

Industrial Production Status

Indicators	2017	2018				2019									
%YoY	Year	Oct.	Nov.	Dec.	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.
MPI*	1.8	5.7	0.8	1.2	3.6	0.6	-1.3	-2.7	1.5	-3.4	-5.3	-3.3	-4.4	-5.1	-8.5

When considered from the Manufacturing Production Index (MPI), the industrial economic status in **October 2019 contracted by 8.5 percent from the same period last year**, partly resulting from a 4.5 percent decrease in exports.

Considering MPI for the past three months compared to the previous year (% YoY), it is evident that industrial production tends to slow down, i.e., a 3.3 percent decrease in July, a 4.4 percent decrease in August, and a 5.1 percent in September.

Indicators	2018			2019									
%MoM	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.
MPI*	2.1	0.9	-1.9	4.7	-2.6	9.5	-17.4	9.3	-3.4	-0.8	0.6	-3.4	-1.5

During the past three months (July, August, and September 2019), the MPI change rates (%MoM) were a 0.8 percent decrease in July, a 0.6 percent increase in August, and a 3.4 percent decrease in September.

Key industries that contributed to the MPI decrease in October 2019 compared to the same month last year were as follows:

- Automobiles and engines: The production contracted by 22.6 percent from almost every product item (except large-sized passenger cars), following the economic slowdown of partner countries. Furthermore, domestic purchasing power weakened, and financial institutions became strict in granting loans.
- Petroleum refining: The production contracted 23.4 percent due to the suspension of some refineries for maintenance. As a result, domestic sales and exports were lower than usual.
- Iron and steel: The production contracted by 17.0 percent in all product groups, due to the economic slowdown in both the global and domestic steel markets. The contraction was also a result of trade war problems and slower domestic demand following economic conditions.

Key industries that contributed to the MPI growth in October 2019 compared to the same month last year were as follows:

- Air-conditioners: The production increased by 13.0 percent due to increased exports to ASEAN and India, including additional orders from Japan and the European Union. The domestic market grew due to market stimulus by launching a variety of products, especially inverter types.
- Hard Disk Drives: The production grew by 5.2 percent due to increased production orders after the closure of production bases in Malaysia since April 2019. The growth was coupled with the development of quality products in response to various types of customers' use.

Other Industrial Economic Indicators in October 2019

Other Industrial Economic Indicators in October 2019

■ Imports of Thailand Industrial Sector



Source: Ministry of Commerce

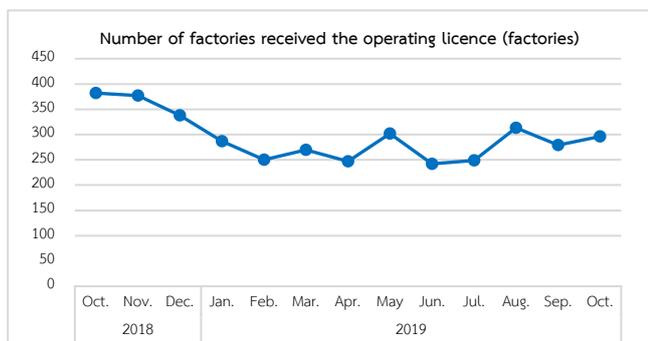


Source: Ministry of Commerce

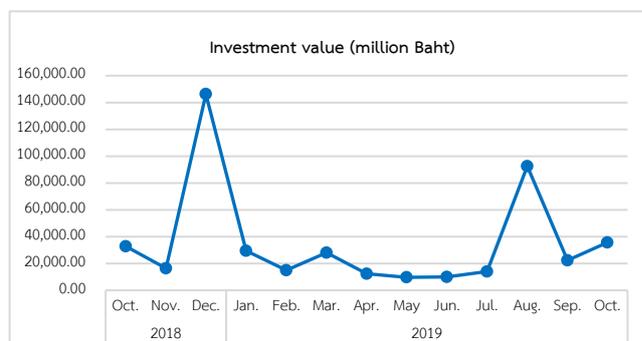
⊖ **Imports of industrial machinery and components** in October 2019, valued 1,488.34 million USD, a contraction by 1.6 percent compared to the same month of the previous year. The products that contributed to the decrease of industrial machinery and parts were engines, transmission shafts and other parts, machinery and equipment used in rubber or plastic processing, and metal processing machinery and parts

⊖ **Imports of raw materials and semi-finished products (excluding gold)** in October 2019, valued 7,167.81 million USD, a contraction by 9.2 percent compared to the same month of the previous year. Products that decreased in imports included organic chemicals, plastic pellets, steel, and semi-finished steel products, other metal ores, such as aluminium and copper products, plastic products, etc.

Industrial Operation Status



Source: Department of Industrial Works



Source: Department of Industrial Works

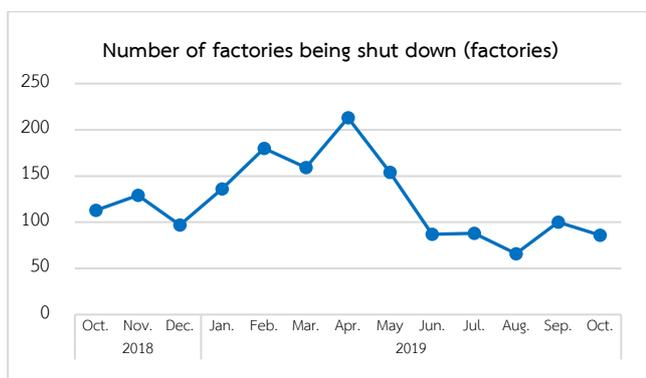
- + A total of 296 factories were licensed to operate in October 2019. The number of licensed factories increased by 6.1 percent from September 2019 (%MoM) but decreased by 22.5 percent from the same month last year (%YoY).

