



# Industrial Economic Status Report

## September 2016

### Summary of Key Issues

**The Manufacturing Production Index (MPI)** in September 2016 indicated the increasing growth by 0.6% when comparing with the same period of last year. The major industries contributing to such growth included industry of ornament, air-conditioner, electronic components, home electrical appliances and pulp and paper.

The growth of air-conditioner industry increased in September 2016 due to the growth of both domestic market and exporting in almost markets such as ASEAN, EU, China and Japan.

The growth of electronic components in September 2016 increased in both ICs, the essential parts for hi-tech product development, and Hard Disk Drive in exporting to all major markets.

#### **Commencement and Disposal of Factory's Register**

In September 2016, 456 plants commenced operations which increased by 19.1% from August 2016. The employment rate increased by 17.1%, while the total investment capital decreased by 16.3%. The major investment was from spirit distillation (Malt Whisky) industry, with a total investment amount of ฿2,999 million. When comparing with the same month of the previous year, the number of plants that commenced operations decreased by 8.4% from September 2015. On the other hand, 98 Factory's Registers were disposed in September 2016 which decreased by 36.8% from August 2016 and decreased by 69.3% from the same month of the previous year.



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### **Thailand's Importation of Industry sector**

In September 2016, the import of industrial machinery and components valued US\$1,399.5 million, which increased by 5.7% comparing with the same month of the previous year from increasing importation of aerial pump and fluid pump machinery, ball bearing, metal processing and wood processing machineries.

The import of raw material and semi-finished product (excluding gold) in September 2016 valued US\$ 6,086.90 million, increasing by 3.1% comparing with the same month of the previous year. This was due to the increasing of import of electrical appliance's components, chemicals and plastic product.

### **Electricity power consumption of Industry sector**

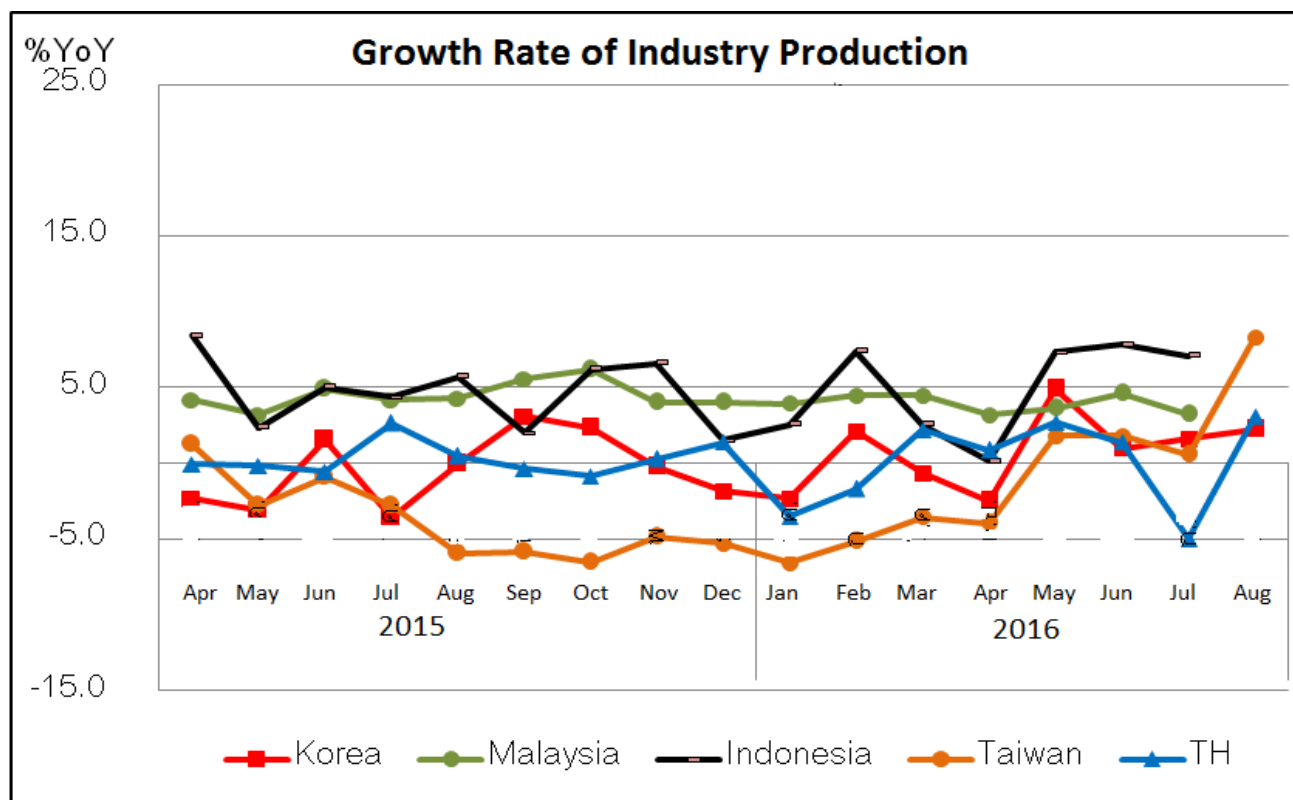
In September 2016, there was consumption of 10,539.2 million kWh (kilowatt-hour), which was 1.5% decreasing from August 2016 (10,702.0 million kWh) and 4.3% increasing when comparing with the same period of year 2015 (10,100.9 million kWh). The electricity power consumption data classified by business size showed that all sized businesses consumed less than last month and the same month of the previous year.



