



Industrial Economic Status Report February 2016

Summary of Industrial Economic Status

The Manufacturing Production Index (MPI) in February 2016 contracted or decreased 1.62% when compared with the same period of previous year (YoY). The contracted main industries included automobiles, iron and steel, garments and fish products. The MPI has contracted, but the contraction rate slowed down from January which contracted 3.5%.

Automobiles industry in February 2016 contracted when compared with the same period of 2015, which it was contract in both domestic and export market.

Fish products industry fell, due to a shortage of raw materials, as well as Thai fishery breaking the IUU rules of EU, a cancel of concessions in Indonesia's territorial waters and stopping of operation of some fishing boats for compliance with new fishing law. However, some products increased in export value YoY, such as chilled or frozen fresh shrimp.

Establishment and close business in February 2016, 256 plants began operations, decreased 4.83% from January 2016, but the investment capital increased 21.9% and the employment rates improved 40.8%. The major industry was the production and distribution of electricity from biomass, with 6 plants for a total investment amount of 9,407.85 million baht and 110 employees hired. When compared with the same month of previous year, the number of plants that commenced operations decreased 15.23% from February 2015. On the other hand, 212 plants closed in February 2016, increased 57.04% from January 2016, and also increased 135.56% YoY.



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Imports of Thailand's industry sector in February 2016, an import of industrial machinery and accessories contracted 13.2% when compared with the same period of previous year, due to a decrease of imports of engines, transmission shafts and other components, air pumps, liquid, and machinery used in the processing of metals and parts.

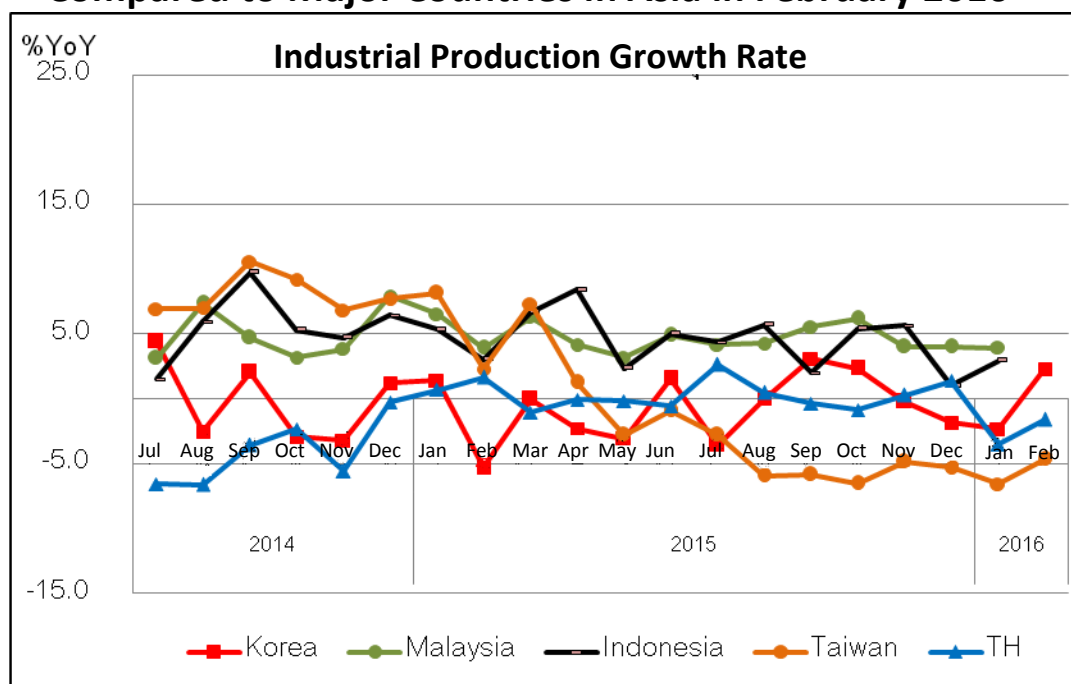
The imports of raw materials and semi-finished goods (excluding gold) had a value of \$5,052.7 million USD, which shrank 15.4% YoY, due to a decrease of imports of yarns and fibers, fabrics, chemicals, iron, steel and its products and components of electrical appliance.

Energy consumption of manufacturers in February 2016 stood at 9,341.4 million kWh (kilowatt-hour), and decreased 2.6% from January 2016 (9,590.8 million kWh), but it increased 4.5% when compared with the same period of 2015 (8,936.1 million kWh). Energy consumption tracking data by business size showed that all small, medium and large-sized businesses consumed less energy when compared to the last month, but consumed more energy when compared to the same period of 2015.