- + The total investment value from the licensed factories to operate in October 2019 was 35,685 million Baht. The value increased by 59.7 percent from September 2019 (%MoM) and by 9.0 percent from the same month last year (%YoY).

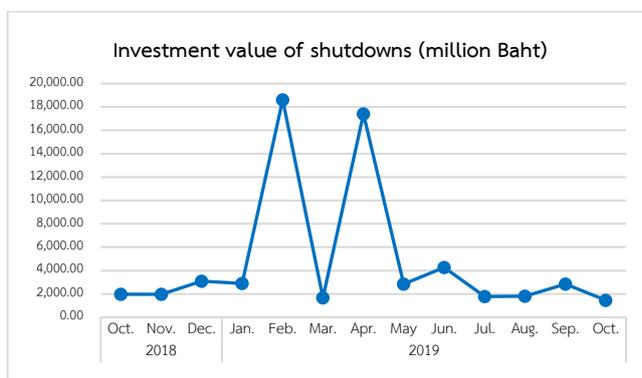
"The industry which had the highest number of newly licensed factories to operate in October 2019 was the concrete and gypsum concrete product manufacturing industry (27 factories), followed by the digging and dredging industry of sand, gravel, or soil (25 factories)."

"The industry which had the highest value of the investment in October 2019 was the fiber or fuzz fiber industry with the investment value of 10,804.00 million Baht, followed by the chemical products, chemicals, or non-fertilizer chemicals industry with the investment value of 6,076.87 million Baht."

■ Industrial Operation Status (cont.)



Source: Department of Industrial Works



Source: Department of Industrial Works

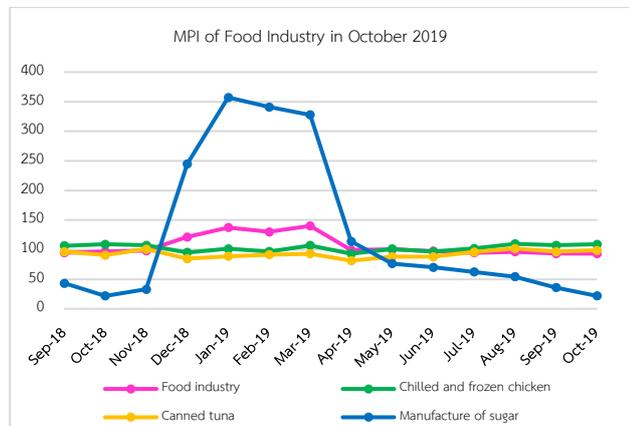
- ⊕ A total of 86 factories shut down the operation in October 2019. The number of shutdowns decreased by 14.0 percent from September 2019 (%MoM) and by 23.9 percent from the same month last year (%YoY).
- ⊕ The lost investment value on shutdowns in October 2019 was 2,843 million Baht, which decreased by 55.7 percent from September 2019 (%MoM) and by 36.3 percent from the same month last year (%YoY).

“The industry with the highest number of shutdowns of factory in October 2019 the engine-powered vehicle repairing industry (9 factories), followed by the concrete and gypsum concrete product manufacturing industry (5 factories).”

“In October 2019, the industry which had the highest operation shutdown with the highest value of investment was the concrete and gypsum concrete product manufacturing industry with the investment value of 356 million Baht, followed by the manufacturing industry of special parts and accessories for motor vehicles or trailers with the investment value of 155 million Baht.”

Industrial Economic Status by Industrial Sectors in October 2019

1. Food Industry



Source: The Office of Industrial Economics



Production of food product in October 2019

decreased by 3.9 percent (%YoY), classified as follows:

1) Export-orientated products that contracted were: (1)

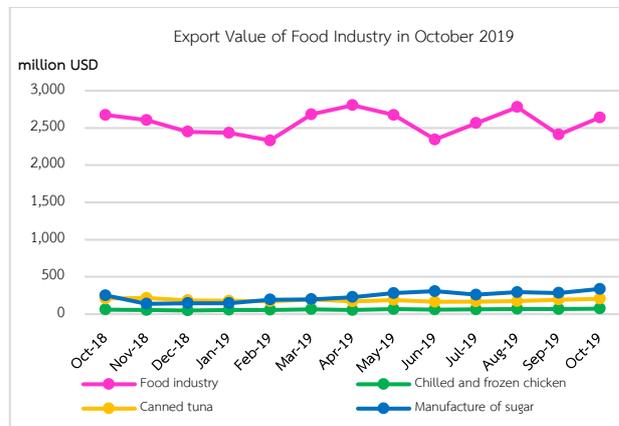
Canned pineapples—The MPI dropped by 69.6 percent due to less raw materials from the reduction of planting areas as the result of unattractive prices and the effect of drought. Orders from key importers such as the US slowed down considerably (2) Tapioca starch—The MPI declined by 23.6 percent as production declined due to droughts and epiphytotic disease. In addition, major importers like China slowed their orders, and (3) Coconut milk—The MPI decreased by 11.0 percent due to the high cost of raw materials, together with key markets such as the US, which slowed down.

2) Domestic market-orientated products, namely palm oil, decreased in MPI by 16.0 percent. This was due to the reduction of palm oil raw materials as the price was low; thus, farmers had no interest in maintaining palm trees.



Domestic sales of food in October 2019 decreased by

9.6 percent (%YoY) due to the Consumer Confidence Index, which declined from the previous year, as consumers were still worried about the Thai economy, which recovered slowly. Furthermore, the purchasing power of the people did not recover much.



