



Industrial Economic Status Report

November 2016

Summary of Key Issues

The Manufacturing Production Index (MPI) in November 2016 grew by 3.8%, the highest growth ever since April 2013 from the past 43 months. The industries contributing to such positive MPI included iron and steel, electronic parts, automotive, petroleum refinery and canned and frozen seafood.

The growth of electronic components in November 2016 was going well from ICs, the essential parts for hi-tech product development. Thus the exporting to major markets as ASEAN, European, US and Japan was increasing.

The growth of canned and frozen seafood increased in November 2016 from the growth of canned and frozen shrimp and the higher market's demand.

Commencement and Disposal of Factory's Register

In November 2016, 338 plants obtained the manufacturing licenses and commenced the operation which increased by 6.6% from October 2016. The total invested capital decreased by 10.9% and the employment decreased by 38.9%. The major investment was from vehicle repair and painting, at ฿1,832 million invested capital. When comparing with the same month of the previous year, the number of plants that obtained the manufacturing license and commenced the operation decreased by 12.7% from November 2015. On the other hand, 95 Factory's Registers were disposed in October 2016 which decreased by 15.9% from October 2016 and decreased by 51.8% from the same month of the previous year.



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Thailand's Importation of Industry sector

In November 2016, the import of industrial machinery and components valued US\$1,407.7 million which shrank by 1.8% from the same month of the previous year from the continuously decreasing importation of printing machinery, jet turbine and its components, rubber processing machinery and equipment and the construction machinery.

The import of raw material and semi-finished product (excluding gold) valued US\$ 6,146.5 million, increasing by 14.3% when comparing with the same month of the previous year. This was in line with the increasing of importation of plastic and chemical product, metal and steel, electrical appliance's components.

Electricity power consumption of Industry sector

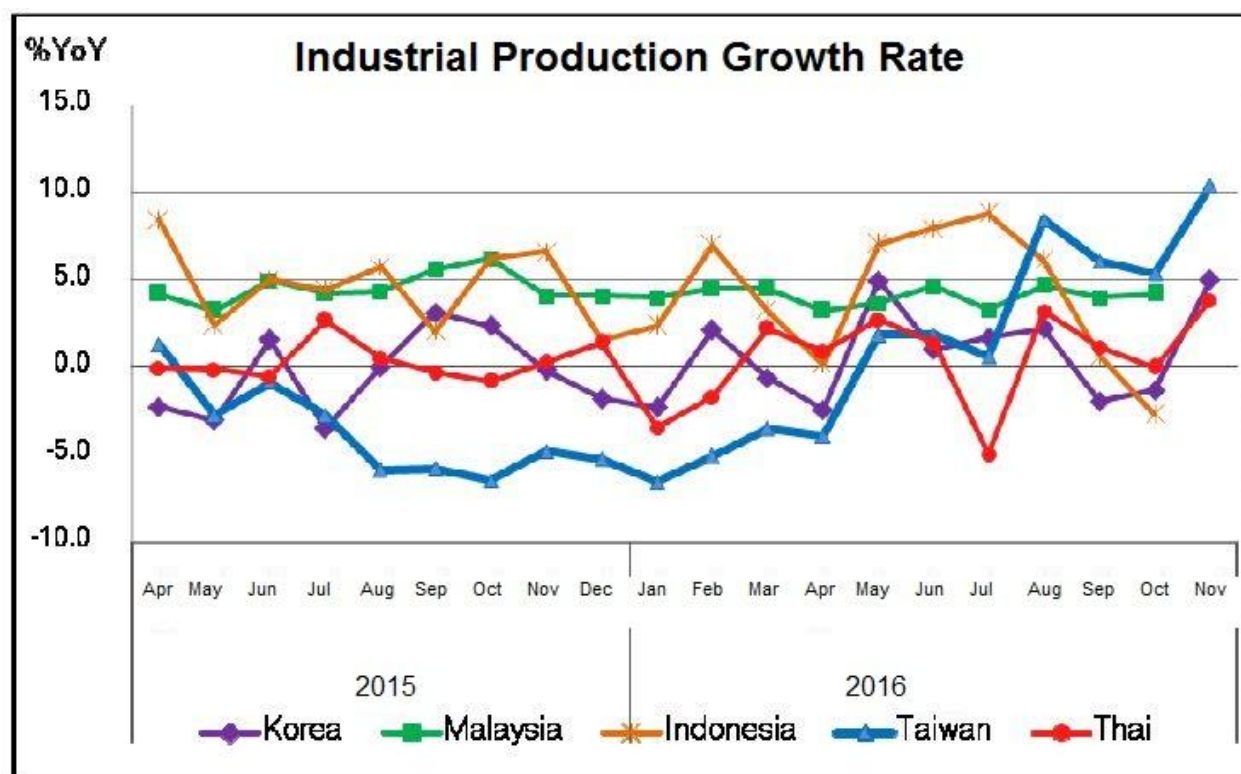
In November 2016, there was consumption of 10,401.8 million kWh (kilowatt-hour) which was 1.9% decreasing from September 2016 (10,604.0 million kWh) and 3.3% increasing when comparing with the same period of year 2015 (10,067.9 million kWh). The 11 months accumulative power consumption in 2016 was 114,140.5 million kWh, 4.3% increasing from the same period of the previous year (109,386.8 million kWh). The electricity power consumption data classified by business size showed that all sized businesses consumed lesser than last month while consuming more from the same month of the previous year.