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### Industrial Economics Conditions of Thailand Comparing with Major Countries in Asia in September 2016



Production situations of Thailand's Industry sector based on the Manufacturing Production Index (MPI) was increased by 0.6% when comparing with the same period of the previous year. The major industries contributing to such growth included ornaments, air-conditioner, electronic tubes, electronic component and parts, pulp, paper and tissue.

Meanwhile the industrial production rate of Taiwan was expanded by 6.5%. The industrial production rate of South Korea was shrunk by 2.2%.

The industrial production rates of Malaysia and Indonesia in September 2016 have not yet been released. But the growth trend continued from the previous months. In August 2016, the industrial production rates of Malaysia and Indonesia expanded by 4.7% and 4.8% respectively.



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### Manufacturing Operation Situation in September 2016

The data from the Department of Industrial Works (DIW) indicated the manufacture operation situation of September 2016 comparing with August 2016 that 456 plants commenced the operation. It increased by 19.1% from August 2016 (383 plants). The number of employed people were 10,329 persons which increased by 17.1% from August 2016 (8,820 persons).

The investment capital was ฿25,486 million which decreased by 16.3% from August 2016 (฿30,467 million).

The report of manufacture operation situation of September 2016 comparing with the same month of the previous year indicated that the plants commenced the operation in September 2016 decreased by 8.4% from in September 2015 which 498 plants commenced the operation. The investment capital slightly decreased by 22.9% from September 2015 (฿33,053 million). The number of employed persons decreased by 12.3% from August 2015 (11,779 persons).

- The industry that had the most manufacturing starting up in September 2016 was the ready-mixed concrete manufacturing, piles and slabs concrete manufacturing (totally 37 plants). The following was the operation of clay/soil digging and scooping for construction (totally 30 plants).
- The industry with the highest level of investment capital in September 2016 was the manufacturing of spirit distillation, Malt Whisky (totally ฿2,990 million). The following was the production and sales of electricity power from biogas (totally ฿2,507.60 million).
- The industry that had the most new employment in September 2016 was seafood processing, shrimp carving, washing & freezing manufacturing (672 persons). The following was the manufacturing of aquatic food preservation (471 persons).



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**Manufacturing Shutdown situation** The shutdown situation of the manufacturing in September 2016 when comparing with August 2016 was reported that number of plants closing down were 98 plants, decreasing by 36.8% from August 2016 (155plants). The number of lay-off workers was 1,760, lower than in August 2016 (3,772 workers). The total investment capital from such shutdown was ฿2,354 million which was higher than August 2016 (฿1,565 million).

The shutdown situation of the manufacturing in September 2016 when comparing with the same month of the previous year was reported that the number of plant closing down 69.3% lesser than in September 2015 (319 plants). The investment capital loss due to plant shutdown was lesser than September 2015 (฿7,058 million), and the number of lay-off workers also were lesser than in September 2015 (16,623 workers).

- The industry that had the most manufacturing shutdown in September 2016 was the manufacturing of gas filling plant (totally 12 plants). The following was the automobile repairing and painting manufacturing (9 plants each).
- The shutting down industry with the highest level of investment capital in September 2016 was the manufacturing of gas filling plant (totally ฿401 million). The following was the manufacturing of the making, modifying & repair of holding device for mechanical equipments (totally ฿295 million).
- The industry that had the most lay-off workers in September 2016 was the rubber industry excepting the rubber tire (248 workers), and the following was the manufacturing of the making, modifying & repair of holding device for mechanical equipments (121 workers).

