



Industrial Economic Status Report

March 2016

Summary of Industrial Economic Status

The Manufacturing Production Index (MPI) in March 2016 returned to expansion by 1.83% when compared with the same period of previous year (YoY). The expanded main industries included automobiles and parts, chemicals, jewelry and air conditioners.

Automobiles industry in March 2016 expanded when compared with the same period of 2015, due to a launch of new car models to market increased, as well as some operators accelerated the production of 1-ton pickup truck for long holidays such as Songkran festival.

Cement industry in March 2016 continued to expand as well, which production and domestic sales increased due to a good growth trend in domestic economy and construction sector, as resulting of government stimulus measures and accelerating infrastructure construction projects. It made that private sector has more confidence in investments.

Establishment and close business in March 2016, 378 plants began operations, increased 47.7% from February 2016, and the investment capital increased 5.28%, but the employment rates dropped 6.5%. The major industry was the production and distribution of electricity from biomass, with 5 plants for a total investment amount of 8,180 million baht and 99 employees hired. When compared with the same month of previous year, the number of plants that commenced operations increased 5.9% from March 2015. On the other hand, 209 plants closed in March 2016, decreased 1.4% from February 2016, but increased 54.8% from the same month of last year.



Industrial Economic Status Report March 2016

Imports of Thailand's industry sector in March 2016, an import of industrial machinery and accessories contracted 4.7% 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 pump 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 \$5,971.7 million US, which shrank 1.8% YoY, due to a decrease of imports of yarns and fibers, chemicals, iron, steel and its products and components of electrical appliance.

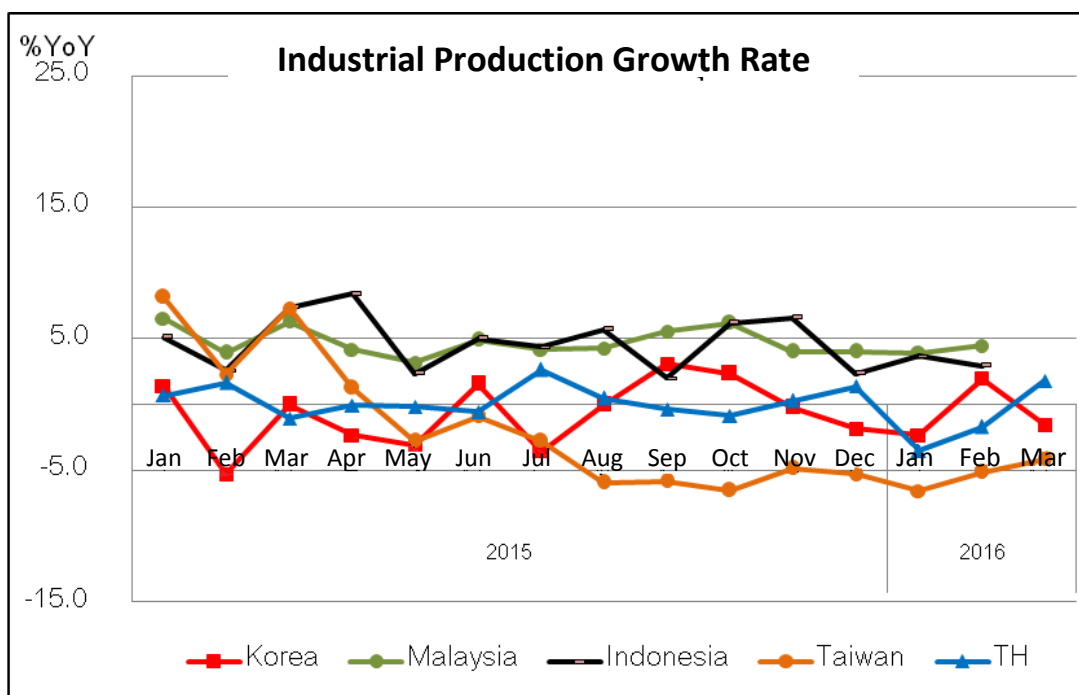
Energy consumption of manufacturers in March 2016 stood at 10,807.2 million kWh (kilowatt-hour), which increased 15.7% from February 2016 (9,341.4 million kWh), and also increased 4.0% when compared with the same period of 2015 (10,391.1 million kWh). Energy consumption tracking data by business size showed that all small, medium and large-sized businesses consumed more energy when compared to the same period of 2015.



