Year(f)
MPI*	1.4	4.0	5.6	5.3	1.0	6.3	5.8	2.5	4.7	4.6	3.2	3.1	2.9	5.0	4.6	3.0

* MPis have been adjusted for 2018 under ISIC Rev.4 classifications which cover 21 divisions, 57 industrial groups and 235 products. The industrial index was formed using the Laspeyres formula based on the 2011 fixed weights, with added value and output value referenced from “The 2012 Business Trade and Industry Census: The Manufacturing Industry” produced by the National Statistical Office of Thailand. Furthermore, the weights of weighted value have been adjusted with added value to reflect the current industrial structure.

The industrial economics status in **July 2018** rose for fifteen consecutive months since May 2017. The **manufacturing production index (MPI) increased by 4.6 percent** from the same period last year, a result from recovering exports consistent with the global economic status. Industrial exports in July 2018 grew by 7.7 percent.

When considering the MPI for the past three months (April, May, and June) compared to last year (%YoY), the trend of industrial production continued to grow and the rate of change was 3.1 percent, 2.9 percent and 5.0 percent respectively. As a result, MPI grew averagely by 4.0 percent in the first seven months of this year, a significant improvement compared to the first seven months in 2017 whereby the MPI grew at an average of only 0.9 percent. The increase of MPI reflected a stronger and more stable growth of the industrial sector.

Indicators	2017							2018						
	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	
MPI	-2.8	4.4	1.6	-5.0	6.5	-3.2	5.0	-0.1	10.5	-20.9	14.7	-1.1	-3.1	

The change rate of MPI (%MoM) for the past three months (April, May, and June 2016) was normal at -20.9 percent, 14.7 percent, and -1.1 percent respectively. This was according to seasonal changes throughout the year as the MPI of April decreased from most factories were closed during the Songkran festivities.

Key industries that contributed to the MPI growth in July 2018 were:

- **Automobiles:** Production grew by 15.1 percent (volume of the vehicle) compared to the same period last year; the thirteenth consecutive month of growth. This was from pickup trucks, diesel engines and passenger cars under 1800 cc, whereby consumers of these products are mostly from the middle class and those that purchase for professional reasons (the case of pickup trucks), which reflected customer confidence in the right direction. Furthermore, the growth of export markets in Asia, Oceania, Middle East, Africa, Central America, and South America boosted domestic sales by 25.7 percent and exports by 0.15 percent.

➤ Sugar: Production grew by 82.3 percent from increased sugarcane yield this year, resulting in more transformation of raw sugar into white sugar and refined sugar than last year. White sugar is used in the production of soft drinks, readymade meals, and household consumption, whereas refined sugar is used in industries with a demand for exceptionally pure ingredients such as the energy drinks industry and products that need to be stored for a long time.

➤ Electronic Parts: Production grew by 9.2 percent in line with consistent growth in demand from the global electronics market. Key export markets were the United States and Japan. Thailand continues to rely on imports from abroad to serve as raw materials for the production of electronics for export. Thus, Thailand's electronics industry is only slightly upstream and mostly mid and downstream.

➤ Petroleum Refinery: Production grew by 14.2 percent in line with demand for use in transportation and the growing industrial sector.

➤ Non-Tire Rubber Products: Production grew by 9.82 percent mainly from rubber bars, as rubber prices fluctuated last year causing China to slow down orders. This year, however, there was more latex in the market causing rubber prices to drop and customers resumed orders after having slowed down.

Regarding forecasts, **the MPI for 2018 is expected to grow at an average of 3.0 percent** (in 2017 growth was 2.5 percent). Supporting factors are the global economic growth causing exports and the manufacturing sector to grow in a good range. This is coupled with public spending and investment which is tended to rise in line with disbursements and progress of government investment projects, including a clear recovery in private investment as a result of improved confidence in the business sector and improvement in the industry capacity utilization rate. In the first seven months of 2018, the capacity utilization rate averaged at 69.21 percent, a good recovery from the first seven months of 2017 which averaged 66.74 percent.