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Thailand's Industrial Economic Conditions Compared to Major Countries in Asia in February 2016



Production situations of Thailand's industry sector considered on the Manufacturing Production Index (MPI) decreased 1.6% when compared with the same period of the previous year, stemming to a decreasing of major industries such as automobiles, iron products, ready-garments, cigarettes, and canned and frozen seafood.

However, the industrial production rate of Taiwan continued to contract by 4.7%.

The industrial production rate of South Korea expanded 2.3%.

The industrial production data of Malaysia and Indonesia in February 2016 have not been released yet currently, but the trend continued growth from the previous month. In January 2016, the industrial production of Malaysia and Indonesia expanded 4.0% and 2.9%, respectively.



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Industrial Activity Situations in February 2016

Business establishment situation of manufactures in February 2016 when compared with January 2016 was reported by the Department of Industrial Works (DIW) that 256 plants began operations and decreased 4.83% from January 2016 (269 plants), but the investment capital valued by amount of 21,589 million baht which increased 21.93% from January 2016 (17,707 million baht), and the number of employed people was 9,686 persons which increased 40.81% from January 2016 (6,879 employees).

Business establishment situation of manufactures in February 2016 when compared with February 2015 was reported by the Department of Industrial Works (DIW) that the number of plant openings decreased 15.23% from February 2015 (302 plants), but the investment capital increased 4.71% from February (20,619 million baht), and the number of employed people increased 31% February 2015 (7,394 persons).

- The industry that had the most factories starting up in February 2016 was the industry of digging for construction (28 plants) and the followed industry was the industry of ready mixed concrete, pile and floor plate (17 plants).
- The industry with the highest level of investment capital in February 2016 was the industry of production and distribution of electricity from biomass (9,407.85 million baht), and followed industry was the manufacturing of parts and components of electronics (4,231.80 million baht).
- The industry that had the most new hires in February 2016 was the industry of the manufacturing of parts and components of electronics (3,750 employees), and followed industry was the manufacturing of frozen shrimp, aquatic animal processing, preserving of meat and frozen aquatic animal (505 employees).



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Business closing situation of manufactures in February 2016 when compared with January 2016 was reported by the Department of Industrial Works (DIW) that the number of plant closures was 212 plants and increased 57.04% from January 2016 (135 plants), the total amount of investment capital of the closures was 3,102 million baht which was more than January 2016 (2,616 million baht), and the number of layoffs was 5,022 employees which increased from January 2016 (3,829 employees).

Business closing situation of manufactures in February 2016 when compared with February 2015 was reported by the Department of Industrial Works (DIW) that the number of plant closures increased 135.56% from February 2015 (90 plants), but the investment capital loss due to plant shutdowns was less than February 2015 (5,370 million baht), and the number of layoffs was less than February 2015 (11,336 employees).

- The industry with the most factory shutdown in February 2016 was the industry of automobiles repairing and painting (46 plants), and followed by the industry of furniture made of wood, rubber, other non-metals which is made of extrusion plastic (24 plants).
- The industry that lost the most investment capital due to factory shutdowns in February 2016 was the industry of automobiles repairing and painting (1,171 million baht), and followed by the industry of production, transmission or distribution of (269 million baht).
- The industry which the most employees were laid off in February 2016 was the industry of sewing clothing, handkerchiefs, neckties, gloves, socks made from fabric and leather (1,097 employees), and followed by the industry of manufacturing, assembly and repair of net, trawl and its components (591 employees).