Source: Ministry of Commerce



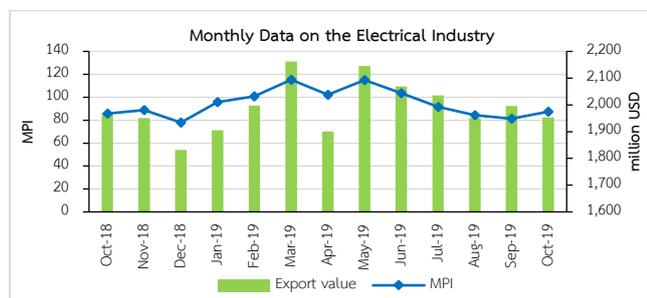
Export markets: The overall value of food exports in

October 2019 dropped 1.3 percent for the third consecutive month due to the decline in the EU, the US, and ASEAN markets. In contrast to the CLMV, China, and Japan markets continued to grow. Key products that contracted were canned pineapple (27.6%), rice—white and jasmine rice (25.8%), cassava products—cassava chip and tapioca starch (25.0%), canned sardines (4.6%), processed chicken (2.0%), and canned tuna (1.1%). However, key exported products such as sugar, chilled and frozen chicken, rice products, chilled and frozen shrimp, milk and dairy products, instant noodles, food seasonings, and fresh fruit (durian and longan) continued to increase.

The forecasted trend predicts that the overall production and export value for the food industry in November may decrease slightly from the same period last year, with negative factors such as the global economic slowdown and effects of the Baht causing Thailand's price competitiveness to drop. In addition, the volume of raw materials for agricultural products decreased, such as rice, cassava, sugar, coconut, and pineapples, despite the positive factors from the African Swine Fever outbreak, causing chicken, which is a substitute product, to increase in demand. Furthermore, factories (nine additional factories from the previous seven factories) producing and processing of poultry meat and by-products of frozen chicken in Thailand have been approved by China. The exports will be allowed from October 22, 2019, onwards.

2. Electrical and Electronics Industry

■ Electrical Industry



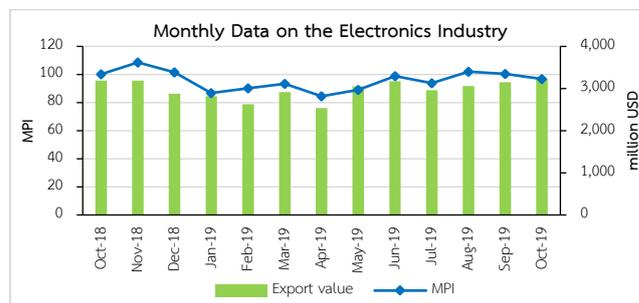
Source: The Office of Industrial Economics, Electrical and Electronics Institute, and Ministry of Commerce

+ **Production of electrical appliances** grew by 1.8 percent compared to the same month last year, reaching an MPI of 87.4. Products that increased in the production included household fans, air-conditioners, electric cables, and rice cookers, which grew by 15.6 percent, 12.2 percent, 3.5 percent, and 0.6 percent, respectively. Rice cookers and electrical wire/cables increased in production due to the growth of inventory release for sales domestically. Meanwhile, air-conditioners and household fans increased from the growing export market. Products that decreased were thermos, microwaves, washing machines, compressors, transformers, cables, refrigerators, and electric motors, by 56.8 percent, 22.5 percent, 19.9 percent, 5.6 percent, 5.0 percent, 2.3 percent, 2.2 percent, and 0.1 percent, respectively. The production of refrigerators decreased because of the inventory release. Production of washing machines, compressors, transformers, and cables decreased due to a drop in domestic sales and exports. Thermos contracted in production due to fewer sales in the domestic market, and the production of microwaves and electric motors decreased from lower demand from overseas markets.

- **Exports of electrical appliances** dropped 0.8 percent from the same month last year to a total of 1,953.5 million USD. The decrease was due to the contraction of key markets, including ASEAN and the EU. Products that decreased in exports were washing/dry cleaning machines and parts thereof, which dropped 7.3 percent to 93.5 million USD as a result of declining orders from ASEAN and the EU markets. On the other hand, exports of refrigerators increased by 11.1 percent to 171.9 million USD, of which grew in the US market. Air-conditioners and parts increased by 10.9 percent to 379.4 million USD in the US, the EU, and Japan markets.

"Production in November 2019 in the electrical appliances and electronics industry is expected to grow by 1.0 percent compared to the same month last year, from increased sales and exports of air-conditioners, household fans, and rice cookers. The growth is a result of the country's economic stimulus policies. Meanwhile, washing machines are expected to be sold both domestically and internationally, such as in the EU and the US."

■ Electronics Industry



Source: The Office of Industrial Economics, Electrical and Electronics Institute, and Ministry of Commerce

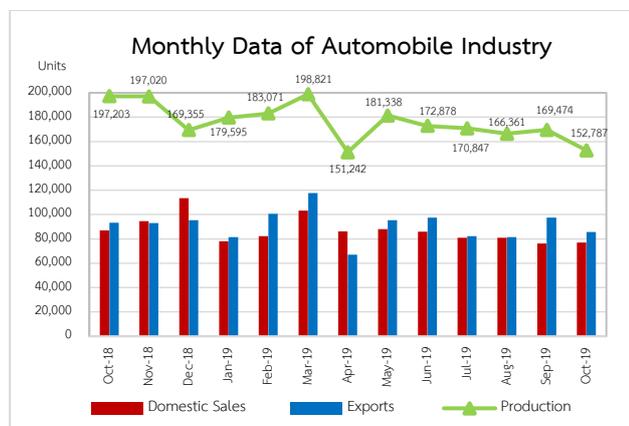
+ **Production of electronics** increased by 2.2 percent compared to the same month last year, reaching an MPI of 96.8. The products that have grown are HDD and IC, which increased by 6.8 and 5.6 percent, respectively. HDD products increased as operators shifted production bases from Malaysia to Thailand, resulting in more orders from key markets. On the other hand, electronic products that contracted included semiconductor devices transistors, PWBs, PCBAs, and printers, which decreased by 18.3 percent, 12.8 percent, 3.9 percent, and 3.7 percent respectively, as orders from key markets slowed down.