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Industrial Economics Condition of Thailand Comparing with Major Countries in Asia in November 2016



The Manufacturing Production Index (MPI) grew by 3.8% from the same period of the previous year. The major industries contributing to such growth included iron and steel product, electronic tube and electronic components, plastic product, automotive, and petroleum etc.

Meanwhile the industrial production growth of Taiwan was expanded by 10.4%.

The industrial production growth of South Korea was shrunk by 5.0%.

The industrial production growth of Malaysia and Indonesia in November 2016 has yet to be released. However in October 2016, the industrial production growth of Malaysia expanded by 4.2% while Indonesia dropped by 2.7%.



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Manufacturing Operation Situation in November 2016

The data from the Department of Industrial Works (DIW) indicated the manufacture operation situation of November 2016 comparing with October 2016 that 338 plants commenced the operation. It decreased by 6.6% from October 2016 (317 plants). The invested capital was ฿20,699 million which increased by 10.9% from October 2016 (฿18,658 million). The numbers of employment were 9,166 persons which increased by 38.9% from October 2016 (6,600 persons).

The report of manufacture operation situation of November 2016 when comparing with the same month of the previous year indicated that the plants commencing the operation decreased by 12.7% from November 2015 (387 plants). The invested capital decreased by 13.7% from November 2015 (฿ 23,990 million). However the numbers of employment increased by 0.1% from November 2015 (9,156 persons).

- The industries that had the most manufacturing starting up in November 2016 were the ready-mixed concrete and pile and slab concrete manufacturing (totally 28 plants). The following was the operation of clay/soil digging and scooping for construction (totally 19 plants).
- The industry with the highest level of invested capital in November 2016 was the automobile repair and painting (totally ฿1,832 million). The following was the rice milling plant (totally ฿1,829 million).
- The newly-operated industries that had the most employment in November 2016 were automobile repair and painting (495 persons). The following was the sea food washing, slaughtering and processing industry (433 persons).



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Manufacturing Shutdown situation

In November 2016 the numbers of plants closing down were 95 plants, increasing by 15.9% from October 2016 (82 plants). The numbers of lay-off workers were 3,803, higher than in October 2016 (2,625 workers).

However the total invested capital loss from such shutdown was ฿1,577 million which was lower than October 2016 (฿1,674 million).

The number of plants closing down in November 2016 was 51.8% lesser than in November 2015 (197 plants). The invested capital loss due to plant shutdown was lesser than November 2015 (฿2,807 million) and the number of lay-off workers was also lesser than in November 2015 (5,109 workers).

- The industry that had the most manufacturing shutdown in November 2016 was the manufacturing of gas refilling (totally 7 plants). The following were the ready-mixed concrete and gypsum plants (5 plants).
- The shutting down industry with the highest level of invested capital in November 2016 was the power plant (totally ฿511 million). The following was industry of cutting & sewing of clothes, handkerchief and scarf (totally ฿135 million).
- The industry that had the most lay-off workers in November 2016 (1,239 workers) was industry of cutting & sewing of clothes, handkerchief and scarf. The following was the manufacturing of the aquatic animal with vacuum & sealed process (791 workers).