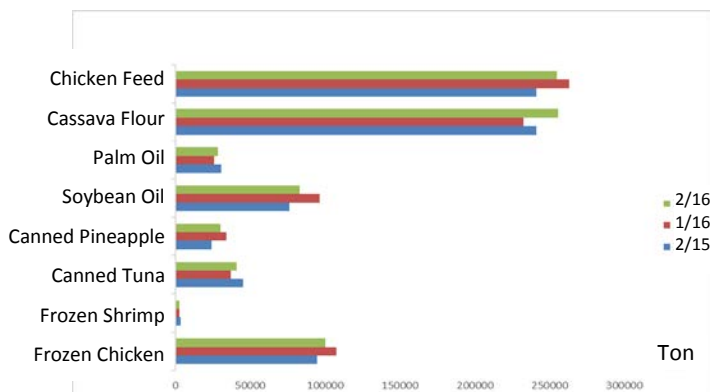


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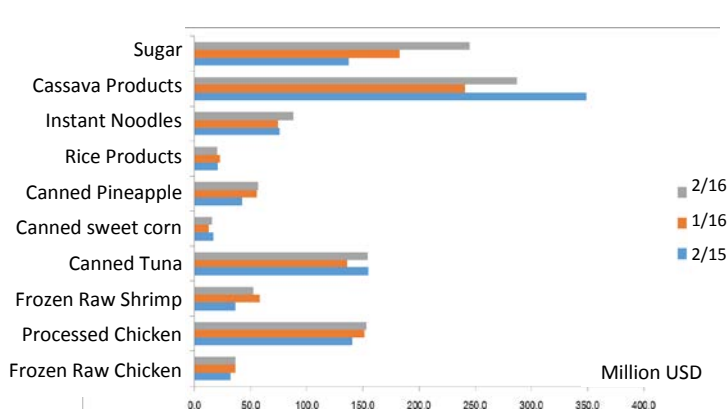
I. Food Industry

Production situation of the food industry in February 2016 improved slightly from the same period of previous year (YoY), due to an increase of raw materials in the market. Meanwhile, the export amount continued contracting due to a decreasing of order from importing countries from the economics continued to slow down, and the product price dropped according to a decreasing of the oil price, as well as well as Thai fishery breaking the IUU rules of EU, and a cancel of concessions in Indonesia's territorial waters. The sale in domestic increased.

Production Volume of Major Products in Food Industry



Exports Value of Major Products in Food Industry



1. Production

In February 2016, production of major products in food industry (excluding sugar) improved 5.2% YoY, and the details are as follows.

Major products mainly based on export market such as canned pineapple, cassava starch and frozen chicken increased 23.1%, 6.1% and 5.8%, respectively YoY, due to an increase of raw materials.

Products mainly based on domestic market that products used domestic raw materials such as palm oil declined in production by 6.1% YoY. For the products used imported raw materials as soybean oil increased in production by 9.4% YoY.

2. Sales

1) Domestic Market: In February 2016, the domestic sales value of food and agricultural products increased 10.7% YoY, and a demand of chicken increased 2.8% YoY.

2) International Markets: Total export value of the food industry export (excluding sugar) in February 2016 continued to drop by 7.8% YoY, due to a decreasing of products such as cassava starch, canned sweet corn, rice products and canned tuna by 17.8%, 7.3%, 4.5% and 0.1%, respectively, due to the economics continued to slow down, and the product price dropped according to a decreasing of the oil price, as well as a shortage of raw materials for the fishing industry, fishery breaking the IUU rules of EU, a cancel of concessions in Indonesia's territorial waters and stopping of operation of some fishing boats for compliance with new fishing law. However, some products increased in export value YoY, such as frozen shrimp, canned pineapple, instant noodle, chilled and frozen fresh chicken, and processed chicken increased 42.7%, 32.6%, 16.5%, 15.1% and 8.9%, respectively due to an increasing of order from oversea, and the prices of chilled, frozen fresh chicken, processed chicken, and canned pineapple dropped slightly. The export value of sugar expanded 78.3% YoY, owing to an increasing of order from Indonesia which is main market due to their demand increased more.

3. Trends

Production and export in overall were forecasted to increase slightly owing to negative factors such as the illegal labor using, the fishery breaking the IUU rules of the EU, the slowing demand from China and the product price dropped according to a decreasing of the oil price. However, there are positive factors in several products such as livestock products (processed chicken) that an increase of orders from oversea, sugar products with an increase of pre-order, fishery products as shrimp from a recovering of Thailand's shrimp production from an outbreak of EMS, as well as the government has applied urgent economic stimulus measures, financial assistance measures for SMEs, and investment accelerating measures in special economic zones in various forms, and tourism stimulus measure that affect food consumption in the country, as resulting, the production and export of food industry expand slightly.