+ **Exports of electronics** valued 3,234.9 million USD, an increase of 1.5 percent compared to the same month last year. HDD and IC reached the export value of 981.4 and 675.6 million USD, increasing by 7.64 percent and 5.49 percent, respectively, as orders from the US, the EU, and Japan markets increased.

"Production in November 2019 in the electronics industry is expected to increase by 2.0 percent compared to the same month last year. This was due to HDD manufacturers shifted production bases from Malaysia to Thailand, and orders from the key market continue to grow."

3. Automotive Industry

■ Automobile Production Industry



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

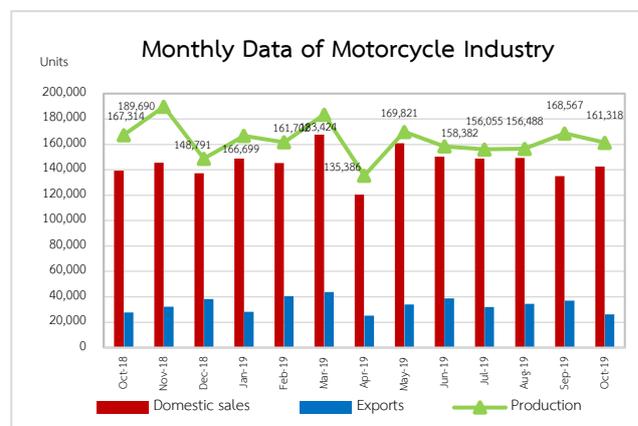
➖ **Automobile production** in October 2019 reached 152,787 units. The production decreased by 9.85 percent compared to September 2019 (%MoM) and by 22.52 percent from the same month last year (%YoY). The decrease resulted from a lower production of passenger cars, 1-ton pickup trucks, and derivatives, and commercial purpose cars.

➕ **Domestic sales of automobiles** in October 2019 reached 77,121 units, an increase of 1.22 percent from September 2019 (%MoM) but a decrease of 11.28 percent from the same month last year (%YoY), as the result of the decrease in sales of passenger cars, 1-ton pickup trucks and derivatives, commercial cars, PPVs, and SUVs causing by the slowdown of domestic economy.

➖ **Export of automobiles** in October 2019 reached 85,552 units, a decrease of 12.29 percent from September 2019 (%MoM) and a decrease of 8.34 percent from the same month last year (%YoY). The exports decreased in Oceania, Africa, Europe, and North America markets.

"Automotive industry outlook in November 2019 is expected to decrease compared to November 2018, as the global economic slowdown and the decrease of domestic sales from the economic slowdown."

■ Motorcycle Production Industry



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

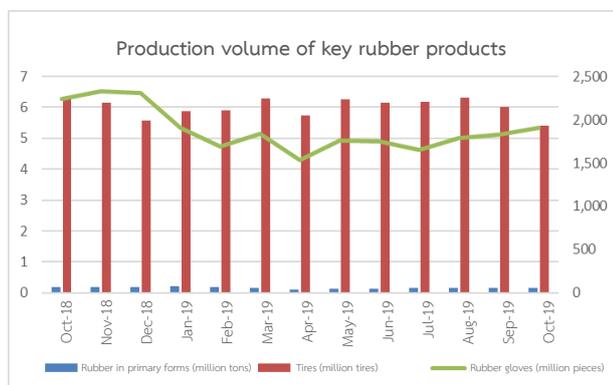
➖ **Motorcycle production** in October 2019 reached 161,318 units. The production decreased by 4.30 percent from September 2019 (%MoM) and by 3.58 percent from the same month last year (%YoY), as the result of the decrease in production of multi purposes and sport motorcycles.

➕ **Domestic sales of motorcycles** in October 2019 reached 142,434 units. Sales increased by 5.44 percent from September 2019 (%MoM) and by 2.26 percent compare to the same month last year (%YoY) which resulted from increasing sales of 51-110 cc., 111-125 cc., 126-250 cc., and 251-399 cc. motorcycles.

➖ **Exports of motorcycles** in October 2019 reached 26,057 units, a decrease of 7.34 percent from September 2019 (%MoM) and a decrease of 5.56 percent from the same month last year (%YoY), which slowed down in the UK, Myanmar, Vietnam, and Cambodia markets.

"Motorcycle industry outlook in November 2019 is expected to decrease compared to November 2018."

4. Rubber and Rubber Products Industry



Source: The Office of Industrial Economics

Production

➖ Processed rubber in primary forms (smoked rubber sheets, rubber blocks, and concentrated latex) decreased by 14.36 percent.

➖ Automotive tires decreased by 13.99 percent as some manufacturers still adjusted to product standards for pneumatic tires, TIS. 2721-2560 (2017), which became effective on September 24, 2019.

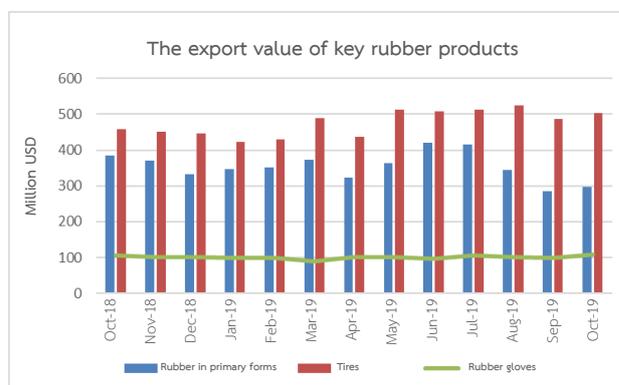
➖ Rubber gloves decreased by 14.89 percent, as the Baht strengthened against the US Dollar causing business operators to bear higher costs and, therefore, unable to compete.

Domestic Sales

➕ Processed rubber in primary forms (smoked rubber sheets, rubber blocks, and concentrated latex) increased by 2.12 percent.