Industrial Economic Status Report

March 2016

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



Production situations of Thailand's industry sector considered on the Manufacturing Production Index (MPI) expended 1.8% when compared with the same period of the previous year. Major industries that contributed to the positive index included automotive components, automobiles, cosmetics, gem and jewelry, and air-conditioners.

However, the industrial production rate of Taiwan continued to contract by 4.2%.

The industrial production rate of South Korea shrank 1.5%.

The industrial production data of Malaysia and Indonesia in March 2016 have not been released yet currently, but the trend continued growth from the previous month. In February 2016, the industrial production of Malaysia and Indonesia expanded 4.5% and 2.9%, respectively.



Industrial Economic Status Report

March 2016

Industrial Activity Situations in March 2016

Business establishment situation of manufactures in March 2016 when compared with February 2016 was reported by the Department of Industrial Works (DIW) that 378 plants began operations and increased 47.7% from February 2016 (256 plants), and the investment capital valued by amount of 22,729 million baht which increased 5.28% from February 2016 (21,589 million baht), but the number of employed people was 9,060 persons which decreased 6.5% from February 2016 (9,686 employees).

Business establishment situation of manufactures in March 2016 when compared with March 2015 was reported by the Department of Industrial Works (DIW) that the number of plant openings increased 5.9% from March 2015 (357 plants), and the investment capital increased 3.8% from March (21,894 million baht), but the number of employed people decreased 9.8% March 2015 (10,039 employees).

- The industry that had the most factories starting up in March 2016 was the industry of digging for construction (47 plants) and the followed industry was the industry of automobiles repairing and painting (32 plants).
- The industry with the highest level of investment capital in March 2016 was the industry of production and distribution of electricity from biomass (8,180 million baht), and followed industry was the manufacturing of medium density fiberboard (1,154 million baht).
- The industry that had the most new hires in March 2016 was the industry of the manufacturing of frozen shrimp, aquatic animal processing, preserving of meat and frozen aquatic animal (740 employees), and followed industry was the automobiles repairing and painting (519 employees).



Industrial Economic Status Report March 2016

Business closing situation of manufactures in March 2016 when compared with February 2016 was reported by the Department of Industrial Works (DIW) that the number of plant closures was 209 plants and decreased 1.4% from February 2016 (212 plants), but the total amount of investment capital of the closures was 3,371 million baht which was more than February 2016 (3,102 million baht), and the number of layoffs was 5,891 employees which increased from February 2016 (5,022 employees).

Business closing situation of manufactures in March 2016 when compared with March 2015 was reported by the Department of Industrial Works (DIW) that the number of plant closures increased 54.8% from March 2015 (135 plants), the investment capital loss due to plant shutdowns was more than March 2015 (1,432 million baht), and the number of layoffs also was more than March 2015 (3,969 employees).

- The industry with the most factory shutdown in March 2016 was the industry of automobiles repairing and painting (24 plants), and followed by the industry of digging for construction (16 plants).
- The industry that lost the most investment capital due to factory shutdowns in March 2016 was the industry of automobiles repairing and painting (674 million baht), and followed by the industry of electrical power generation, transmission and sale (632 million baht).
- The industry which the most employees were laid off in March 2016 was the industry of sewing clothing, handkerchiefs, neckties, gloves, socks made from fabric and leather (2,331 employees), and followed by the industry of knitting, lace, garment made of thread or fiber (615 employees).