Other Industrial Economic Indicators in July 2018

Other Industrial Economic Indicators in July 2018

Thailand's Industrial Sector Importation



Source: Ministry of Commerce

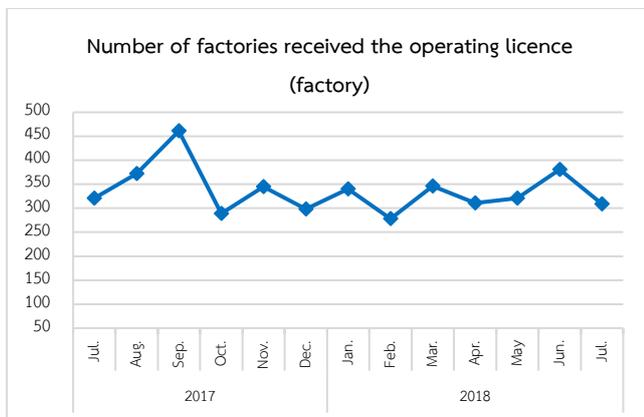


Source: Ministry of Commerce

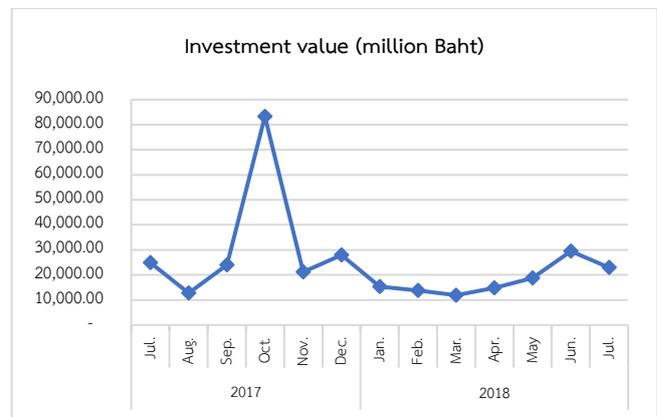
+ The import value of industrial machinery and components in July 2018 was 1,473.0 million USD, increased by 2.7 percent compared to the same month last year, from the imports of air and liquid pumps, machinery and components used in construction, and metal processing machinery.

+ The import value of raw material and semi-finished products (excluding gold) in July 2018 was 7,277.8 million USD, a 7.7 percent growth compared to the same month last year, in line with the import of equipment and parts of the electrical appliance and electronics, chemicals, iron, steel, and products thereof.

■ Status of Industrial Operations



Source: Department of Industrial Works



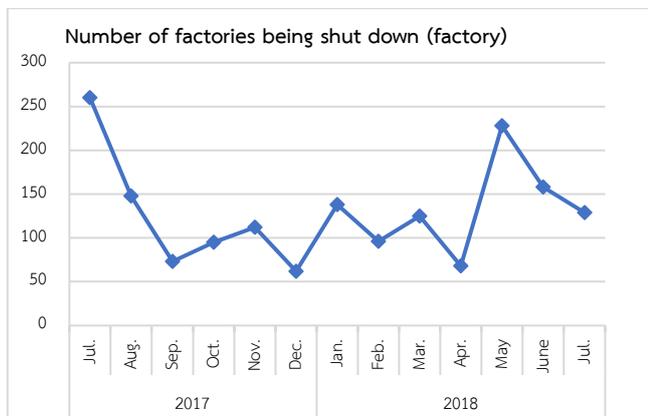
Source: Department of Industrial Works

- ⊖ A total of 309 factories were licensed to operate in July 2018. The number decreased by 18.9 percent from June 2018 (%MoM) and a 3.7 percent decrease compared with the same month last year (%YoY).
- ⊖ The total value of investment from the licensed factories for operation in July 2018 was 22,938.1 million Baht, a 22.4 percent decrease from May 2018 (%MoM) and a 7.8 percent decrease compared with the same month last year (%YoY).