➖ Automotive tires decreased by 10.91 percent in correlation to the contraction of the Replacement market and the result of the enforcement of pneumatic tires standards, TIS. 2721-2560 (2017)

➖ Rubber gloves decreased by 3.51 percent as domestic businesses were unable to compete on price.



Source: Ministry of Commerce

Exports

➖ Processed rubber in primary forms (smoked rubber sheets, rubber blocks, and concentrated latex) decreased in export value by 22.90 percent. This was due to China, which is a main export market of Thailand, has reduced orders for rubber from Thailand by 48.60 percent.

➕ Automotive tires increased in export value by 10.11 percent as the US market was still in a good growth which increased by 22.87 percent.

➕ Rubber gloves increased in export value by 1.33 percent from the expansion of the US, Belgium, and China markets.

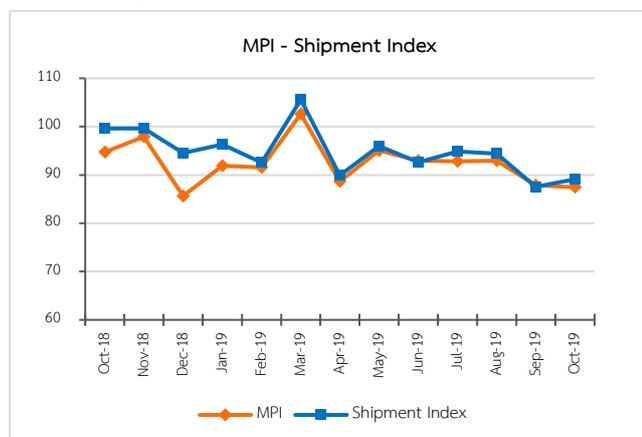
Industry Outlook in November 2019

The production and sales of processed rubber in primary forms (smoked rubber sheets, rubber blocks, and concentrated latex) are expected to slow down from the previous month due to an epiphytotic (*Phytophthora leaf fall disease*) in rubber plantations in the south, resulting in less supply of rubber to the market. The production and domestic sales of automotive tires are expected to grow following the growth trend of the US and the replacement market. The production of rubber gloves is expected to slow due to the increased cost burden, such as the strengthening Baht compared with the US Dollar. Meanwhile, the domestic sales of rubber gloves are expected to grow following the trend of higher domestic demand.

Exports of processed rubber in primary forms (smoked rubber sheets, rubber blocks, and concentrated latex) are expected to decrease in value, in line with the projected slowdown of rubber orders from China. Exports of automotive tires and rubber gloves, on the other hand, are likely to increase in the value following the growth trend of the US market.

5. Plastics Industry

MPI and Shipment Index



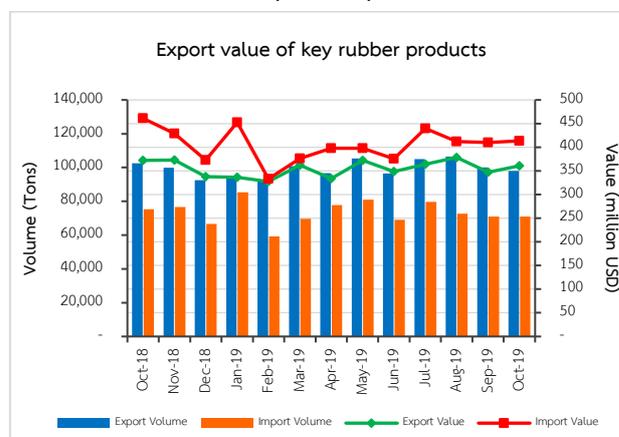
Source: The Office of Industrial Economics

➔ **The Manufacturing Production Index** in October 2019 was 87.47; a decrease of .77 percent compared to the same period last year. The MPI of many products, e.g., plastic tableware, kitchenware, and toilet articles; plastic film; plastic sheets decreased by 29.22 percent, 27.09 percent, and 19.42 percent, respectively, as the result of economic slowdown causing a decrease in the demand for products.

➔ **The Shipment Index** in October 2019 was 89.12, a decrease of 10.65 percent compared to the same period last year. The MPI of plastic tableware, kitchenware, and toilet article category decreased by 29.74 percent, followed by plastic gunny bag and plastic plate, which decreased by 17.28 percent and 16.93 percent, respectively.

➔ **Exports** in October 2019 valued 360.97 million USD, or a decrease of 2.98 percent compared to the same period last year.

Volume and value of exports-imports

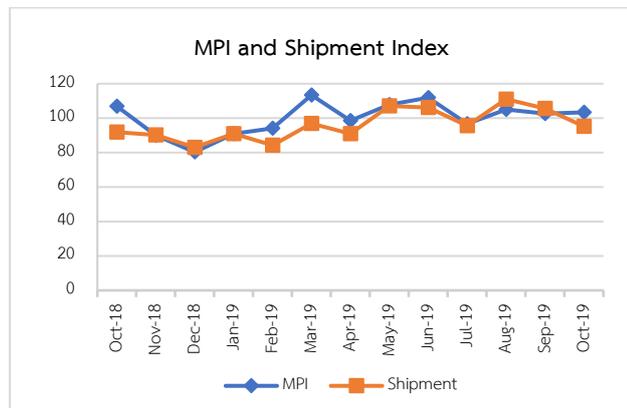


Source: The Office of Industrial Economics

➔ **Imports** in October 2019 valued 413.12 million USD or a decrease of 10.42 percent compared to the same period last year. Plastic products that contributed in the decreased in import value were self-adhesive plastic plates, sheets, film, foil, tape, strip and other flat shapes, whether or not in rolls (HS 3919); other articles of plastics (HS 3926); articles for the conveyance or packing of goods (HS 3923) which decreased by 12.94 percent, 15.33 percent, and 10.29 percent, respectively.

The plastics industry outlook in November 2019: it is expected that production and exports will continue to contract as the result of economic slowdown and the decrease in demand for plastic products, both domestic and overseas markets.