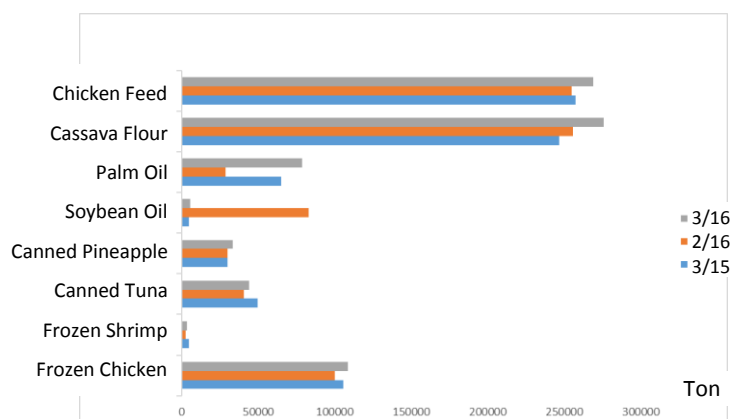
Industrial Economic Status Report

March 2016

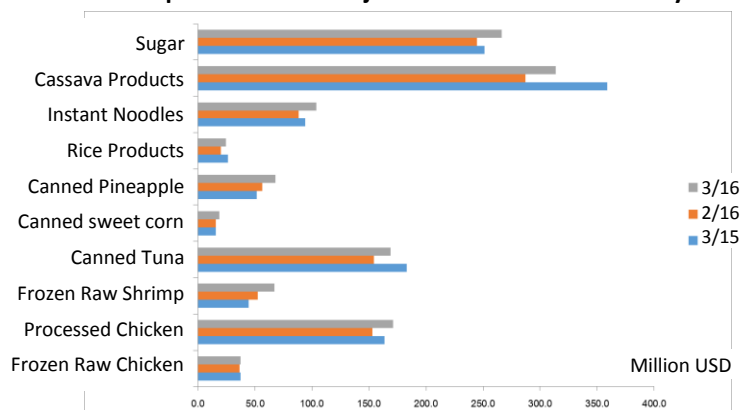
I. Food Industry

Production situation of the food industry in March 2016 improved from the same period of previous year (YoY), due to an increase of raw materials in the market. Meanwhile, the export amount continued to contract slightly due to a slow of order from importing countries from the global economy continued to slow down, and the product price dropped according to a decreasing of the oil price and an excessive supply in the market was so much, as well as well as Thai fishery breaking the IUU rules of EU, and a cancel of concessions in Indonesia's territorial waters.

Production Volume of Major Products in Food Industry



Exports Value of Major Products in Food Industry



1. Production

In March 2016, production of major products in food industry (excluding sugar) improved 7.1% YoY, and the details are as follows.

1) Products based on export market: The increased products included cassava starch, canned pineapple and frozen chicken which the production increased 11.8%, 11.4% and 2.8%, respectively YoY, due to an increase of raw materials.

2) Products based on domestic market: Products used domestic raw materials as palm oil expanded in production by 21.4% YoY. Products used imported raw materials as soybean oil increased in production by 16.2% YoY.

2. Sales

1) Domestic Market: In March 2016, the domestic sales value of food and agricultural products (excluding sugar) increased slightly from the same month of last year by 1.9%, and a demand of animal feed, especially chicken feed increased 0.7% YoY.

2) International Markets: Total export value of the food industry export (excluding sugar) in March 2016 dropped slightly by 0.1% YoY. The dropped products included cassava starch, canned tuna, rice products and frozen and chilled chicken by 12.6%, 7.6%, 6.3% and 0.5%, respectively, due to the global economy remained in a slow, and the product price dropped according to a decreasing of the oil price, as well as an excessive supply in the market, but there was a shortage of raw materials of 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 such as frozen shrimp, canned pineapple, canned sweet corn, instant noodle, and processed chicken increased 50.6%, 32.1%, 20.1%, 10.6% and 4.7% YoY, respectively due to an increasing of order from oversea. The export value of sugar expanded 6.0% YoY, owing to an increasing of order from ASEAN countries.

3. Trends

Production and exports in overall are 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) which there are 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 a food consumption in the country, as resulting, the production and exports of food industry will expand as well.