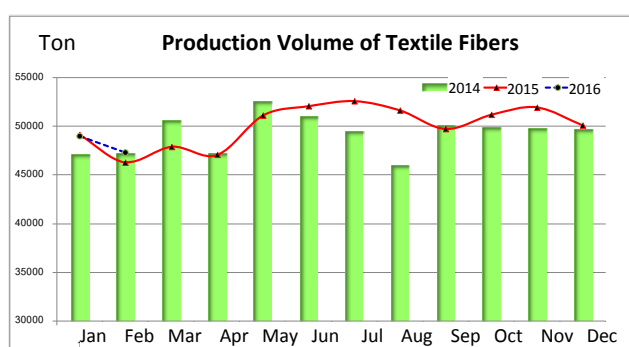


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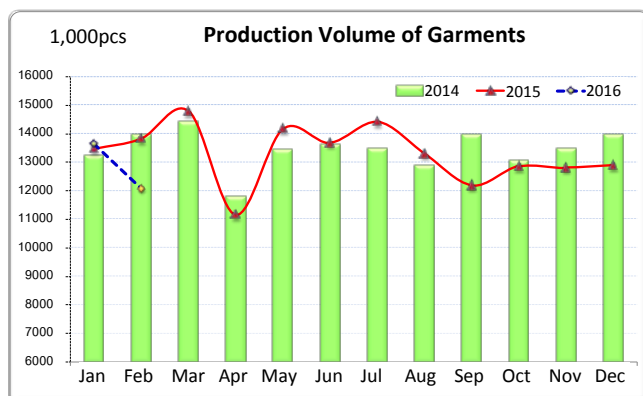
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II. Textile and Garment Industry

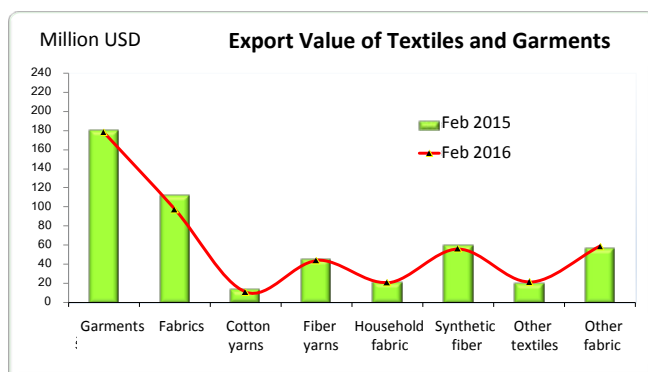
Manufacturing of **textile fibers** sector will continue to expand from last month. Exports will slow down according to the economic situation of partner countries which has slowed.



Source: The Industrial Economics Information Center, The Office of Industrial Economics



Source: The Industrial Economics Information Center, The Office of Industrial Economics



Source: The Information and Communications Technologies Centers, The Department of Trade Negotiations, The Ministry of Commerce

1. Production

- **Textile sector:** When compared with the same period of previous year, the manufacturing of fibers increased 3.2%, as resulting of an expanding production of synthetic fibers with an increase of 4.3%. Meanwhile, the manufacturing of yarns dropped due to a decline of fabrics by 0.5%.

- **Garment sector:** When compared with the same period of previous year, the manufacturing of readymade Garments decreased 12.8% in both knitted clothes and woven clothes, due to a decrease of orders of domestic and abroad, as well as an increase of imports of shirt, blouse for women and girl, and pants/skirt of both men and women from China, Bangladesh, Italy and Turkey.

2. Sales

- **Domestic sale:** When compared with the same period of previous year, the sale value of fibers products increased 4.3%, meanwhile, fabrics and readymade garments decreased 3.9% and 4.5%, respectively, according to a decline of production due to public slowed spending for luxuries as the economy slowed.

- **Export value:** When compared with the same period of previous year, the export value of textile and garment dropped 4.3% in overall. **The textile sector** decreased 5.3% which fabrics products, cotton yarn, synthetic fiber yarn, and synthetic fiber slumped 13.3%, 17.1%, 2.6% and 6.1%, respectively, due to a decrease of major partner market such as Indonesia, Vietnam, Pakistan and India, and the fabrics decline in ASEAN market such as Vietnam, Myanmar and Indonesia. **The garment sector** dropped 2.7% which readymade garments decreased 1.3%, due to a decrease of order from main markets such as the EU and ASEAN according to a slowdown of the global economy, except Japan and the US market which the export increased 7.9% and 0.7%, respectively.

3. Trends

Manufacture of textiles fibers sector is forecasted to expand continuously from last month. The export is expected to slow according to a slowdown of the economy of partner countries. For the textiles group, the import of textiles fibers is forecasted to increase, but the fabrics will slow down continuously. For the readymade garments group, imports of shirt, blouse for women and girl, and pants / skirt of both men and women is expected to expand according to a demand of fashion products of domestic consumer.