6. Chemicals Industry

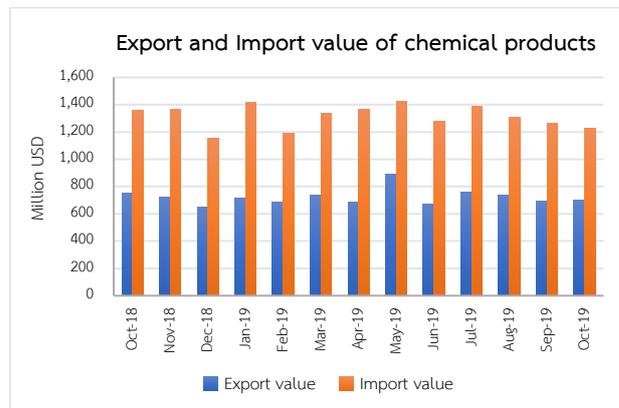


Source: The Office of Industrial Economics

⊖ The manufacturing production index of the chemical industry in October 2019 was 103.37, a decrease of 3.36 percent compared to the same period last year. The production of downstream chemical categories decreased by 6.07 percent; the highest reduction was in the chemical fertilizer category. The production of basic chemical categories increased by 5.70 percent from the same period last year.

⊕ Sales in October 2019, the chemical industry had a shipping index of 95.25, a growth of 3.63 percent compared to the same period last year. The shipping index of the basic chemical products grew by 6.27 percent, mainly from an increase in Caustic Soda production. For downstream chemical products, the shipping index grew by 2.82 percent in the soap and detergent product category.

⊖ Exports in October 2019 valued 702.95 million USD, a decrease of 6.47 percent compared to the same period last year. Shipping of the basic chemical category reached the total value of 351.35 million USD, a decrease of 16.86 percent compared to the same period last year. Key products that contributed to the decline in exports was organic chemical (28.10 %), fertilizer (25.14%), and inorganic chemical (14.05). Exports to key markets such as China, India, and Indonesia decreased.

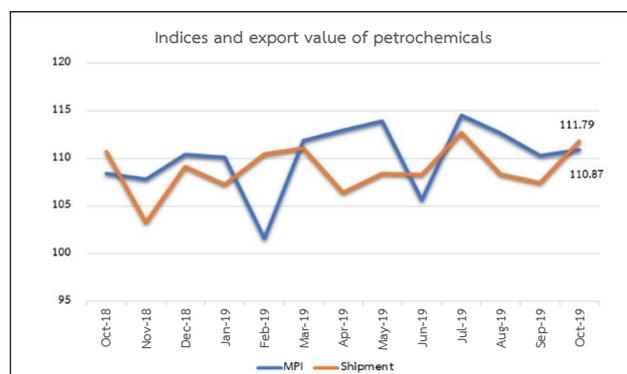


Source: Customs Department, Ministry of Finance

⊖ Imports in October 2019 decreased 9.59 percent compared to the same period last year to a valued 1,226.36 million USD. Basic chemicals category reached an import value of 757.27 million USD, a decrease of 14.24 percent from the same period last year. Downstream chemicals decreased by 0.91 percent to the import value of 469.09 million USD. Products that decreased in import value were organic and inorganic chemicals, paints, etc.

In November 2019, production and exports of the chemical industry are expected to slow down. However, there are still factors that need to be monitored, e.g., global economic condition and the economic slowdown of trading partner, including exchange rate that continues to appreciate and may affect the export of Thai chemicals.

7. Petrochemicals Industry

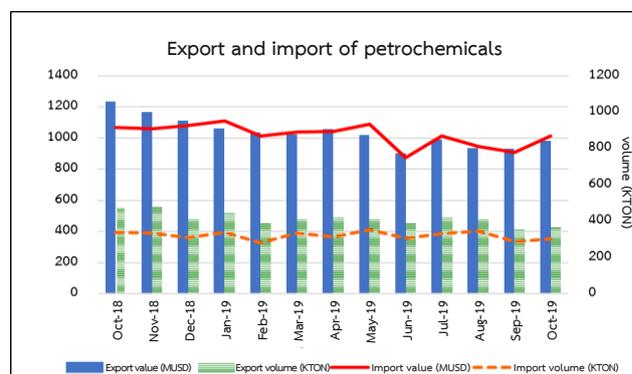


Source: The Office of Industrial Economics

+ The manufacturing production index in October 2019 increased 2.26 percent from to the same period last year to 110.87. The production of basic petrochemicals—Ethylene and Toluene—used as precursors of plastic pellets and solvents, increased by 2.79 percent and 0.91 percent, respectively. Meanwhile, downstream petrochemical products—PET, EPS, PS, and PE resins—used to produce various types of packaging and plastic products, grew by 15.05 percent, 11.57 percent, 8.88 percent, and 5.87 percent, respectively.

+ The shipment index in October 2019 increased 0.96 percent from the same period last year to 111.79. The shipment of basic petrochemicals—Propylene and Benzene—used as precursors of plastic pellets and solvents, increased by 5.34 percent and 4.15 percent, respectively. In downstream petrochemical products—SAN, PS, EPS, PET, and PE resins—used to produce various types of plastic packaging and products, increased by 29.37 percent, 12.69 percent, 11.14 percent, 8.98 percent, and 1.84 percent, respectively.

- Exports in October 2019 reached 980.54 million USD, a decrease of 20.57 percent compared to the same period last year. Basic petrochemical products with decreasing export value were Para-Xylene, Terephthalic Acid, Benzene, and Toluene, which mainly used as precursors in the synthetic fibers and solvent production. Downstream petrochemical products with decreasing export value were PE, PP, PC, PVC, and PET resins, which mostly used in the packaging, plastic products, construction products, and drinking water bottles industry.