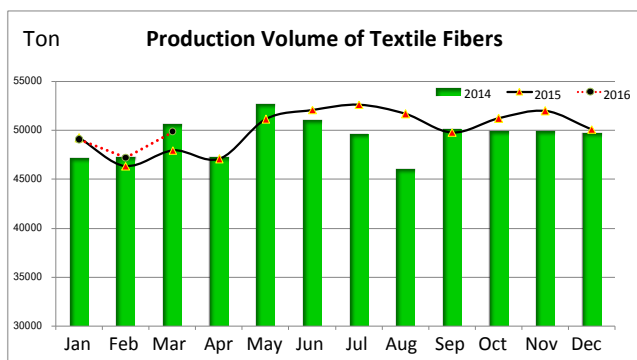


Industrial Economic Status Report

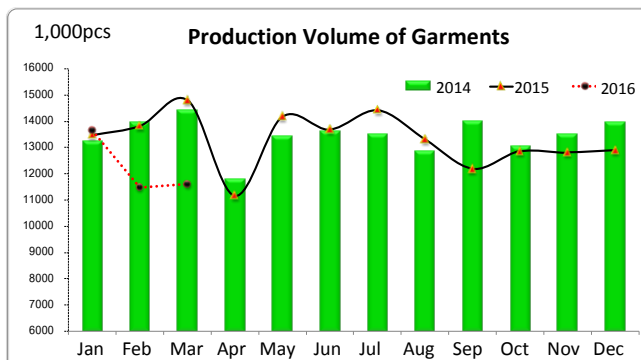
March 2016

II. Textile and Garment Industry

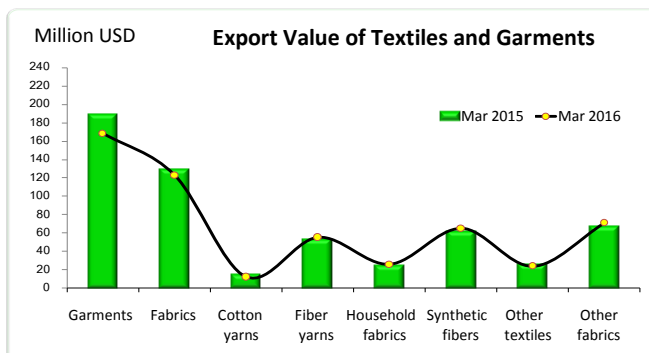
“Manufacturing of textile fibers sector increased in an expansion of synthetic fibers production, but yarns production decreased in line with a drop of fabrics group production, and garments group declined in knitted and woven garments.”



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 3.9%, as resulting of an expanding production of synthetic fibers with an increase of 6.7%. Meanwhile, the manufacturing of yarns dropped 8.7% in line with a decline of fabrics by 14.2%.

- **Garment sector:** When compared with the same period of previous year, the manufacturing of readymade Garments decreased 21.5% in both knitted clothes and woven garments, due to a decrease of orders of domestic and aboard, as well as an increase of imports from China, Cambodia, Vietnam and Bangladesh.

2. Sales

- **Domestic sale:** When compared with the same period of previous year, the sale value of fibers products increased 8.1%, meanwhile, fabrics and readymade garments decreased 8.3% and 6.1%, 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 3.8% in overall. **The textile sector** increased slightly by 0.3% which synthetic fiber yarn, household textile, synthetic fiber and other textiles climbed 5.5%, 5.5%, 6.2% and 6.1%, respectively, due to a decrease of major partner market such as Vietnam, Turkey, Pakistan and Bangladesh, and the fabric products declined 5.2% in Vietnam, Myanmar, Laos, Bangladesh and the US markets. **The garment sector** dropped 10.8%, especially a drop of readymade garments, due to a decrease of order from ASEAN, the US and the EU markets, according to a slowdown of the global economy, except Japan market which the export expanded in readymade garments made of cotton.

3. Trends

Manufacture of textiles fibers sector is forecasted to expand continuously form the last month. The export is expected to increase. The readymade garments are forecasted to slow according to a slowdown of the economy of partner countries. For imports of the textiles group, the imports of textiles fibers are forecasted to same level with the last month. The readymade garments group is expected to increase in imports of women and girl's shirt/blouse, Jacket, underwear and coat, and both men and women trousers/ skirt, from China, Cambodia, Vietnam and Bangladesh.