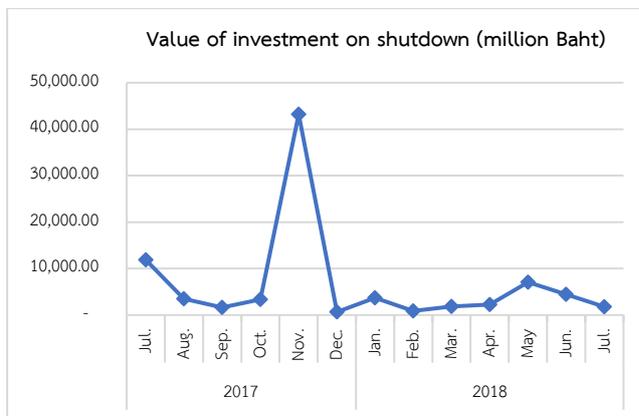
“The industry with the highest number of licensed factories commencing the business in July 2018 was the concrete and plaster product production industry (25 factories), followed by the gravel/sand/clay digging and epilation industry (22 factories).”

“In July 2018, the industry with the highest investment value was thermal electricity industry valued at 4,725.7 million Baht, followed by the food seasonings, condiment, and dyes industry valued at 2,818 million Baht.”

■ Status of Industrial Operations (cont.)



Source: Department of Industrial Works



Source: Department of Industrial Works

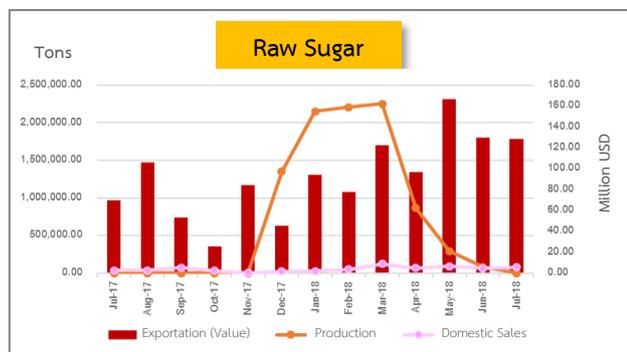
- ⊕ A total of 129 factories shut down operation in July 2018. The number decreased by 18.4 percent from June 2018 (%MoM) and decreased by 50.4 percent from the same month last year (%YoY).
- ⊕ The lost investment value on shutdowns in July 2018 equated to 1,760.4 million Baht, a 60.7 percent drop from June 2018 (%MoM), and an 85.2 percent drop from the same month last year (%YoY).

“In July 2018, the industry with the highest number of shutdown factories were gravel/sand/clay digging and epilation industry (12 factories), and the automobile repair industry (9 factories).”

“In July 2018, the industrial shutdown with the highest value of the investment was gas filling industry valued at 318 million Baht, followed by transportation industry of cement, lime, and plaster, valued at 288 million Baht.”

Industrial Economic Status for July 2018 by Industry

1. Food Industry

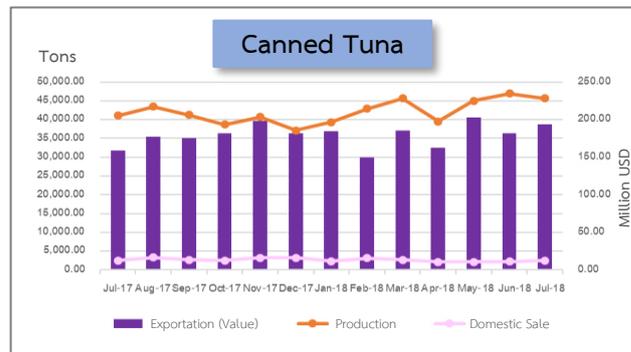


Source: Office of Industrial Economics and the Ministry of Commerce

+ **Production** of food product in July 2018 increased by 10.5 percent (%YoY), classified as follows:

1) Export-orientated products namely, sugar increased by 84.7 percent (%YoY) to serve the increase in agricultural output. This was coupled with the production of canned tuna which grew by 11.1 percent (%YoY) from pressure easing on raw material and product prices, resulting in more purchase orders from trade partners.

2) Domestic market-orientated products namely, instant noodle and ready-to-drink milk, increased by 11.2 percent and 4.3 percent (%YoY) respectively from the result of the continuous increase in consumer demand.