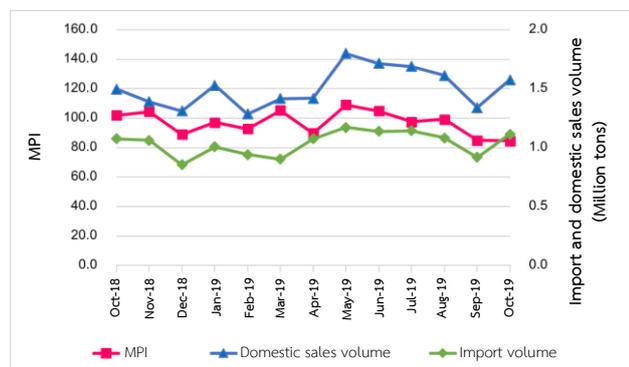


Source: Customs Department, Ministry of Finance

- Imports in October 2019 valued 424.84 million USD, a decrease of 23.48 percent compared to the same period last year. Basic petrochemical products with decreasing import value were products mostly used as precursors in the production of PVC, PE, and synthetic fibers such as Vinyl Chloride, Para-Xylene, Ethylene, and Phthalic Anhydride. Meanwhile, downstream petrochemical products with decreasing import value were BR rubber, SR rubber, Nylon resin, and PES resin, which mostly used in the production of plastic packaging, plastic products, and synthetic rubbers.

Petrochemicals industry outlook in November 2019, exports and imports are expected to slow down compared to the same period last year, from fluctuations of oil prices in the world market and the global economy that is likely to enter a recession, including the effect of the US-China trade war.

8. Iron and Steel Industry



Source: The Office of Industrial Economics / Iron and Steel Institute of Thailand

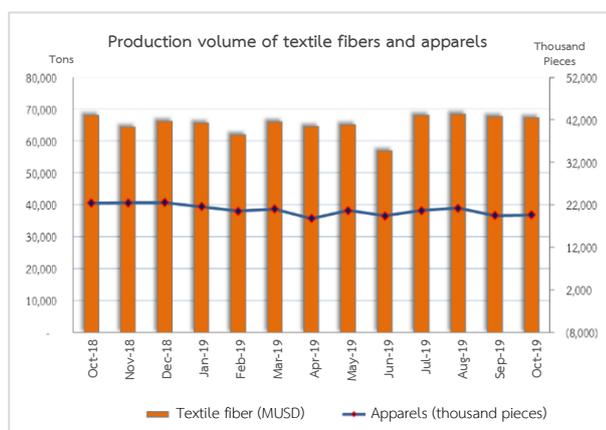
- The manufacturing production index in October 2019 reached 84.6, a decrease of 17.0 percent (contracting for the fifth consecutive month) compared to the same period last year. Considering key products, namely flat-formed steel, and long-formed steel, the MPI of both product groups decreased. The MPI of long steel was 82.8, a decrease of 16.6 percent (contracting for the fourth consecutive month), from the production of wire rods, which decreased by 30.4 percent, followed by deformed steel bars (18.7%) and hot-rolled sections (18.0%). The contraction followed the slowdown in the construction industry, especially the construction of private residences in other provinces, while government construction continued to grow. The MPI of flat-formed steel products was 83.5, down 21.6 percent (declining for the fifth consecutive month), from the production of Tin free sheets which decreased by 37.5 percent, as manufacturers in related industries imported cheaper products from different countries such as South Korea, China, and Japan (imports in October 2019 reached 13,703 tons, an increase of 205.4 percent), followed by cold-rolled steel sheets and galvanized sheets which contracted by 31.0 percent and 18.6 percent, respectively.

- Domestic sales in October 2019 reached a volume of 1.6 million tons, a decrease of 3.4 percent compared to the same period last year from the downturn of downstream industries such as the construction and canned fruit packaging industries, resulting in reduced steel demand. The domestic sales volume decreased in both long and flat steel. The sales volume of long steel reached 0.6 million tons, a decrease of 2.0 percent from the sales of round bars and hot-rolled sections, which decreased by 12.7 percent. Products in the flat steel product group reached a sales volume of 1.0 million tons, down by 4.3 percent. Sales of tin plates reduced by 29.5 percent, followed by cold-rolled steel sheets and galvanized steel sheets in both HDG and EG types, which contracted by 16.6 and 7.2 percent, respectively.

+ Imports in October 2019 increased 1.0 percent from the same period last year to a total of 1.1 million tons. The increase was from the import of flat steel products with the volume of 0.8 million tons, an increase of 2.4 percent from imports of hot-rolled alloy steel plate, which rose by 587.0 percent (key import source was China), followed by tin free plates (205.4%) and cold formed structural steel (124.2%). Imports of long steel products, on the other hand, decreased 2.9 percent to the volume of 0.3 million tons. This decrease was from the imports of hot-rolled carbon steel sections, which decreased 56.3 percent (key import source was Japan), followed by alloy steel round bars (42.7%) and seamless pipes (28.6%).

"The trend of the steel industry in November 2019 is forecasted that production will slow down compared to the same period of last year due to the slowdown in downstream industries such as the construction industry, especially the construction of private residences in other provinces, while government construction is expected to continue growing."

9. Textile and Garment Industry



Source: The Office of Industrial Economics

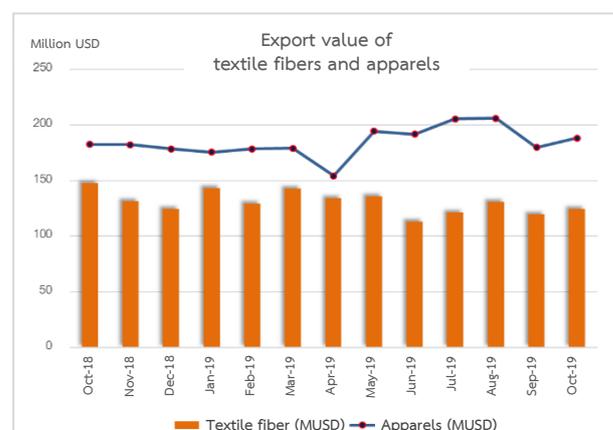
Production

+ Production of textile fibers increased by 1.20 percent. The increase partly resulted from the production growth of man-made fibers for exports to China.