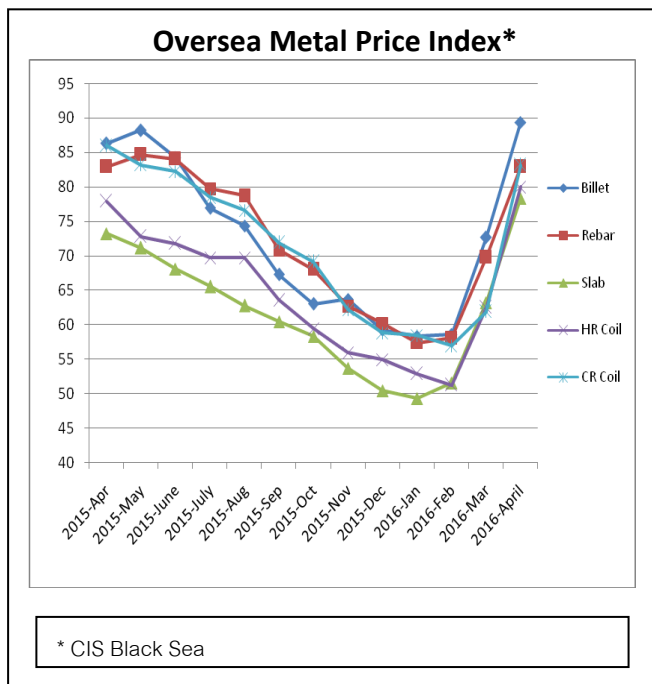


Industrial Economic Status Report

March 2016

III. Iron and Steel Industry

The World Steel Association (Worldsteel) forecasted that the global steel demand in 2016 will contract 0.8% when compared with the same period of last year, but the demand in 2017 is forecasted to grow 0.4%. The Worldsteel estimated that in 2016 the steel industry will be faced that a demand of steel in China is likely to shrink, and the demand in other regions, such as NAFTA and the EU is stable when compared with last year. However, the demand of steel in 2017 is forecasted to recover, except the demand of steel in Chinese market will continue to fall.



1. Production

The manufacturing situation of iron industry in March 2016 decreased when compared with the same period of previous year, which the MPI in this month stood at 122.93 points with a decrease of 4.49% YoY, due to following reasons.

- The manufacturing index of flat-steel products dropped 3.24% YoY, which Chromed plated steel and Tin plated steel decreased 18.98 and 16.92%, respectively, but a coil of hot rolled steel increased 51.84%. According to the data from the Iron and Steel Institute of Thailand, it found that the domestic demand in the flat-steel products was 965,902 tons with an increase of 17.9%, which hot rolled thick steel plate and hot rolled thin steel plate climbed 81.9% and 22.5%, respectively. Imports of flat steel products expanded 7.0%, which Cold-formed steel structures and hot rolled thick alloy steel plate increased 1,933.3% and 107.1%, respectively. Exports of flat-steel products declined 11.2%, which hot rolled thin plate and hot rolled thick alloy steel plate dropped 93.5% and 66.7%, respectively.

- The manufacturing of flat-steel products dropped 7.99% YoY, which deformed bar and high-tensile steel wire decreased 10.24% and 6.79%, respectively. According to the data from the Iron and Steel Institute of Thailand, it found that the domestic demand in long steel products increased 26.2%, which rebar and structural steel expanded 64.2%, but steel wire dropped 8.6%. Imports decreased 6.3%, which stainless steel rebar and seamless pipe dropped 51.1% and 32.6%, respectively. Exports increased 39.2%, which steel wire and hot rolled structural alloy steel increased 58.1% and 53.8%, 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 April 2016 when compared with the same period of previous year, the prices of almost iron products increased such as the price of slab increased 6.99%, from \$73.25 USD to \$78.37 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 \$80.23USD to \$51.62 USD per ton, and the price of billet steel bar climbed 3.54%, from \$86.35 USD to \$89.41 USD per ton, but the price of cold rolled steel sheet fell 3.27%, from \$85.98 USD to \$83.17 USD per ton, and the price of steel wire was stable by 82.97%.

3. Trends

Thailand's iron production situation in March 2016 YoY is expected that total iron production will expand slightly, due to steel price in the past has downward direction, as resulting, buyers delayed a purchase, but currently, the steel prices began to steady, so the buyers will purchase more and the production also will increase as well.