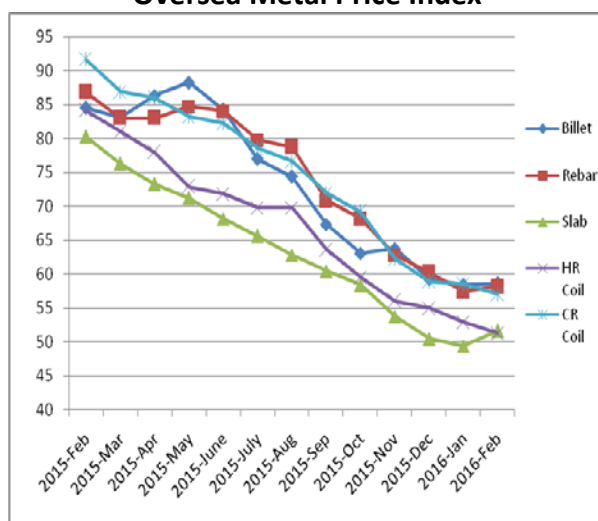
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III. Iron and Steel Industry

The South East Asia Iron and Steel Institute (SEAISI) forecast that steel consumption in ASEAN in 2016 will increase 6.9% when compared with the same period of last year, which Vietnam is a country with the highest consumption grew by 26%, followed by Philippines: 15%, Malaysia: 5.4% and Singapore: 4.7%, but Indonesia consumption fall by 3.6% and Thailand fall 3.4%.

Oversea Metal Price Index*



* CIS Black Sea

1. Production

The manufacturing situation of iron industry in February 2016 decreased when compared with the same period of previous year which the MPI in this month stood at 111.19 points with a decrease of 15.19% YoY, due to following reasons.

- The manufacturing of flat-steel products dropped 13.91% YoY, which Tin plated steel and Chromed plated steel slumped 26.60% and 21.06%, respectively. According to the data from the Iron and Steel Institute of Thailand, it found that the domestic demand in the flat-steel products was 810,885 tons with a decrease of 10.9%, which Chromed plated steel Electro Galvanized steel sheet (EG) slumped 19.7% and 16.3%, respectively. Imports of flat-steel products dropped 10.9%, which Hot-rolled stainless steel and Hot Rolled Pickled & Oiled Steel Sheets (P&O) decreased 31.2% and 27.1%, respectively. Exports of flat-steel products increased 59.9%, which Hot-rolled stainless steel increased 5,775% (export volume was 235 tons) and Cold-rolled Carbon steel sheet increased 564.5% (export volume was 5,050 tons).

- The manufacturing of long-steel decreased 17.62% YoY, which deformed bar and high-tensile steel wire decreased 20.87% and 3.80%, respectively. According to the data from the Iron and Steel Institute of Thailand, it found that the domestic demand increased 12.0%, which steel bar and structural steel increased 14.4%, and following steel wire increased 8.2%. Imports expanded 4.8%, which Alloy steel rebar and stainless steel wire increased 77.7% and 39.7%, respectively. Exports improved slightly by 1.3%, which structural allow steel wire and steel bar increased 145.5% and 34.2%, respectively.

2. Metal Prices

According to the international steel price index of the Iron and Steel Institute of Thailand, the Free-On-Board (FOB) prices at Black Sea ports in February 2016 when compared with the same period of previous year, the prices of almost iron products decreased such as the price of Hot-rolled steel sheet decreased 39.02%, from \$84.1 USD to \$51.28 USD per ton, the price of Cold-rolled steel sheets slumped 37.76%, \$91.58 USD to \$57 USD per ton, the price of slab steel was down 35.66%, from \$80.23 USD to \$51.62 USD per ton, the price of rebar fell 33.09%, from \$86.8 USD to \$58.08 USD per ton, and the price of billet steel bar declined 30.65%, from \$84.47 USD to \$58.58 USD per ton.

3. Trends

Thailand's iron production situation in February 2016 YoY is expected that total iron production will decrease, due to Thailand economy situation. The long-steel industry is expected that government sector's projects are driver of the long-steel industry better. In private sector's construction projects, it is forecasted that the condominium projects with High end will continue to expand, but other businesses will remain in stable. The flat-steel is predicted that production will decline according to a decrease of demand of downstream industries such as automotive and electrical appliances with production declining.