- Fabrics and wearing apparel decreased by 13.55 percent and 12.39 percent, respectively, because of a declining trend in orders from trading partner countries, together with the slowdown of domestic consumption demand. Therefore, business operators reduced the production of upstream raw materials, which will be stocks.

Domestic sales

- Textile fibers, fabrics, and wearing apparel decreased by 14.25 percent, 13.95 percent, and 23.6 percent, respectively. The decrease was due to declining demand for raw materials to produce products for both exports and domestic consumption. Furthermore, domestic purchasing power decreased.



Source: Ministry of Commerce

Exports

- Export value of textile fiber decreased by 15.66 percent, partly because of the global economic slowdown. This reduced purchase orders of Thai textile fibers. However, exports of man-made fibers to China grew by 11.11 percent from domestic consumption in China.

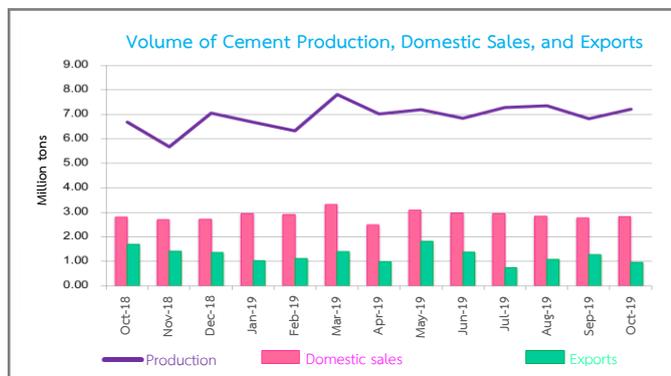
+ Export value of fabric and wearing apparel increased by 2.37 percent and 3.00 percent, respectively. The increase resulted from the growth of fabric exports to Vietnam and Cambodia, including expansion of exports of wearing apparels for both men and women to Japan and the EU markets.

November 2019 outlook

The circumstance of textiles and apparel industry, it is expected that the production of textile fibers and fabric will slow down in line with the export trend expected to decline. As a result of the political situation of the US and the trade war between the US and China, trade and investment of such markets slow down. These will affect production sectors which lower the demand for raw materials from Thailand. However, apparel is expected to continue to expand in the OEM sector for international brand.

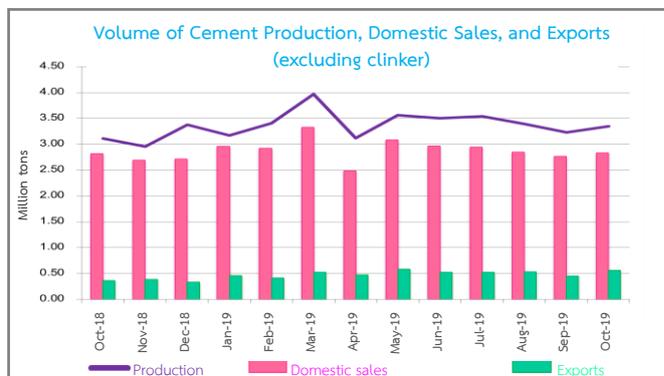
10. Cement Industry

Overall Cement Industry



Source: 1. Domestic production and sales volume: Division of Industrial Economics Information and Indices, The Office of Industrial Economics
2. Export volume: Information and Communication Technology Center, Office of the Permanent Secretary, Ministry of Commerce.

Cement Industry (excluding clinker)



Source: 1. Domestic production and sales volume: Division of Industrial Economics Information and Indices, The Office of Industrial Economics
2. Export volume: Information and Communication Technology Center, Office of the Permanent Secretary, Ministry of Commerce.

+ *Overall cement production* in October 2019, reached 7.21 million tons, an increase of 5.63 percent from September 2019 (%MoM) and 7.86 percent from the same month last year (%YoY).

+ *Overall domestic cement sales* in October 2019, reached 2.83 million tons, an increase of 2.00 percent from September 2019 (%MoM) and 0.45 percent (%YoY) from the same month last year, due to the acceleration of large-scale government projects and the demand for housing repairs after the floods in the previous month.

- *Total exports of cement* in October 2019 reached 0.96 million tons, a decrease of 25.19 percent from September 2019 (%MoM) and 43.55 percent from the same month last year (%YoY). The decline was a result of key export markets, e.g., Bangladesh and China decreased orders by 70.68 percent and 74.79 percent, respectively.

The overall trend of the cement production in November 2019, when compared with the same period last year, is expected to grow following demand in the domestic market. However, there are still issues that need to be monitored, namely the economic slowdown, appreciation of the Baht, and impact on income from employment terminations, for example.

+ *Cement production* (excluding clinker) in October 2019 reached 3.35 million tons. The production increased by 3.56 percent from September 2019 (%MoM) and by 7.69 percent from the same month last year (%YoY).

+ *Domestic sales of cement* (excluding clinker) in October 2019 reached the total volume of 2.83 million tons. The sales increased by 2.36 percent from September 2019 (%MoM) and by 0.45 percent from the same month last year (%YoY).

+ *Export of cement* (excluding clinker) in October 2019 reached 0.56 million tons, an increase of 23.76 percent from September 2019 (%MoM) and a 54.39 percent increase from the same period last year (%YoY). The increase was a result of key export markets, e.g., Cambodia and Myanmar increased orders by 107.85 percent and 68.92 percent, respectively compared to the same month last year.

Cement production (excluding clinker) in November 2019, when compared to the same period last year, is likely to expand following demand in the domestic market and acceleration of large-scale government projects, including continuously increasing orders from major export markets such as Cambodia and Myanmar.