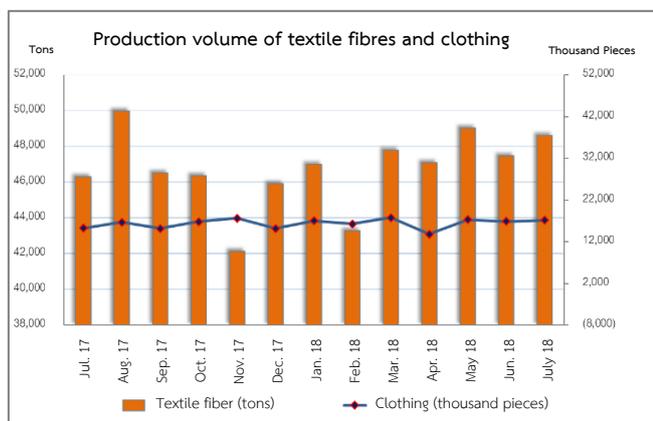
Source: Office of Industrial Economics and the Ministry of Commerce

+ **Domestic market:** Domestic sales volume of food product in July 2018 grew slightly by 0.8 percent (%YoY), resulting from a positive economic trend.

+ **Export markets:** The export value of food products in July 2018 increased by 3.1 percent (%YoY) in almost products such as canned sardine, white rice, sugar; fresh, chilled and frozen chicken; canned tuna, food seasoning, tapioca flour, processed chicken, canned sweet corn, and rice product which increased by 57.5 percent, 53.8 percent, 41.0 percent, 29.5 percent, 21.3 percent, 16.9 percent, 16.8 percent, 9.9 percent, 4.6 percent, and 4.0 percent respectively (%YoY) due to the global demand for commodities that increased following the global economic recovery.

+ **Trend forecast:** It is expected that the production and export value in the food industry in August 2018 will increase due to opportunities to expand exports to China in replacement of US products including shrimp, chilled and frozen chicken, processed pork and cassava products. It is expected that China will import less of these products from US due to increased taxes to counter trade measures. This also includes rice products (white and jasmine rice) which partner countries have increased demand for, coupled with the Thai economic trend showing consistent growth and positive factors from supporting government policies in agriculture and base economy.

2. Textile and Garment Industry



Source: The Office of Industrial Economics

Production

+ Production of textile fibers and apparel grew by 5.02 percent and 12.62 percent (%YoY) respectively to support growth in exports of synthetic and fibers with special property fibers such as collagen, and aramid fibers and apparel made from synthetic fiber.

- Fabrics dropped by 1.75 percent (%YoY) from a decrease in cotton woven fabrics which Thailand has no raw materials for, coupled with less domestic demand. However, production of fabrics made from synthetic fibers expanded well.

Domestic Sales

+ Textile fibers and apparel grew by 18.98 percent and 9.48 percent (%YoY) in textile fibers and clothing made from synthetic fibers, partially used as raw material to produce shirts with King Rama X's emblem and as raw material to produce hats and scarves in the volunteer project "We do good by heart", which many people in the country are joining. At the same time, factories produced synthetic fibers to sell finished goods in order to prepare for new products, which resulted in boosted domestic sales.

- Apparel dropped by 4.37 percent (%YoY) partially because some consumers showed interest in cheaper fashion clothes from China and Vietnam.



Source: Ministry of Commerce

Exports

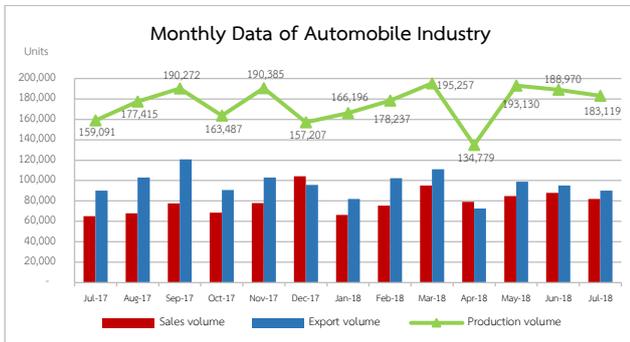
+ Textile fibers, fabrics and apparels increased in value by 18.98 percent, 10.94 percent, and 11.67 percent respectively (%YoY), whereby textile fibers grew for twenty-one consecutive months from November 2016. Key export products were synthetic fibers and fabrics which are made from fibers with special properties, whereby Thailand has the potential for both production and export. Key export markets of textile fibers and fabrics were Vietnam, Myanmar, Bangladesh, and Cambodia.