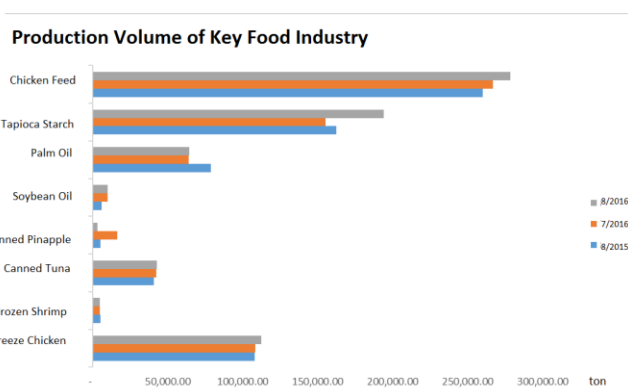


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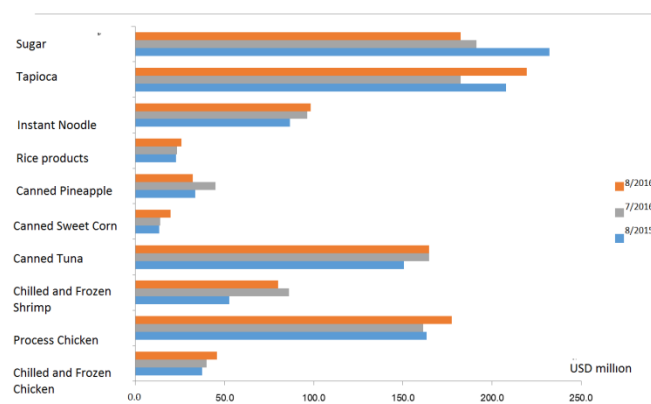
## September 2016

### I. Food Industry

The production of the food industry increased from the same period of the previous year when comparing with the same period of the previous year, due to the increasing of agriculture production contributed by better export than other countries and growth continuation of market demand. The local consumption also increased in some commodities such as soybean oil (palm oil substituted)



**Export Volume of Key Food Industry**



#### 1. Production

In September 2016, production in major food products industry (excluding sugar) increased by 6.4%. The details are:-

1) Export-oriented Products : Tapioca starch, canned tuna and frozen shrimp increased by 16.0%, 7.7% and 7.1% respectively due to the increasing of production as well as a continual market demand.

2) Domestic-oriented Products: The products which used domestic raw materials such as palm oil decreased by 25.9%. And the products which use imported raw materials such as soybean oil increased by 83.5% due to the rising of domestic consumption demand.

#### 2. Marketing

##### 1) Domestic Market:

The domestic sales in September 2016 in quantity of food and agricultural products (excluding sugar) slightly increased by 8.6% when comparing with the same month of the previous year, from the continuous increasing demand of palm oil which increased by 76.0%, as the soybean oil price is close to the palm oil price that made consumers switch to consume soybean oil instead.

##### 2) Export Markets:

The total export in September 2016 in amount of food products (excluding sugar) increased by 12.4% when comparing with the same month of the previous year. Those products included frozen fresh shrimp, canned sweet corn, frozen fresh chicken, instant noodle, canned tuna, rice products, processed chicken and tapioca products, which increased by 58.5%, 26.5%, 24.9%, 11.4%, 10.5%, 7.8%, 7.6% and 4.1% respectively. Although the global economy still remained slow down and fluctuated, Thai export situation was better than those other exporting countries. However, some products such as canned pineapple decreased by 12.0% due to slowing down of overseas orders as well as the strengthening of Thai Baht currency. Also the export of sugar dropped by 45.5 % when comparing with the same month of the previous year from slowing down of the orders from major partner countries such as Indonesia and Cambodia.

#### 3. Trends

In overview the production and export is anticipated to be slightly increased from the previous year, despite the negative factors such as the illegal labor employment, the fishery against the EU's IUU rules, the slowing down of demand from 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 oversea, the reinstated right of export to Korea of chilled and frozen chickens, the upgrading of Anti-Human Trafficking from tier3 to tier 3 of US government, shrimp product which has recovered from EMS disease 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 effect the expansion of food consumption in the country and food production and food export.