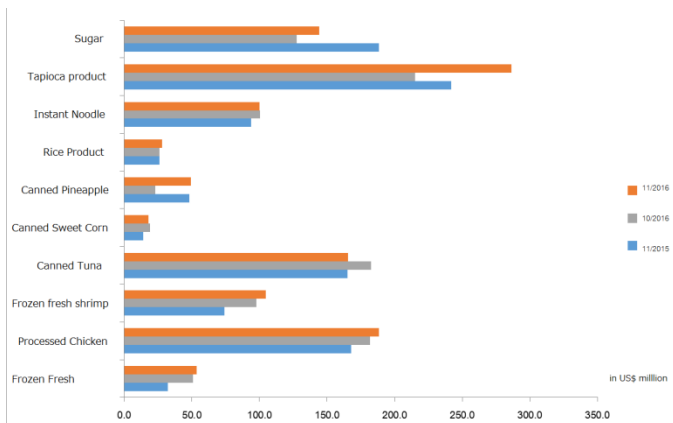
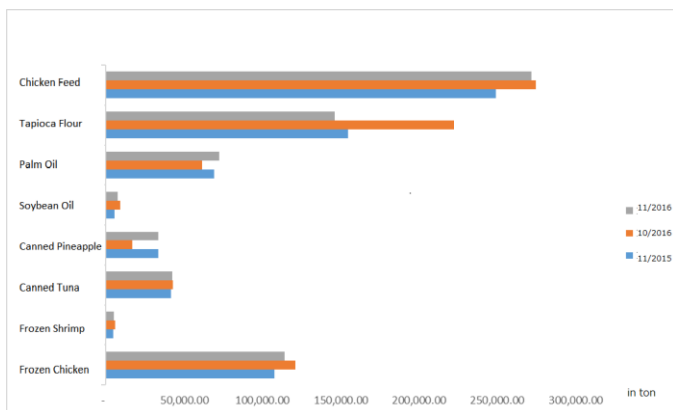


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I. Food Industry

The production and export value from the food industry increased from the same period of the previous year due to the increasing of agriculture production. Thai export situation was better than other countries and continuously grew. The local consumption was increasing as well.



1. Production

The production in November 2016 in major food industry was increased by 1.6% from the same period of last year. The details are:-

1) Export-oriented Products: The frozen shrimp and canned tuna increased by 12.7% and 2.5% respectively due to the increasing of production as well as continual market demand.

2) Domestic-oriented Products: The product which uses local raw materials such as palm oil increased by 4.1% from the growth of raw materials while the product which uses imported raw material i.e. soybean oil increased by 32.3 %, due to the rising of domestic consumption demand.

2. Marketing

1) Domestic Market:

The domestic sales value in November 2016 of food and agriculture products increased by 0.4% from the same month of the previous year. This was from the economic recovery which increased the spending.

2) Export Market:

The total export value in November 2016 of food products increased by 8.2%. The products included frozen fresh chicken, frozen fresh shrimp, canned sweet corn, tapioca, processed chicken, rice products, instant noodle, canned pineapple and canned tuna, which increased by 66.4%, 41.2%, 28.1%, 18.4%, 12.0%, 8.4%, 6.6%, 2.9% and 0.2% respectively. Although the global economy still remained slow down and fluctuated, Thai export situation was still better than those other exporting countries. However the export of sugar product decreased by 23.5% from the same month of last year due to insufficient product volume for export.

3. Trend

In overview the production and export are anticipated to be slightly expanded from the previous year due to the negative factor from the fishery against the EU's IUU rules, the slowing down of demand from major countries such as China and Japan, the Brexit effect and the strengthening of Thai Baht currency. However there are positive factors in several products such as processed chicken with increasing orders from overseas especially from the reinstated right of export to Korea, the upgrading of Anti- Human Trafficking from tier 3 to tier 2 of US government, the EMS disease recovery of shrimp product and increasing pre-orders of sugar product. Also the government has promoted the rapid economic stimulus measures, financial assistance measures for SMEs and investment accelerating measures in special economic development zones in various forms. In addition the tourism stimulus measures increase the food consumption in the country and food production and food export.