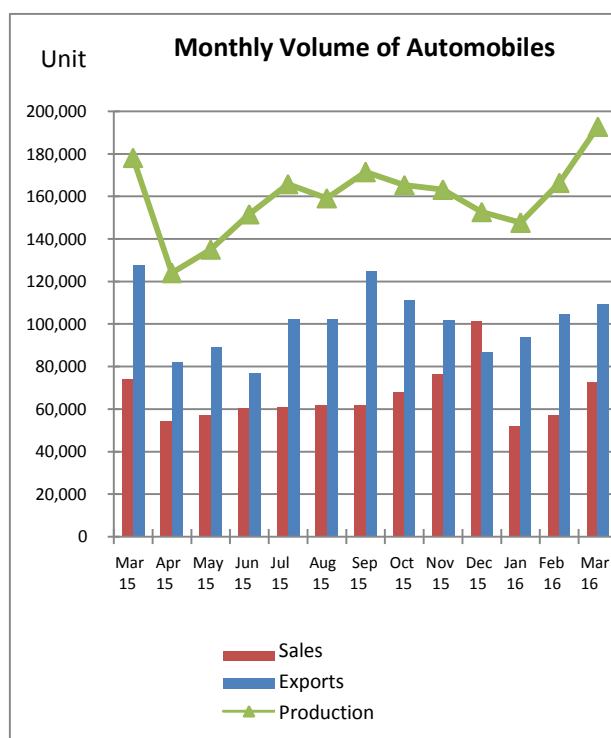
Industrial Economic Status Report

March 2016

IV. Automotive Industry

Vehicles

The automotive industry in March 2016 expanded when compared to the same period of previous year, stemming to a launch of new car models to market increased, as well as some operators accelerated the production of 1-ton pickup truck for long holidays such as Songkran festival. However, Domestic and export markets were slow in line with the domestic and global economics situation.



1. Production

Manufacturing volume of automobile in March 2016 was 192,811 units, which increased 8.19% from March 2015 which produced 178,217 units, due to an increase of 1-ton pickup trucks and commercial cars.

2. Sales

Sales volume of automobile in March 2016 was 72,646 units, which decreased 1.98% from March 2015 which sold 74,117 units, due to a decrease of passenger cars and commercial cars, but the sales of 1 ton pickup trucks and, PPV and SUV cars increased.

3. Export

Export volume in March 2016 was 109,334 units, which declined 14.33% from March 2015 which exported 127,619 units, which the export market slowed in Central America and South America, Middle East and the EU.

4. Trends

The automotive industry in April 2016 is forecasted to expand when compared with April 2015. The production in April 2016 is expected to reach by 38% for domestic sale and by 62% for exports.

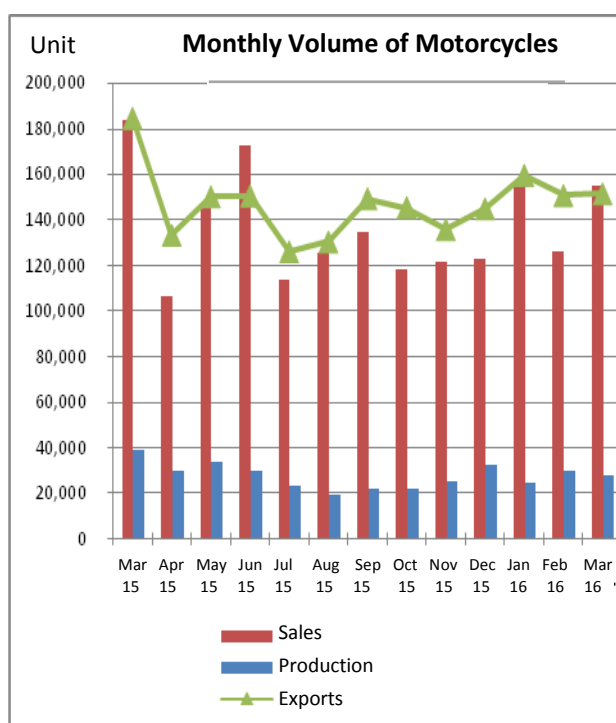


Industrial Economic Status Report

March 2016

Motorcycle

In March 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 March 2016 was 151,313 units which decreased 17.93% from March 2015 which produced 184,373 units, owing to a decrease in production of versatile type motorcycles.

2. Sales

Sales volume of motorcycles in March 2016 was 155,183 units which decreased 15.65% from March 2015 which sold 183,977 units, stemming to an increase in sales of family-type and scooter type motorcycles.

3. Export of finished motorcycles (CBU)

Export volume was 28,031 units in March 2016 which dropped 28.68%, from March 2015 which exported 39,305 units, due to a decrease of exports to Netherlands, Japan and Malaysia.

4. Trends

The motorcycle industry in April 2016 is expected to slow when compare with April 2015. The production in April 2016 is forecasted by 70% for domestic sales and by 30% 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).