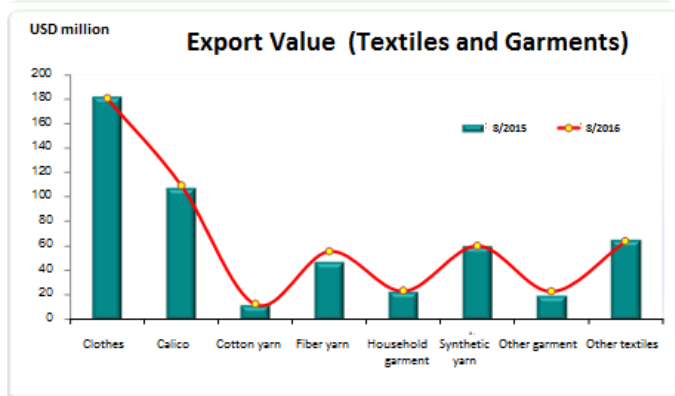
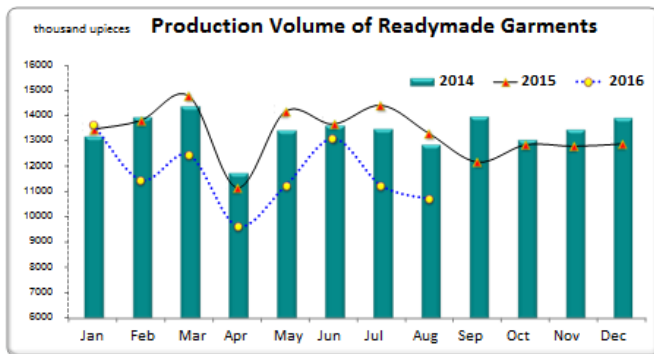
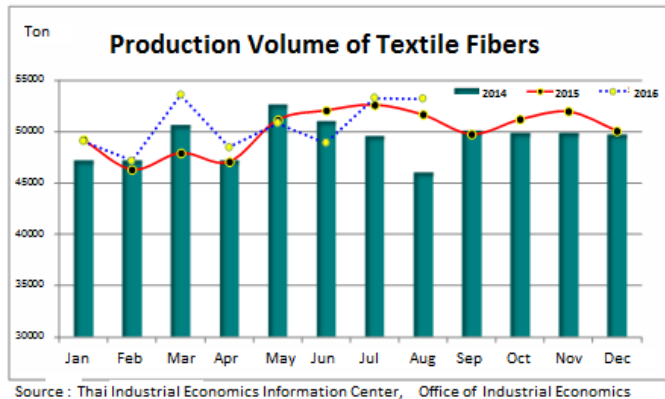


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### II. Textile and Garment Industry

Manufacturing of textile slightly increased in the synthetic fibers group due to the higher domestic demand and export. The increasing garment was from the increased knitting clothes due to the pre-production of excessive stock prepared for year-end sales.



#### 1. Production

• **Textile sector:** When comparing with the same month of the previous year, the manufacturing of the textile fiber product increased by 9.6 %. The production of synthetic fiber and yarn groups increased by 3.7% and 1.0% respectively due to the higher domestic demand and export. The production of garment decreased by 12.7% due to oversupply from last month importation.

• **Garment sector:** When comparing with the same month of the previous year, the manufacturing of readymade garment products decreased by 4.1% in the knitted fabrics while the yarn fabric slightly increased due to increasing of domestic and export demand from the production of excessive stock prepared for year-end sales

#### 2. Sales/Distribution

• **Domestic Sales :** When comparing with the same month of the previous year, the sales volume of Textile fibers product increased by 2.4% . However the sales of garments dropped by 3.0%, respectively. This was according to the continuous slowing down in production. The consumption of readymade garment increased 5.1% in both knitting and weaving clothes.

• **Exporting :** When comparing with the same month of the previous year, the sale volume of Text le fibers products increased by 1.2% due to the increase of demand from partner countries , especially China whose import increased by 35.9%. Also the export to Turkey and Bangladesh increased. The export values of garment product slightly increased by 1.0% from exporting to Vietnam, Myanmar, Japan and China. The export value of the readymade garments continuously declined to be 9.8 % due to the decreasing order from major export markets such as ASEAN, US and EU affected from the obscure economic recovery.

#### 3. Trends

The production was anticipated to be expanded significantly, especially black clothes which Thai people wear to pay the commemoration with high respect. The higher demand drastically resulted in accelerated production of clothes to meet the consumers' demand. Meanwhile, production of fabrics and readymade garment were expected to be unchanged or even slow down continuously from last month. Some manufactures expanded their manufacturing base to ASEAN countries. The domestic sales is expected to increase based on the domestic economy. The export of readymade garment and clothes is expected to be increasing continuously until the end of the year 2016, especially to ASEAN market. On the other hand, the export to EU will increase due to higher demand during Christmas and New Year festivals.