Forecasts for August 2018

+ Trends in textile fiber and fabric production are expected to expand in the speciality fiber segment, including fabrics made of synthetic fibers to support exports to Vietnam, Bangladesh and Japan. Production of apparel may be stabilised from the popularity of cheaper fashion apparel from China and luxury brands.

3. Automotive Industry

■ Automobile Production Industry



Source: Office of Industrial Economics; data collected from Automotive Division, Federation of Thai Industries

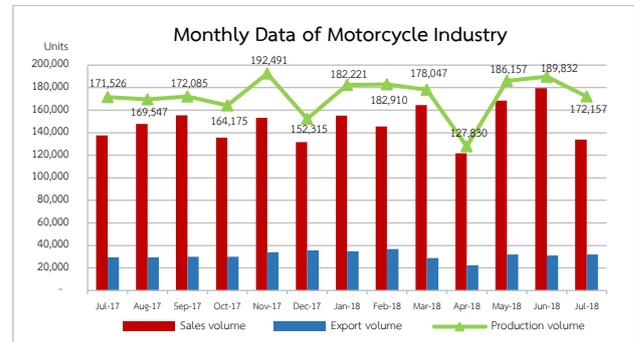
➕ **Automobile production** in July 2018 reached 183,119 units, a 3.10 percent decrease from June 2018 (%MoM) but a 15.10 percent increase from the same month last year (%YoY) resulting from the rise in production of passenger cars; 1-ton pickup trucks and derivatives; and commercial vehicles. Automobile production increased for thirteen consecutive months compared to the same period last year.

➕ **Domestic sales of automobiles** in July 2018 reached 81,946 units, a 6.72 percent decrease from June 2018 (%MoM) but a 25.73 percent increase from the same month last year (%YoY), resulting from an increase in sales of passenger cars, 1-ton pickup trucks, PPV and SUV cars. The increase was a result of, the growth of the domestic economy, and continued expansion of public and private investment, and new car models launched on the market.

➕ **Automobile exports** in July 2018 reached 90,151 units, a 5.39 percent drop from June 2018 (%MoM) but a 0.15 percent increase from the same month last year (%YoY). Exports of automobiles expanded in Asia, Oceania, the Middle East, Africa, and Central and South America.

“In August 2018, the trend of the automobile industry is expected to increase compared to August 2017 resulting from the growth of both domestic and global economy.”

■ Motorcycle Production Industry



Source: Office of Industrial Economics; data collected from Automotive Division, Federation of Thai Industries

➕ **Motorcycle production** in July 2018 reached 172,157 units, a 9.31 percent decrease from June 2018 (%MoM) but a 0.37 percent increase from the same month last year (%YoY) resulting from growth in production of multi-purpose motorcycles.

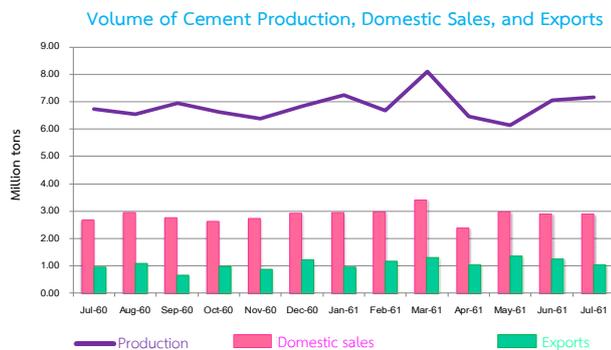
➖ **Domestic sales of motorcycles** in July 2018 reached 134,036 units, a 25.34 percent decrease from June 2018 (%MoM) and a 2.60 percent decrease from the same month last year (%YoY).