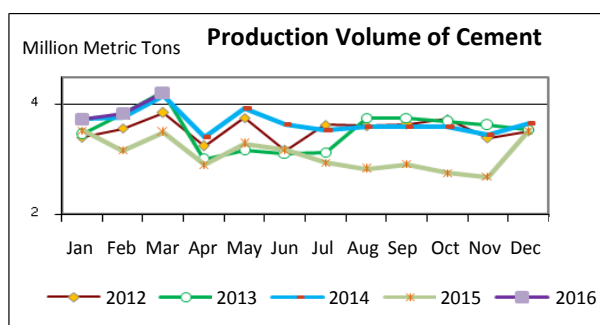


Industrial Economic Status Report

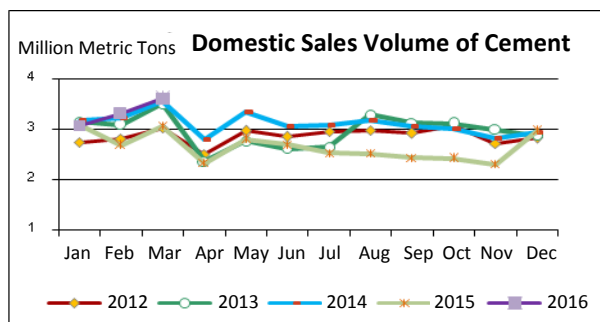
March 2016

V. Cement Industry

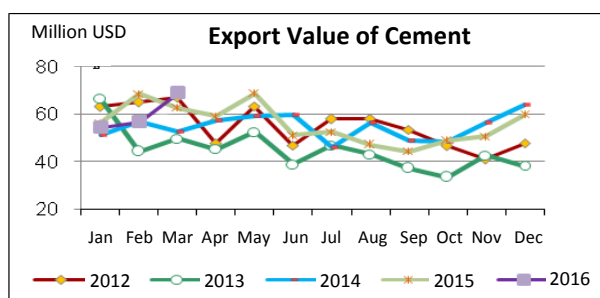
"Cement industry continued to expand as well, which domestic production volume and sales increased, due to a growth trends of economy and construction sector in the country, as a result of government economic stimulus measures as well as accelerating the infrastructures construction, which making the private sector to have a confidence to invest more. Export value improved more, due to Bangladesh, a main partner country, needed more cement from Thailand."



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 March 2016 increased 20.63% and 17.64%, respectively.

Cement industry continued to improve, especially the domestic sales. Referring to the left graphs, it demonstrated the highest value in the past 5 years. It presented a growth trends of economy and construction sector in the country, as a result of government economic stimulus measures as well as accelerating the infrastructures construction such as Double track railway and motorway, which some project were tendered completely in some distances and are expected to begin construction in Q2/2016. Therefore the domestic demand of cement expanded and is expected to grow further.

2. Export

Export value of cement in March 2016 improved 10.15% YoY, due to Bangladesh, a main partner country, needed a lot of cement from Thailand. Meanwhile Myanmar, a major export market of Thailand, continued to decrease order from Thailand, and Vietnam had been a major export market of Thailand, today became to production base with excessed capacity over demand in the country, has searched export market as same as Thailand. Vietnam has low cost than Thailand, so is able to sale cement in lower price than Thailand. It is needed to monitor an effect to expansion of export market of Thailand in the future.

3. Trends

Domestic production and sales of cement industry are good trend in expanding, due to several measures from government as well as accelerating the infrastructures construction, as resulting, the domestic economy improves and the private sector has a confidence to invest more.

Export is predicted to drop YoY, due to the reference base of export in 2015 was very high, as well as a demand in the country has good trend due to a clear of government's construction projects as resulting, the domestic economy improves and the private sector has a confidence to invest in real estate sector, prosperity spread to provinces more, and attracting foreign investors to invest in Thailand more.