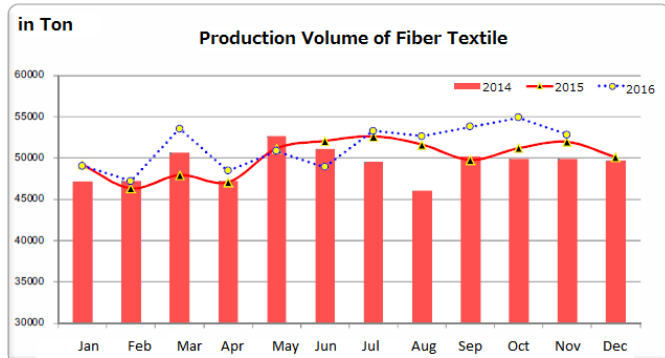


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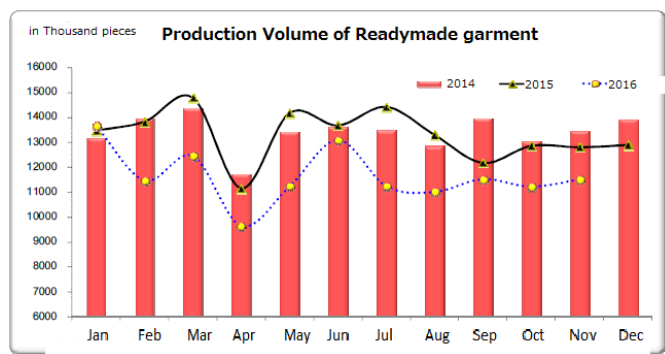
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II. Textile and Garment Industry

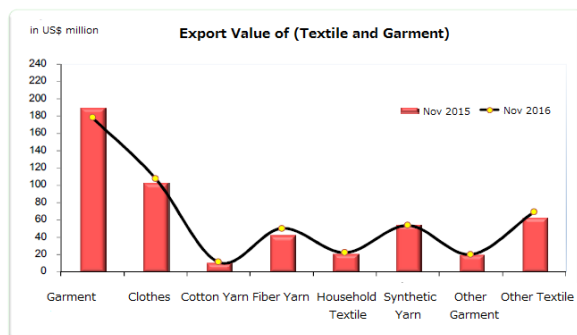
Manufacturing of textile increased in the synthetic fibers group due to the higher domestic demand. The cloth and garment production decreased due to huge volume of import product.



source : Industrial Economics Information Center, Office of Industrial Economics



source : Industrial Economics Information Center, Office of Industrial Economics



source : Industrial Economics Information Center, Office of Industrial Economics

1. Production

□ **Textile sector:** When comparing with the same month of the previous year, the manufacturing of the textile fiber product increased by 1.7 %, especially synthetic fibers increased by 2.1% from the domestic demand. The production of fabric decreased 0.3% due to numerous import volume and accumulative stock previously.

□ **Garment sector:** When comparing with the same month of the previous year, the manufacturing of readymade garment products decreased by 10.0% in the weaved and knitted fabrics as the black clothes demand saturated and the increasing import from China, Vietnam, Cambodia Bangladesh and Hong Kong were the cause of in local production dropping.

2. Marketing

□ **Domestic Sales:** When comparing with the same month of the previous year, the sales volume of Textile fibers product, mostly sold to local textile factories, increased by 11.1%. While the sales of fabric increased by 2.1% in accordance with the continuous slowing down in production. The production of readymade garment increased 11.9% in knitting clothes but, in overview, the readymade garment production was slow down 1.7%.

□ **Exporting :** When comparing with the same month of the previous year, the sale volume of Textile fibers products decreased by 3.2% due to the decrease of demand from partner countries i.e. China, Turkey, Vietnam, Pakistan and US. The export values of fabric products increased by 3.5% from exporting to Myanmar, Cambodia, Japan and China. The export value of the readymade garments continuously declined to be 6.5 % due to the decreasing orders from major export markets such as Japan, US and EU which were affected from the obscure economic recovery. However export to ASEAN was increasing by 13.7%

3. Trend

In overview the production of fiber textile and fabric is anticipated to be expanded by the demand from ASEAN countries. The demand of black clothes is saturated and the imported black clothes from China are numerous. The overview of export of readymade garment and clothes is expected to be slightly increasing as the economics of major partner countries are still slow down continuously.

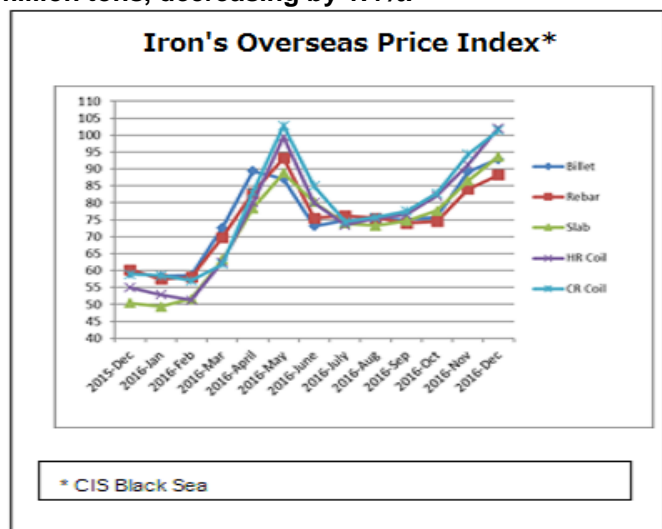


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III. Iron and Steel Industry

World Steel Association reported that the iron and steel production in November 2016 was at 132.4 million tons, expanded by 5% from the same period of last year. The world production capacity consumption rate was at 69.6%, decreasing by 0.1%. The raw steel production volume of China was at 66.3 million tons, increasing by 5% from the same month of the previous year, while of Japan was 8.6 million tons, decreasing by 1.4%.