➕ **Exports of motorcycles** in July 2018 reached 31,941 units, a 3.19 percent increase from June 2018 (%MoM) and a 9.01 percent increase from the same month last year (%YoY), whereby export markets in Japan, Vietnam, and Cambodia expanded.

“In August 2018, the trend of the motorcycle production industry is expected to grow compared to August 2017.”

4. Cement Industry

Overall Cement Industry



Source: 1. Domestic production and sales volume: Division of Industrial Economics Information and Indices, Office of Industrial Economics

2. Export volume: Information and Communication Technology Center, Office of the Permanent Secretary, Ministry of Commerce.

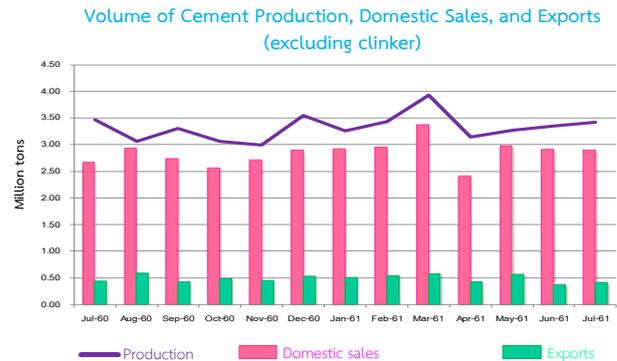
+ Total cement production in July 2018 reached 7.15 million tons, a 1.21 percent increase from June 2018 (%MoM) and a 6.30 percent increase from the same month last year (%YoY) to support the expansion of the domestic market.

+ Overall domestic cement sales in July 2018 reached 2.90 million tons, a 0.52 percent drop from June 2018 (%MoM) but increased by 7.45 percent compared to the same month last year (%YoY) resulting from continued progress in construction of public utilities and expanded construction in the private sector.

+ Total cement exports in July 2018 reached 1.06 million tons, down by 17.25 percent from June 2018 (%MoM) as key export markets such as Myanmar and Laos reduced purchase orders. However, compared to the same month last year, exports increased by 8.45 percent (%YoY) which resulted from Bangladesh and the Philippines increased purchase orders by 31.93 percent and 27.08 percent respectively.

+ The trend of the overall cement industry in August 2018 is expected to improve; however, there must be caution on negative impacts from rain and flooding in many provinces.

Cement Industry (excluding clinker)



Source: 1. Domestic production and sales volume: Division of Industrial Economics Information and Indices, Office of Industrial Economics

2. Export volume: Information and Communication Technology Center, Office of the Permanent Secretary, Ministry of Commerce.

+ Cement production (excluding clinker) in July 2018 reached 3.43 million tons, a 2.10 percent increase from June 2018 (%MoM) but a 1.19 percent decrease from the same month last year (%YoY).

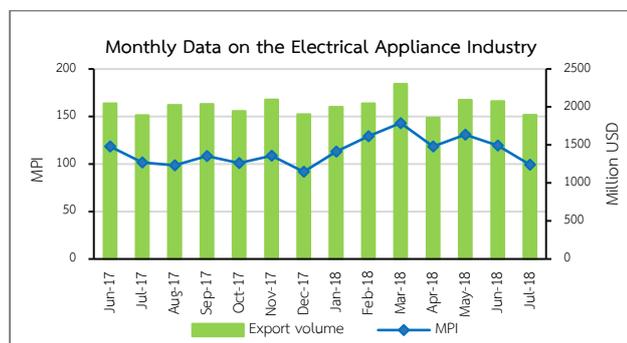
+ Domestic sales of cement (excluding clinker) in July 2018 reached 2.90 million tons, a 0.52 percent drop from June 2018 (%MoM) as it was the beginning of the monsoon season and flooded in many provinces. However, compared to same month last year, sales increased by 8.61 percent (%YoY) from continued growth in the domestic market in line with the economy and increased demand from the progress of public utilities and private real estate construction.