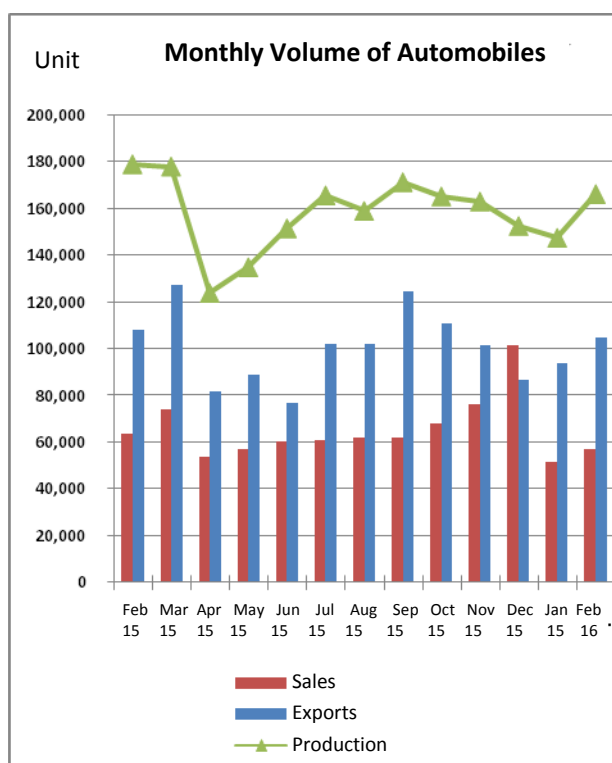


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IV. Automotive Industry

Vehicles

The automotive industry in February 2016 was a slowdown when compared to the same period of previous year, stemming to a slowdown of domestic and export markets.



1. Production

Manufacturing volume of automobile in February 2016 was 166,412 units, which decreased 7.11% from February 2015 which produced 179,158 units, due to a decrease of 1-ton pickup trucks and commercial cars.

2. Sales

Sales volume of automobile in February 2016 was 57,093 units, which decreased 10.72% from February 2015 which sold 63,949 units, due to a decreasing of 1-ton pickup trucks and commercial cars, but the sales of PPV and SUV cars increased.

3. Export

Export volume in February 2016 was 104,712 units, which decreased 3.20% from February 2015 which exported 108,173 units, which the export market slowed in Africa, Middle East, Central America and South America.

4. Trends

The automotive industry in March 2016 is forecasted to expand when compared with March 2015. The production in March 2016 is expected to reach by 39% for domestic sale and by 61% for exports.

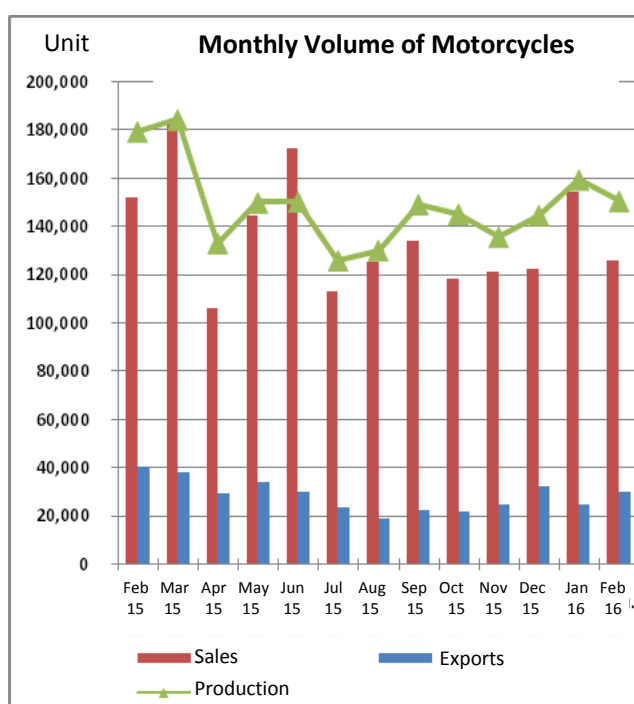


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Motorcycle

In February 2016, the motorcycle industry was slowdown when compared with the same period of 2015, due to a decrease of domestic and export markets.



1. Production

Manufacturing volume of motorcycles in February 2016 was 150,603 units which decreased 16.04% from February 2015 which produced 179,384 units, owing to a decrease in production of versatile-type motorcycles.

2. Sales

Sales volume of motorcycles in February 2016 was 125,874 units which decreased 17.21% from February 2015 which sold 152,037 units, stemming to an increase in sales of family-type, scooter-type and sport-type motorcycles.

3. Export of finished motorcycles (CBU)

Export volume was 30,028 units in February 2016 which dropped 26.23%, from February 2015 which exported 40,704 units, due to a decrease of exports to China, the UK and Philippine.

4. Trends

The motorcycle industry in March 2016 is expected to expand when compare with March 2015. The production in March 2016 is forecasted by 80% for domestic sales and by 20% for exports.

Note: Since 1 January 2016, the motorcycle production data is revised by addition more one manufacturer's information.

Type of motorcycles is changed from family-type to versatile-type (family-type and scooters-type).