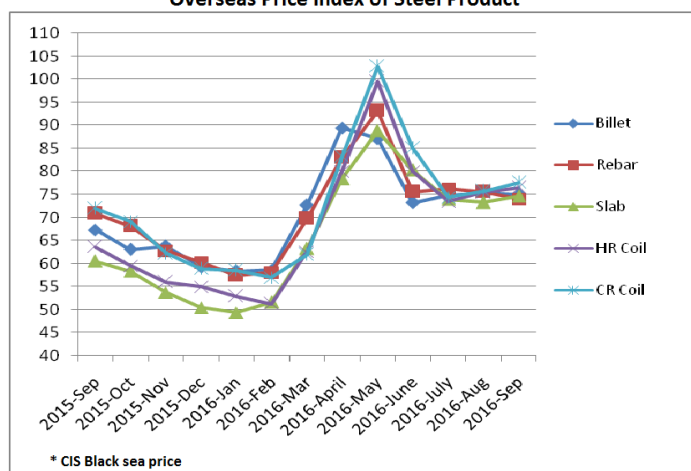
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### III Iron and Steel Industry World Steel

Association anticipates the iron and steel consuming demand in 2016 to be 1,501 billion ton, increasing by 0.2%. It also anticipates for 2017 to be 1,510 billion ton, increasing by 0.5% comparing with the same month of the previous year. The key factor is from the slowing down of global investment which leads to slight recovery of demand.

Overseas Price Index of Steel Product



#### 1. Production

The manufacturing situation of steel industry in September 2016 improved when comparing with the same month of the previous year. The MPI in this month was at 115.60 with the increment rate of 2.7% comparing with the same month of the previous year. The reasons are:

- The MPI of the Flat steel production increased by 14.03% when comparing with the same month of the previous year. The chrome plate sheet increased by 48.02%. The hot rolled sheets increased by 44.37%. The Cold rolled sheets increased by 22.88%. According to the data from the Iron and Steel Institute of Thailand, the domestic demand in flat-steel products was 959,087 ton, increasing by 3.6% which mostly the chrome plate sheet increased by 86.9%. Secondly tin plate sheet increased by 36.8% and thirdly The Cold rolled sheets increased by 25.8%. The Import volume was 738,928 ton, decreasing by 4.1%, which mostly was from hot rolled sheet (Carbon steel), decreasing by 34.7% and secondly hot rolled sheet (Alloy steel), decreased by 31.8%. The export volume was 38,220 ton, increasing by 46.2% from the thick hot rolled sheet (alloy steel) product which increased by

7,285.4% while Galvanized steel sheet increased by 220.9%.

- The MPI of long-formed steel production decreased by 12.45% comparing with the same month of the previous year. The production of high strength steel wire decreased by 16.18%. The Reinforcing bar decreased by 13.37 and the steel wire decreased by 9.14%. According to the data from the Iron and Steel Institute of Thailand, the domestic demand dropped by 13.6% which round bar and structural steel products decreased by 23.2%, but the wire rods increased by 15.9%. The import volume was 233,544 ton, increasing by 6.7% which mostly hot rolled structural steel (Carbon steel) increased by 266% and secondly hot rolled structural steel (stainless steel) increased by 43.6%. The export volume decreased by 17.1% which the round bar product decreased by 66.6%.

#### 2. Steel Prices

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 ports in September 2016 when comparing with the same period of the previous year that the product with increasing price included the flat steel bar which increased from 60.46 to 74.65 point, up by 23.47%. The increasing rate of Hot rolled steel sheet increased from 63.58 to 76.51 point, up by 20.34%. The increasing rate of billet steel bar increased from 67.29 to 75.05 point, up by 11.53. The price of Cold rolled sheets decreased from 71.96 to 77.57 point, down by 7.80%. The price of round bar increased from 70.85 to 74.04 point, up by 4.50%.

#### 3. Trends

Thailand's iron production situation in October 2016 when comparing with the same month of the previous year is anticipated to be unchanged. The consumption of Flat steel will be increased due to the more using in electrical appliance such as air-conditioner and washing machine. However the demand of long-formed steel for construction industry would be unchanged.





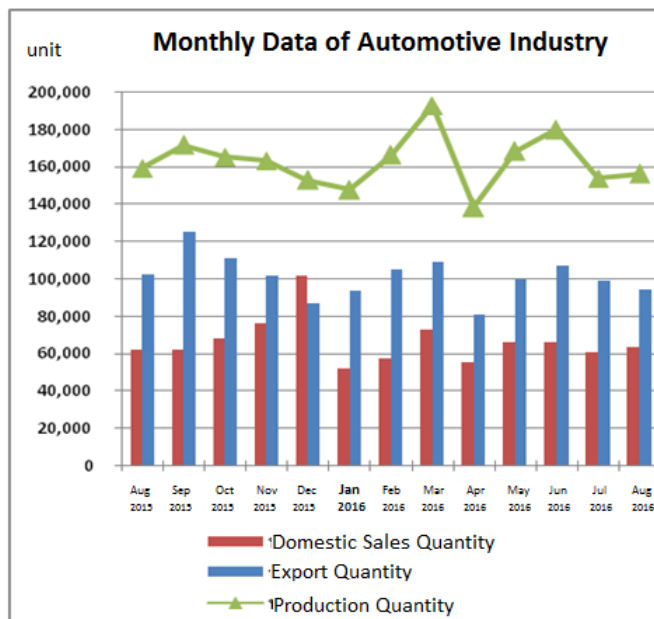
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### IV. Automotive Industry