+ Export of cement (excluding clinker) in July 2018 reached 0.41 million tons, increased by 11.39 percent from June 2018 (%MoM) but decreased by 6.41 percent from the same month last year (%YoY) resulting from crucial export markets namely, Myanmar and Cambodia dropped purchase orders by 31.27 percent and 23.03 percent respectively.

+ The trend of the overall cement industry (excluding clinker) in August 2018 is expected to continue growing in line with the progress of public utilities and increased private real estate construction.

5. Electrical and Electronics Industry

■ Electrical Industry



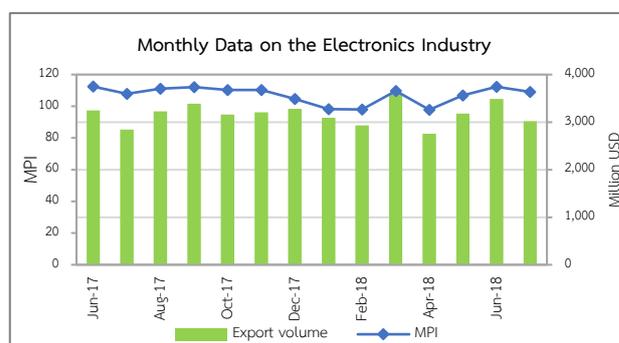
Source: Office of Industrial Economics

⊖ Production of electrical appliances remained stable and reached a production index of 99.3, a slight drop by 2.6 percent compared to the same month last year. Products which dropped in production were electric motors, microwaves, refrigerators, washing machines and electrical wiring by 22.7 percent, 17.5 percent, 12.1 percent, 9.0 percent and 3.3 percent respectively. Production of electric motors and electrical wiring dropped due to decreased domestic demand, whereas refrigerators, microwaves and washing machines dropped in production from fewer overseas orders. On the other hand, the output of kettles, compressors, air conditioners, rice cookers and household fans increased by 30.4 percent, 14.6 percent, 14.4 percent, 9.1 percent and 2.6 percent respectively. Production of kettles increased due to the increased domestic demand which resulted in more sales, whereas air conditioners, rice cookers, household fans and compressors had increased overseas orders.

⊕ Exports of electrical appliances reached an export value 1,896.1 million USD, a 0.2 percent increase compared to the same month last year. Key products such as the export value of air conditioners and parts, and switch and control panels reached 408.4 million USD and 135.0 million USD, a 19.2 percent and 9.0 percent increase from last year respectively. On the other hand, the export value for refrigerators was 119.6 million USD, a drop by 19.8 percent, whereby dropping in almost all key markets such as Asean, the EU, China and Japan. As for washing machines, the export value was 110.9 million USD, a 14.2 percent drop, whereby dropping in US market.

“The manufacturing production index is forecasted to increase slightly in August 2018 by 1.1 percent compared to the same period last year. The increase is from air conditioners with higher foreign orders, whereas washing machines and refrigerators will have lower foreign order.”

■ Electronics Industry



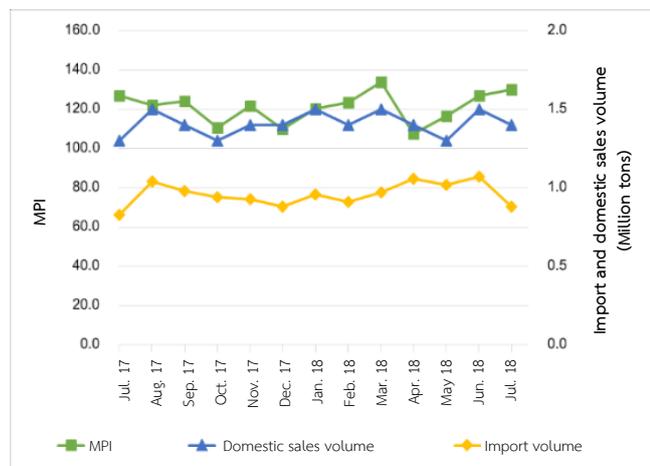
Source: Office of Industrial Economics

⊕ Production of electronics reached a production index of 99.1 when compared to the same month last year as a result of key product groups namely, Monolithic IC, PCBAs, printers and semiconductor devices, Transistors, HDD and other ICs increased by 21.0 percent, 13.9 percent, 9.6 percent, 8.5 percent and 5.2 percent respectively, in line with the global growth of electronics. ICs especially increased as being used as a key component in the development of high-tech products including smartphones and tablets. HDDs were developed to more capacity for cloud storage, whereas the market has increasingly developed semiconductors used as a component of smart devices such as watches, LED screens, and photosensors in cameras.