1. Production

The manufacturing situation of steel industry in November 2016 improved when comparing with the same month of the previous year. The MPI in this month was at 127.82 with the increment rate of 19.92%. The reasons are:

- The MPI of the Flat steel production increased by 24.56%. The galvanized steel sheet increased by 36.11%. The chromed flat sheet increased by 32.78%. The hot rolled sheet increased by 31.42%. According to the data from the Iron and Steel Institute of Thailand, the domestic demand in flat-steel products was 991,877 tons, increasing by 31.4% which mostly the hot rolled sheet increased by 90.3%. Secondly chrome sheets increased by 48.8%. The Import volume was 790,736 tons, increasing by 30.3%, which mostly was from cold formed structural steel increased by 153.8% and secondly the thick hot plate sheet increased by 141.7%. The export volume was 35,794 tons, increasing by 6.4% from thick hot plate sheet (stainless steel) product which increased by 48.0% while hot rolled sheet (Alloy steel) increased by 33.4%.

- The MPI of long-formed steel production increases by 16.91% when comparing with the same month of the previous year. The production of the round bar, the steel bar and wire rod increase by 28.43%, 18.2% and 12.74 respectively. According to the data from the Iron and Steel Institute of Thailand, the domestic demand was 782,340 tons, increased by 102.4%. The round bar and formed structural steel increased by 169.8%. The wire rods increased by 30.0%. The import volume was 239,598 tons, increasing by 19.3% which mostly the hot formed structural steel increased by 144.3% and secondly wire rod (Alloy steel) increased by 68.3%. The export volume was 63,223 tons, decreased by 9.5% which wire rod (Alloy steel) decreased by 100.0% and hot formed structural steel decreased by 22.6%. The reason why there was higher consumption of steel, although the demand of successive downstream industries (like construction, automotives, electrical) were not really expanding, was from the calculation technique where it combines production output, import & export and inventory together. Secondly it was due to the increasing of market price from the rising raw material prices (raw iron and charcoal) when charcoal mine closed in China.

2. Steel Price

The international steel price index generated by the Iron and Steel Institute of Thailand indicated the change of price index (FOB) at CIS Black Sea port in November 2016 when comparing with the same period of the previous year that the products with increasing prices included the hot plate steel sheet which the price increased from 54.97 to 102.05 point, up by 85.65%, the flat steel beam price increased from 50.46 to 93.66 point, up by 85.61%, the cold rolled sheet price increased from 58.87 to 101.40 point, up by 72.24%, the billet steel beam price increased from 59.29 to 92.94 point, up by 56.75% and the round bar price increased from 60.21 to 88.29 point, up by 46.64%. The factor affecting the prices increasing of the steel and metal was the rising price of raw materials, such as charcoal.

3. Trend

Thailand's iron production situation in December 2016 is expected to be increasing for both flat steel (hot flat sheet and coated flat sheet) and long-formed steel. This results from the expansion of the successive downstream industries, such as electrical appliances (e.g. washing machine and air-conditioner) and construction.



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IV. Automotive Industry

Automobile

The automobile industry was expanding in November 2016 from the same period of the year 2015. However the domestic distribution and export were slow down due to domestic consumers expedited in buying PPV to avoid higher prices from increasing excite tax based on new tax structure on CO₂ gas exhausting effective from January 1, 2017.

which increased from November 2015 by 4.67%(163,170 units). This was due to the increasing of passenger car and pick-up truck.