#### Automobile

The automobile industry slightly expanded in September 2016 when comparing with the same period of the year 2015 due to the expanding of domestic market from the recovery of economic as well as the launching new car models



#### 1. Production

Manufacturing quantity of automotive in September 2016 was 173,069, which increased from September 2015 by 0.92% (171,496 units). This was due to the increasing of passenger car and commercial car production.

#### 2. Sales

Sales quantity of automobile in September 2016 was 63,641 units, which increased which increased from September 2015 by 2.86% (61,869 units). This was due to the increase of sales of passenger car, one-ton truck and the commercial vehicle.

#### 3. Export

The export quantity in September 2016 was 112,565 units, decreased from which increased from September 2015 by 9.91% (124,952 units). The declining export markets were Middle East and European and South American countries.

#### 4. Trend

The automotive industry in October 2016 is expected to be slow down when comparing with October 2015. The production in October 2016 is expected to be 35% contributed to domestic sales and 65% contributed to export market.



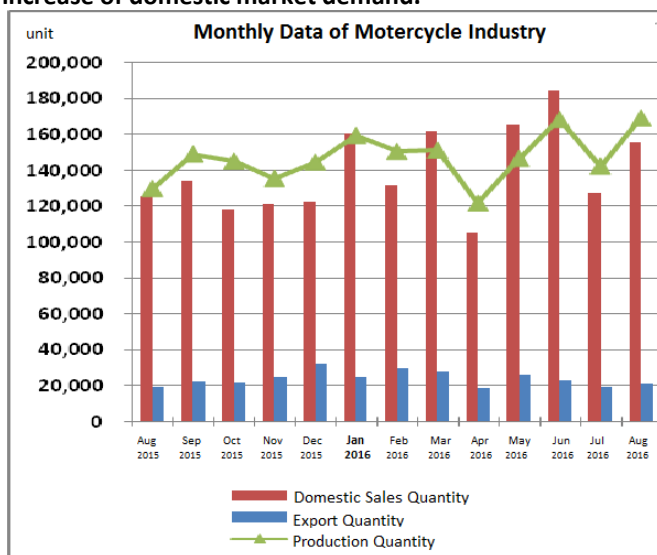
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### Motorcycle

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

Sales quantity of motorcycles in September 2016 was 156,753 units which increased by 16.6% from September 2015 which sold 134,434 units.



### 3. Export of Complete Built Unit (CBU) motorcycle

The export quantity was 19,249 units in September 2016 which increased 14.56% from September 2015 which exported 22,530 units, due to the increase of export to Philippines, Italy and Canada.

### 4. Trend

The motorcycle industry in October 2016 is expected to be slow down when comparing with October 2015. The production in October 2016 is expected to be 83% contributed to domestic sales and 17% contributed to export market.

#### Note:

1) Since January 2016, the motorcycle production data has been revised by adding the information from on 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 types has been revised from family-type and scooters-type and sport-type to motorcycles types of : less than or equal to 100 cc, 101-125 cc, 126-150 cc and more than 150 cc types. Therefore, we can be able to compare only the overall growth rate.

### 1. Production<sup>1</sup>

Manufacturing quantity of motorcycle in September 2016 was 151,294 units which increased by 1.38% from September 2015 which produced 149,234 units.

Contribution was from the versatile-type and sporty motorcycles.