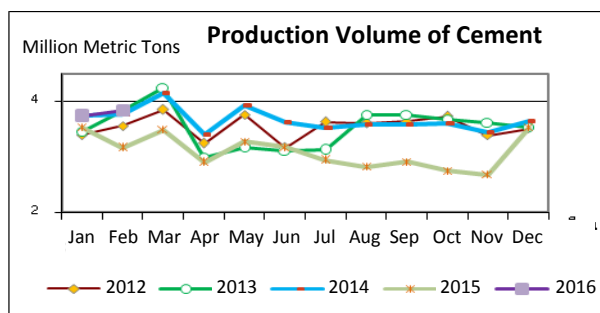


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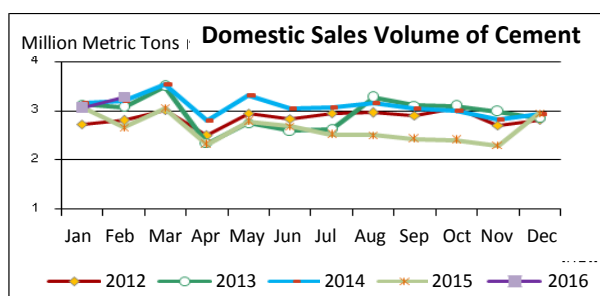
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V. Cement Industry

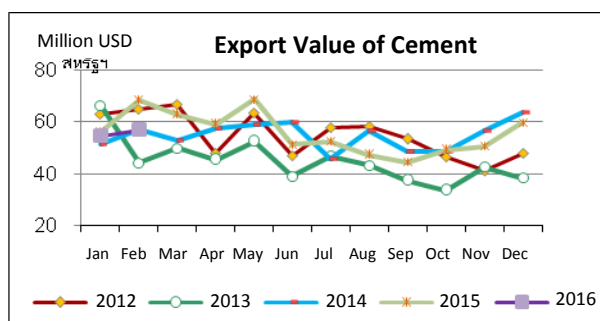
"Cement industry improved quite a lot, with the highest production volume and sales in the countries in the past 5 years, due to a growth potential of the Thailand economy, as a result of government economic stimulus measures which making the private sector to have a confidence to invest more, and the cement market in domestic grow up. Export value dropped due to the neighboring countries, especially the main market of Thailand such as Myanmar and Cambodia lowered order cement from Thailand quite a lot."



Source: The Industrial Economics Information Center, The Office of Industrial Economics



Source: The Industrial Economics Information Center, The Office of Industrial Economics



Source: The Information and Communications Technologies Centers, The Office of the permanent Secretary Ministry of Commerce

1. Production and Domestic Sales

When compared with the same period of previous year, production and sales volume of cements (excluding clinker) in February 2016 increased 21.51% and 23.22%, respectively.

Cement industry continued to improve from last month. Refer to the graphs demonstrated domestic production and sales volume of cements, the violet line of 2016 increased when compared with the same period of previous year (green line). They were the highest production and sales volume in the countries in the past 5 years. It presented that the expansion of the construction sector from the good prospects of the expansion of the domestic economy. This is a result of the government's economic stimulus measures and projects. In particular, the infrastructure construction projects have been clear that the tender will be completed and starting of construction from the mid to the end of this year. It affected to the private sector to have the confidence to invest more, so the demand of cement in domestic was improved more.

2. Export

Export value of cement in February 2016 dropped 16.97% YoY, due to major partner countries such as Myanmar and Cambodia reduced order of cement from Thailand, as well as the base of export figures in the same period of previous year was quit high. Myanmar, a partner country of Thailand, has accelerated to build cities and infrastructures and the constructions have reached at near complete, so the cement demand from Thailand declined and is likely to fall further in the next phase. In addition, Vietnam became to a major competitor in cement export market of Thailand, due to the production volume was over domestic demand, so Vietnam exported much cement which is cheaper than Thailand.

3. Trends

Domestic production and sales of cement industry are good trend in expanding, due to several measures from government to help people with low incomes and have been affected from a slowdown of economy to have more purchase power, as well as the progress of many infrastructures construction projects become to clear, so the private sector has the confidence to invest more further.

Trend of export is predicted to contracted, due to the reference base of export in the last year was very high, as well as Myanmar is a main export markets of Thailand, has developed the cities and it has reached in some level, and productivity in the domestic has increased due to a large company from Thailand has established the production base in Myanmar, so a trend of cement import from Thailand will decline in next phase.