2. Sales

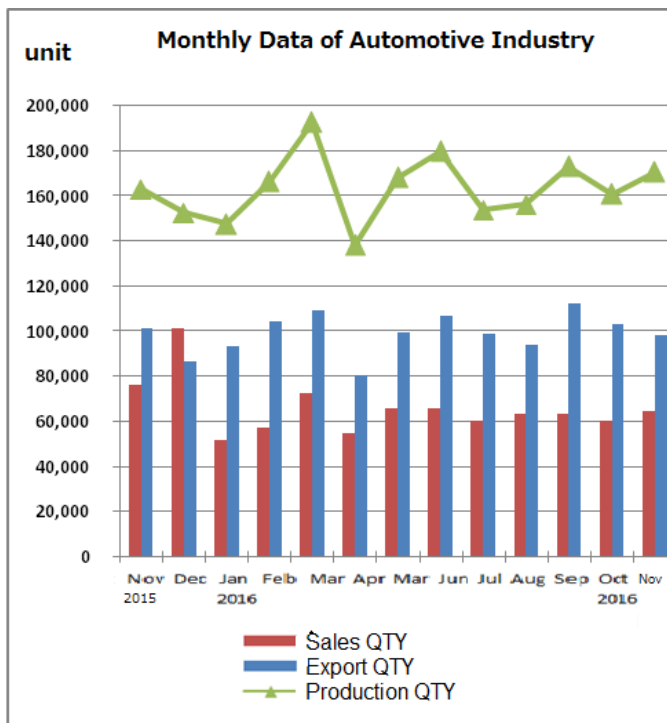
Sales quantity of automobile in November 2016 was 64,771 units, lower than in November 2015 by 15.25% (76,426 units). This was due to the decrease of sales of passenger car, PPV and SUV vehicle.

3. Export

The export quantity in November 2016 was 98,447 units which decreased from November 2015 by 3.12% (101,650 units). The declining export markets were Asia, Middle East, Central America and South American countries.

4. Trend

The automotive industry in December 2016 is expected to be slow down when comparing with December 2015. The production in December 2016 is expected to be 44% for domestic sales and 56% for export market.



1. Production

Manufacturing quantity of automotive in November 2016 was 170,784 units



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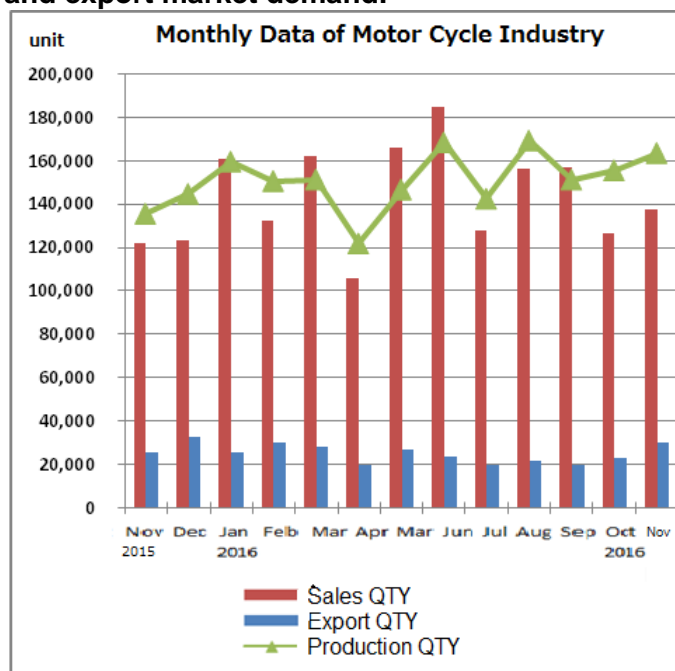


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Motorcycle

The Motorcycle industry in November 2016 expanded when comparing with the same period of 2015 due to the increase of domestic and export market demand.



Note:

- 1) Since January 2016, the motorcycle production data has been revised by adding the information from an additional manufacture. Type of motorcycles from the data reports has been changed from family-type to versatile-type (family-type and scooters-type).
- 2) As from April 2016 data reports, the motorcycle type classification has been revised from family-type, scooter-type and sporty-type to be motorcycle types of : less than or equal to 100 cc, 101-125 cc, 126-150 cc and more than 150 cc types. Therefore we can only be able to compare the overall growth rate.

1. Production¹

Manufacturing quantity of motorcycle in November 2016 was 163,400 units, increasing by 20.4% from November 2015 which produced 135,714 units. Contribution were from the increasing production of versatile and sporty motorcycles.

2. Sales²

Sales quantity of motorcycles in November 2016 was 137,291 units which, increasing by 12.9% from November 2015 which sold 121,599 units.

3. Export of Complete Built Unit (CBU) motorcycle

The export quantity was 29,934 units in November 2016, increasing by 18.56% from November 2015 which exported 25,247 units. This was due to the increase of export to UK, US and Netherland.

4. Trend

The motorcycle industry in December 2016 is expected to be expanding when comparing with December 2015. The production in December 2016 is expected to be 77% for domestic sales and 23% for export market.