### 2. Sales<sup>2</sup>

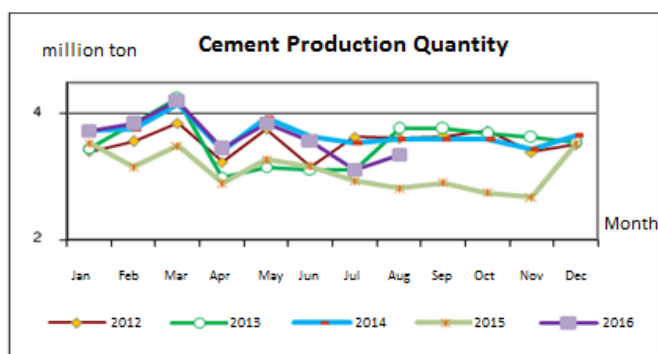


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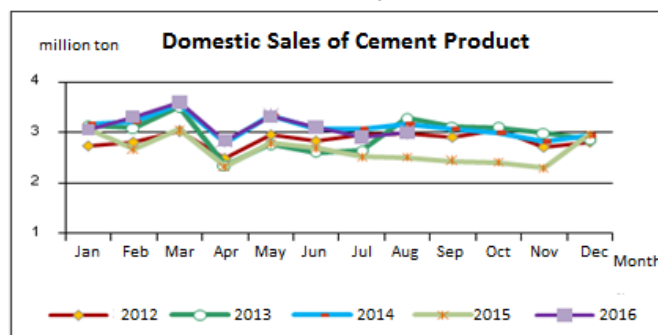
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### V. Cement Industry

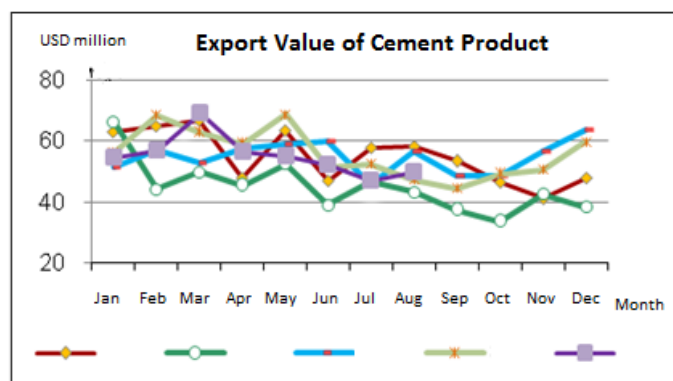
The overall growth rate of Cement industry increased when comparing with the same period of the previous year. However considering from the growth during 2<sup>nd</sup> half of this year, the growth rate reduce due to slowing down of private sector's investment from overall slow economic expansion. The export value slightly increased due to the increasing order from Bangladesh, Vietnam and Cambodia.



Source : Industrial Economics Information Center, Office of Industrial Economics



Source : Industrial Economics Information Center, Office of Industrial Economics



Source : Information Technology and Communication Center, Office of Permanent Secretary, Ministry of Commerce

#### 1. Production and Domestic Sales

When comparing with the same period of the previous year, the production and sales volume of cement (excluding granular cement) in September 2016 increased by 11.68% and 16.39% respectively.

Cement industry showed expanding when comparing with the same period of the previous year which the figure base was low. Actually the cement industry has declined since July 2016, 3 months consecutively dropping, due to the unlikely recovery of Thai economic. The heavy raining and flood were also the reasons of slowing in cement consumption and production consequently. However government continued the policy of economic stimulus policy by acceleration of the large infrastructure projects including construction projects of the motorways between the major cities, construction project of Double track railways, construction project of the coastal ports of Laem Chabang (Port A) etc. These will enable the cement industry to continue to grow further.

#### 2. Export

The export value of cement in September 2016 increased by 2.32% when comparing with the same period of the previous year as the increasing orders from Vietnam, Bangladesh and Cambodia, especially Bangladesh created the value as much as US\$ 8.59 million, or 19% of total export value of cement of this month. However the cement imported by Bangladesh was just only low-priced granular cement while the import by Myanmar has been reduced since last month. These made the export value of cement increased just slightly.

#### 3. Trend

The production and domestic sales in this month were at the same level due to heavy raining continuously in many areas throughout the month that resulted in slowing down in construction. The slow investment of private sector from the slowing down of economic growth results in decreasing of cement local demand.

The export value is anticipated to be declined when comparing with the same period of the previous year as Myanmar, one of key buyer countries has continuously reduced its order since this April 2016, while Bangladesh was just only buy low-priced granular cement. Thus the export value has trend to be dropping.



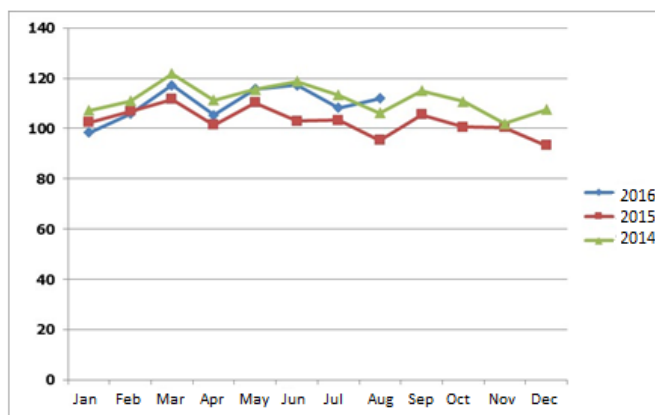
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### VI. Electrical and Electronics Industry

Overview of manufacturing of electrical and electronic industry, showed that in September 2016 increased by 10.05% when comparing with the same month of the previous year. The electrical industry increased by 15.96% due to the expansion of washing machine which increased over 40%. The electronic industry increased by 6.65% due to the increase of production of Monolithic IC, other ICs and Hard disk drive.