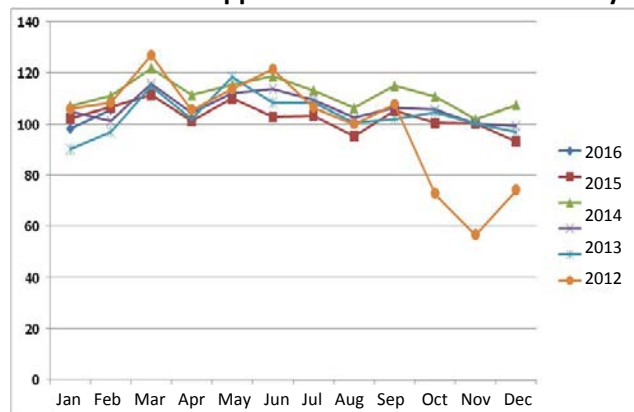


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VI. Electrical and Electronics Industry

Overall manufacturing of electrical and electronics industry in February 2016 dropped 0.87% when compare with the same period of previous year. The electronics industry decreased 2.43% YoY, stemming to a reduction of hard disk drives (HDDs), but the electrical industry increased 1% YoY.

MPI of Electrical Appliances and Electronics Industry



Source: The Office of Industrial Economics

Table 1: Top Value of Electrical Appliances and Electronic Products Exported in February 2016

| Electrical / Electronic Products | Value (Million USD) | %YOY |
|---|---------------------|--------------|
| Computer components | 1,346.30 | -3.10 |
| Integrated circuits | 552.54 | -4.34 |
| Air conditioners | 395.95 | -1.52 |
| VDO cameras & Digital cameras | 93.94 | -22.19 |
| Total of electrical / electronic product | 4,208.24 | -3.83 |

Source: The Electrical and Electronics Institute

1. Production

In overall manufacturing situation of the electrical and electronics industry in **February 2016**, the MPI stood at 105.87 points with a decrease of 0.87% YoY. The MPI of electrical industry sector stood at 127.70 points with an increase of 1% YoY. The expanded electrical appliances included split-type air conditioner's condensing unit, split-type air conditioner's evaporator unit, fan, Microwave oven and rice cooker with an increase of 12.71%, 3.96%, 28.53%, 13.36% and 23.49%, respectively YoY, due to an increase of domestic sales of air conditioner, and an increase of microwave oven export to the US and Japan, except televisions drooped 66.63% due to some manufacturers relocated their manufacturing base to other ASEAN countries.

The MPI of the electronics industry sector in February 2016 stood at 92.26 points with a decline of 2.43% YoY. The drooped electronics products included Semiconductors and HDDs, with a decrease of 14.19% and 19.33%, respectively YoY, due to owing to a reduction of demand of PCs and notebook in the global market.



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VI. Electrical and Electronics Industry (Continue)

2. Export

In February 2016, the total export value of the electrical appliances and electronics industry was \$4,208.24 million USD, a decrease of 3.83% YoY.

Electrical appliances had export value by \$1,809.83 million USD and a decrease of 5.89% YoY, due to a decrease of export to main markets such as ASEAN, the US and Japan with a decrease of 1.01%, 25.54% and 3.89%, respectively YoY, but the export to the EU and China expanded 15.89% and 1.24%, respectively YoY. The highest export value of the electrical appliance as air conditioner was \$395.95 million USD with a decrease of 1.52% YoY, due to a decrease of export to the US and Japan by 25.10% and 26.17%, respectively YoY. The followed products were VDO camera and digital camera by amount of \$93.94 million USD with a decline of 22.19% YoY, due to a decrease of export to main markets such as ASEAN, the EU, the US and Japan by 23.12%, 26.20%, 5.28% and 48.24%, respectively YoY, due to new technology instead. The export value of television valued \$46.10 million USD with a decrease of 59.77% YoY, which the export to the EU and the US slowed down quite a lot after a large export in 2015. The decrease in this month was 59.77% YoY,

Electronics products had export value by \$2,398.41 million USD, down 2.20% YoY, due to a decrease of export to all main markets such as ASEAN, China and Japan by 0.50%, 23.24% and 11.57%, respectively YoY. The electronics product with largest export value was components of computers with export amount of \$1,346.30 million USD, with a decline of 3.10% YoY, due to the export to China and Japan downed 35.80% and 5.66%, respectively YoY. The followed products was ICs with export amount of \$552.54 million USD, with a decrease of 4.34% YoY, due to the export to the EU, China and the US dropped 11.61%, 9.28% and 55.08%, respectively YoY. Meanwhile, the export to China continued to increase since 2015 in order to production of electronics components.

3. Trends

According to the leading index model conducted by the Electrical and Electronics Institute, overall the electrical and electronics industry production in February 2016 is forecasted to decrease 1.06% YoY. The electrical industry is expected to increase 3.88% YoY, owing to air conditioner expanded in both domestic market and some abroad markets (the EU, ASEAN and China). The electronics industry is expected to drop 5.99% YoY, stemming to exports of HDD IC to major markets slow down according to the global economy.