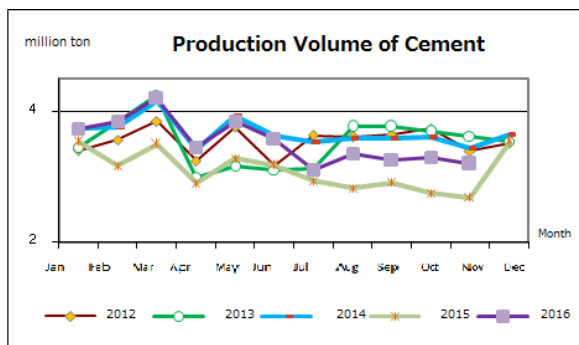


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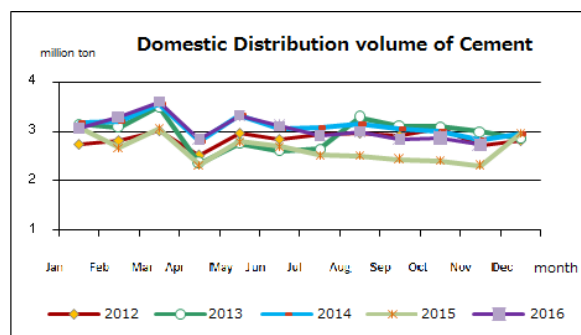
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V. Cement Industry

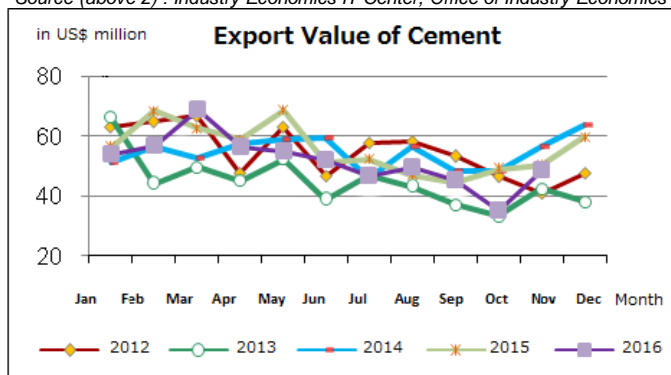
In overview Cement industry was still expanded when comparing with the same period of the previous year due to the 2015 base figures were rather low. However the growth has been reducing due to the slowing down of government projects' progress and thus lower cement demand than forecasted. The export value shrank due to the decreasing orders from Myanmar and Cambodia



Source (above 2) : Industry Economics IT Center, Office of Industry Economics



Source (above 2) : Industry Economics IT Center, Office of Industry Economics



source : IT & Communication Center, Office of Secretary of Commerce Ministry

1. Production and Domestic Sales

When comparing with the same period of the previous year, the production and domestic sales volume of cement (excluding clinker cement) in November 2016 increased by 18.58% and 18.69% respectively. Cement industry was expanding as the base figure of 2015 was rather low. When comparing with the past 5 years, the growth of cement industry actually has not been good especially in the 2nd half of this year from the unlikely recovery of Thai economics which made slowing down of private sector's real estate investment and cement consumption consequently. Although government continued the economic stimulus policies and many infrastructure construction projects were underway, e.g. being bided, commencing or work in progress, the demand was still lower than forecasted.

2. Export

The export value of cement in November 2016 shrank by 3.52% from the same period of the previous year as the sharply decreasing orders from Myanmar. Although there was increasing order of clinker cement from Bangladesh, clinker cement was low price cement which did not much increase export value and consequently the overall export value was reducing. The major export countries were Bangladesh, Cambodia and Myanmar in gross value of US\$ 31.95 million, or 65.57% of total export value.

3. Trend

The production and domestic sales would be maintained as it has been due to the economics has not been recovered. The government's infrastructure projects have not yet been fully implemented. Some projects have yet to bid. Some have the land expropriation problem and some have to re-run the Environmental Impact Assessment (EIA) process.

The export value is anticipated to be shrinking from the same period of the previous year as Myanmar, one of key buyer countries has continuously reduced its order since last months. Although Bangladesh trend to buy more low-priced clinker cement, the export value has trend to be dropping.