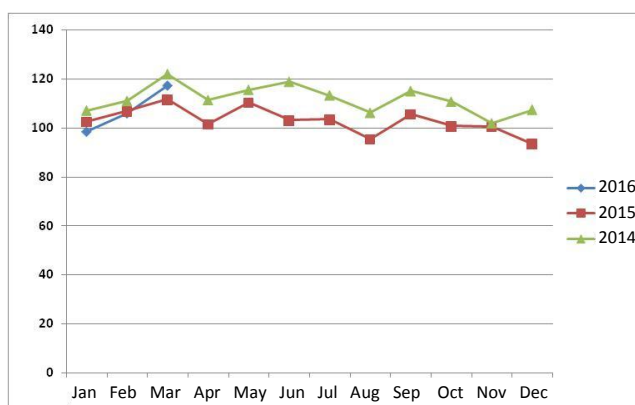
Industrial Economic Status Report

March 2016

VI. Electrical and Electronics Industry

Overall manufacturing of electrical and electronics industry in March 2016 improved 5.07% when compare with the same period of previous year. The electrical industry increased 9.10% YoY, due to an increase of domestic sales and exports to ASEAN. The electronics industry improved 1.79% YoY, stemming to an increase of IC production.

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 March 2016

Electrical / Electronic Products	Value (Million USD)	%YOY
Computer components	1,333.57	-5.84
Integrated circuits	640.52	1.42
Air conditioners	455.36	-0.73
VDO cameras & Digital cameras	139.86	10.44
Total of electrical / electronic product	4,543.89	-2.63

Source: The Electrical and Electronics Institute

1. Production

In overall manufacturing situation of the electrical and electronics industry in **March 2016**, the MPI stood at 117.25 points with an increase of 5.07% YoY. The MPI of electrical industry sector stood at 142.09 points with an increase of 9.10% YoY. Almost electrical appliances expanded, which split-type air conditioner's condensing unit, split-type air conditioner's evaporator unit, refrigerator, washing machine and microwave oven increased 13.11%, 13.29%, 6.09%, 0.19% and 36.70% YoY, respectively, due to an increase of domestic sales and exports to ASEAN markets including exports to the EU market, except televisions drooped 64.83% due to some manufacturing bases were relocated to other ASEAN countries.

The MPI of the electronics industry sector in March 2016 stood at 101.77 points with an increase of 1.79% YoY, which Other IC climbed 12.22% YoY, because it is an important part in digital products, and the exports to China and the US and the EU increased. Meanwhile, HDD and Semiconductor dropped 9.05% and 15.77% YoY, respectively, owing to demand of use of PCs and notebook continued to decrease.



Industrial Economic Status Report

March 2016

VI. Electrical and Electronics Industry (Continue)

2. Export

In March 2016, the total export value of the electrical appliances and electronics industry was \$4,543.89 million USD, with a decrease of 2.63% YoY.

Electrical products had export value by \$2,024.22 million USD, with a decrease of 1.83% YoY, due to a decrease of export to China and the US with a decrease of 7.02% and 8.07% YoY, respectively, but the export to ASEAN, the EU and Japan expanded 2.60%, 2.31% and 6.78% YoY, respectively. The decreased products included that air conditioner was an export value of \$455.36 million USD with a decrease of 0.73% YoY, due to a decrease of exports to China, the US and Japan by 52.41%, 5.71% and 23.11% YoY, respectively. The export value of refrigerator valued \$139.86 million USD with an increase of 10.44% YoY, due to an increase of the exports to main markets such as ASEAN, the EU, the US and Japan by 21.29%, 6.57%, 13.24% and 19.17% YoY, respectively.

Electronics products had export value by \$2,519.68 million USD, with a decrease of 3.27% YoY, due to a decrease of export to all main markets such as ASEAN, the EU, China, the US and Japan by 8.74%, 4.18%, 19.22%, 1.99% and 18.01% YoY, respectively. The electronics product with largest export value was components of computers with export amount of \$1,333.57 million USD, with a decline of 5.84% YoY, due to the exports to major markets such as the EU, China, the US and Japan downed 11.47%, 26.02%, 14.63% and 8.28% YoY, respectively. The followed products was ICs with export amount of \$640.52 million USD, with an increase of 1.42% YoY, due to the export to the EU, China and the US expanded 5.49%, 10.73% and 6.04% YoY, respectively.

3. Trends

According to the leading index model conducted by the Electrical and Electronics Institute, overall the electrical and electronics industry production in March 2016 is forecasted to decrease 1.06% YoY. The electrical industry is expected to increase 3.88% YoY, owing to domestic sales begin to recover, especially air conditioner and refrigerator, as well as the exports to ASEAN markets will expand well. The electronics industry is expected to drop 5.99% YoY, stemming to exports of HDD continue to down owing to a decrease of demand of PCs and notebook.