⊕ Export of electronics valued at 3,019.4 million USD, a 6.1 percent growth compared to the same month last year. Exports to most key markets improved including China, ASEAN, EU, and Japan. Electronics products with the highest export value were computer equipment and parts with a value of 1000 million USD, an increase by 12.7 percent, followed by ICs valued at 671 million USD, a drop by 2.3 percent, whereby China and EU market decreased by 41.5 percent and 2.2 percent respectively.

“The manufacturing production index for electronics in August 2018 is expected to increase by 11.1 percent compared to the same month last year, from exports of computer equipment and parts thereof, ICs, telephones and equipment thereof which have grown consistently.”

6. Iron and Steel Industry



Source: Office of Industrial Economics; Iron and Steel Institute of Thailand

+ The manufacturing production index in July 2018 reached 130.1, a 2.5 percent increase compared to the same period last year. Analyzed by key products that were flat and long-formed steel, it was found that flat steel grew by 5.3 percent from a 30.1 percent increase in chromium-plated sheets due to increased purchase orders from the canned seafood industry. This was followed by galvanized steel sheet, cold-rolled steel and hot-rolled steel sheets which grew by 7.2 percent, 6.5 percent and 5.5 percent respectively. Long-formed steel products dropped by 2.5 percent, whereby cold-rolled structural steel decreased by 13.4 percent, followed by steel bars, deformed bars and hot-rolled structural steel which fell by 8.9 percent, 7.2 percent and 5.0 percent respectively. The MPI for deformed bars has decreased consistently since October 2017 - May 2018, and increased by 5.2 percent in June, but dropped again in July.

+ Domestic sales in July 2018 reached 1.4 million tons, a 9.7 percent growth compared to the same period last year. Long-formed steep reached 0.4 million tons in consumption, a 14.3 percent increase among all product groups. Steel bars and structural steel grew by 19.0 percent, whereas steel wires grew by 11.6 percent. This was the first month of increase for steel bars and structural steel after a 4-month consecutive drop from March – June 2018. Flat-formed steel reached 1.0 million tons, a 7.8 percent growth, whereby chromium plated steel sheets increase by 42.0 percent, followed by thin hot-rolled steel sheets, other forms of plated sheets and galvanized steel sheets (HDG and EG) which grew by 13.4 percent, 9.7 percent and 5.4 percent respectively.

+ Imports in July 2018 reached 0.9 million tons, a 6.3 percent increase compared to the same month last year. Flat-formed steel products reached 0.8 million tons, a 7.3 percent growth from imports of thin hot-rolled carbon steel sheets, chromium plated sheets and thin hot-rolled alloy steel sheets which grew by 146.2 percent, 54.2 percent and 45.3 percent respectively. Meanwhile, long-formed steel products reached 0.2 million tons, a 3.5 percent increase, as imports of hot-rolled carbon structural steel, carbon steel wires and stainless-steel rods grew by 116.9 percent, 28.3 percent and 15.7 percent respectively.

"The steel industry outlook in August 2018 is projected to slow down, whereby the MPI is expected to drop by 3.0 percent, from flat and long-formed steel products. Flat-formed steel products are expected to decline due to fewer orders from the downstream industries such as the electronic appliances industry, especially washing machines and refrigerators. As for long-formed steel, there are some issues to be aware of regarding US trade measures. It is expected to be a barrier for steelmakers and exporters from downstream industries. This is coupled with the US currently drafting the "FART Act," a law that allows the US President to announce the increase in import tax on any item, without the necessity to take into account the normal tariff (MFN) and tariff bound to the World Trade Organization (WTO). Thus, it is as if the law permits the US to pull itself out of WTO membership".