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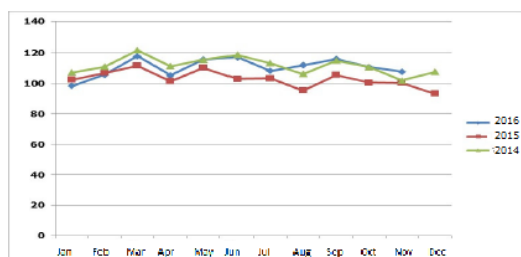
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VI. Electrical and Electronics Industry

In overview the manufacturing of electrical and electronic industry in November 2016 increased by 7.35% when comparing with the same month of the previous year. The electrical industry increased by 2.81% due to the expansion of electrical equipment which increased up to 32.5%. The electronic industry increased by 10.22% due to the increase of production of Monolithic ICs, Other ICs and HDD.

MPI of electrical and electronic industry

MPI of Electrical and Electronic Industries



Source : Office of Industrial Economics

Remark : The Production Index Base of year 2011 has been applied

Table 1 : The value of most Electrical Appliance and

Electronics Products Export in November 2016

Electrical Appliances and Electronics Products	Value (in million US dollar)	%YoY
Computer components	1,478.28	3.2
Printed Electrical Board	686.66	7.27
electrical circuit switching and protection device and parts	270.73	32.05
Air-conditioner	267.12	- 1.83
Total of Electrical Appliances and Electronics Products	4,748.88	8.47

Source : Institute of Electrical and Electronics

1. Production

In overview the MPI of the electrical and electronic industry in November 2016 when comparing with the same period of the previous year was at 107.76, up by 7.35%. The MPI of electrical industry sector was at 104.09, up by 2.81%. The expanding electrical appliance included condensing unit split-type air conditioner, fan-coil unit split-type air conditioner, electrical fan, washing machine, microwave, electrical rice cooker and television increased by 6.97%, 6.72%, 3.13%, 4.13%, 9.38%, 3.06% and 18.30% respectively. The domestic and exported sales of air-conditioner to major countries such as China and Japan were increased by 164.30% and 29.13% respectively. The increment of washing machine was from production capacity expansion of manufacturers since August 2016 and significantly increasing export to major markets, especially to US market.

When comparing with the same period of the previous year, the MPI of the electronic industry sector was at 110.05, increasing by 10.22% due to the increasing production of Monolithic ICs, Other ICs and HDD at 21.14%, 11.89% and 4.07%. As ICs was the essential parts for hi-tech product development, thus the export to major countries likes EU and Japan was increased.



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2. Export

Total export value of the electrical appliance product and electronic industry in November 2016 was US\$4,748.88 million, decreasing by 8.47% when comparing with the same month of the previous year.

Electrical Appliance Product

When comparing with the same month of the previous year, the electrical appliance product had the export value of US\$ 2,014.78 million with the increase of 10.77%. This was due to the increase of export to all major markets such as ASEAN, EU, China, US and Japan which increased by 2.77%, 1.80%, 10.02%, 11.78% and 47.97% respectively. The leading product with most export value was electrical circuit switching and protection device including base and control panel with export amount of US\$270.73 million, up by 32.05%. This was due to the increase of export to major countries i.e. ASEAN, EU, China, US and Japan by 24.21%, 28.94%, 39.12%, 11.70% and 32.20% respectively. The following product was air conditioner with export amount of US\$ 267.12 million, down by 1.83%. This was due to the export decreased to the major market such as ASEAN, EU and US by 0.96%, 23.14% and 2.02% respectively.

Electronic product

When comparing with the same month of the previous year, the electronic product had the export value of US\$2,734.10 million, increased by 6.84%. This was due to the increase of export to almost key markets as ASEAN, EU, US and Japan

markets by 5.53%, 11.59, 5.01% and 27.79%. The leading electronic product with most export value was components of computer which had export amount of US\$1,478.28 million, increased by 3.20%. This was due to the increase of export to all major markets e.g. ASEAN, EU, China, US and Japan by 1.25%, 1.80%, 9.86%, 6.64% and 10.57% respectively. The following product was Electrical Circuit Board (ECB) with export amount of US\$ 686.66 million, down by 7.27%. This was due to the increasing export to most major countries ASEAN, EU, US and Japan by 17.88%, 13.55%, 6.24% and 16.99% respectively. However the export to China decreased by 24.69%.

3. Trend

From the index guide model conducted by the Electrical and Electronics Institute, the overview of the electrical and electronic industry in December 2016 is anticipated to increase by 10.36% when comparing with the same month of the previous year. The electrical industry is expected to increase by 7.92% from the increasing of cooling appliance such as air conditioner which would expand in both domestic and export market and washing machine which has production capacity expansion as well. The electronic industry is expected to rise up by 12.79% due to the higher demand of ICs for hi-tech product development.