Manufacturing Production Index (MPI) of Electrical and Electronics



Source : Office of Industrial Economics

Remark : MPI has been adjusted to be based on 2011 production years

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

Electrical / Electronic Products	Value (Million USD)	%YOY
Computer components	1,488.44	3.16%
Integrated circuits	741.21	6.23%
Air conditioners	316.46	32.06%
VDO cameras & Digital cameras	247.83	30.39%
<b>Total of electrical / electronic product</b>	<b>4,695.70</b>	<b>7.35%</b>

Source: The Electrical and Electronics Institute

### 1. Production

Overview of manufacturing situation of the electrical and electronics industry in September 2016 when comparing with the same period of the previous year, the MPI was at 116.12, up by 10.05%.

When comparing with the same period of the previous year, the Production Index (MPI) of electrical industry sector was at 116.43, up by 15.96%. The expanding electrical appliances included condensing unit split-type air conditioner, fan-coil unit split-type air conditioner, electrical fan, washing machine and microwave oven increased by 24.71%, 27.77%, 0.47%, 40.71% and 16.38% respectively. This was due to almost all increment of domestic and exported sales of air-conditioner to major countries such as ASEAN, EU China and Japan. And export to major markets of washing machine was increased, especially to US market. Some manufactures expanded their production capacity and thus increase the export of washing machine.

When comparing with the same period of the previous year, the MPI of the electronics industry sector was at 115.93, increased by 6.65% due to production increasing of Monolithic IC, other ICs and Hard Disk Drive which increased by 8.10%, 9.19% and 8.13% respectively. As ICs were the essential parts for hi-tech product development, thus the export to major countries was recovered.



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### 2. Export

Total export value of the electrical appliances and electronics industry in September 2016 was US\$4,993.36 million, increasing by 6.5% when comparing with the same month of the previous year.

#### Electrical products

When comparing with the same month of the previous year, the electrical products had the export value of US\$2,037.84 million with the increase of 8.62%. This was due to the increase of export to all major markets such as ASEAN, EU, China, US, and Japan which increased by 3.08%, 10.96%, 25.11, 4.86 and 8.66% respectively. The leading product with most export value was air conditioners with export amount of US\$324.65 million, up by 9.79%. This was due to the increase of export to major countries i.e. ASEAN, EU, China and Japan, by 17.5%, 15.64%, 61.31% and 7.98% respectively. The following product was electrical circuit switching and protection device including platform and control panel with export amount of US\$ 270.12 million, up by 22.40%. This was due to the export increased to the major markets such as ASEAN, EU, China, US, and Japan, by 19.67%, 27.87%, 8.51%, 10.02 and 14.57% respectively when comparing with the same month of the previous year.

#### Electronics products

When comparing with the same month of the previous year, electronics products had the export value of US\$2,955.51 million, increased by 5.08%. This was due to the increase of export to key markets as ASEAN, EU and US market by 1.76%, 16.01 and 14.80%. The

leading electronics product with most export value was components of computers had export amount of US\$1,567.10 million, which increased by 5.98%. This was due to the increase of export to major markets such as ASEAN, EU, China and US, by 0.12%, 17.8%, 10.46 and 11.51% respectively. Except the export to Japan, it dropped by 9.02%. The following product was Printed integrated circuit board (PCB) with export amount of US\$768.21 million, down by 2.61%. This was due to the export to China and Japan decreased by 23.63% and 6.70% respectively. Except the export to ASEAN, EU and US, it increased by 1.21%, 7.01% and 1.87% respectively when comparing with the same month of the previous year.

### 3. Trends

From the index guide model conducted by the Electrical and Electronics Institute, the overview of the electrical and electronics industry in October 2016 is anticipated to increase by 6.73% when comparing with the same month of the previous year. The electrical industry is expected to increase by 12.38%. With the increasing of cooling appliances like, air conditioner which can be expanded to both domestic and export market. The washing machine has production capacity expansion as well.

The electronics industry is expected to rise up by 1.08%. This is due to the higher demand ICs for hi-tech product development.