

At present the structure of business trade, services and industrial activity, has changed dramatically. There are new kind of business in the economy, including the small scale industries and home industry which has a role in the economic growth of the country as a whole increased. Therefore, statistical data on basic information of the business is important and necessary for the public and private sector in policy formulation and development planning of economic and industry in both the national and provincial level, to increase competitiveness in the global trade arena. The National Statistical Office (NSO) proposed by the key government agencies, including the Office of Industry Economics, the Ministry of Industry, Office of the National Economic and Social Development Board, Bank of Thailand and the Ministry of Commerce, to conduct the Industrial Census every 5 years, there for, the basic information obtained by the census can be used for both government and private sectors in various aspects.

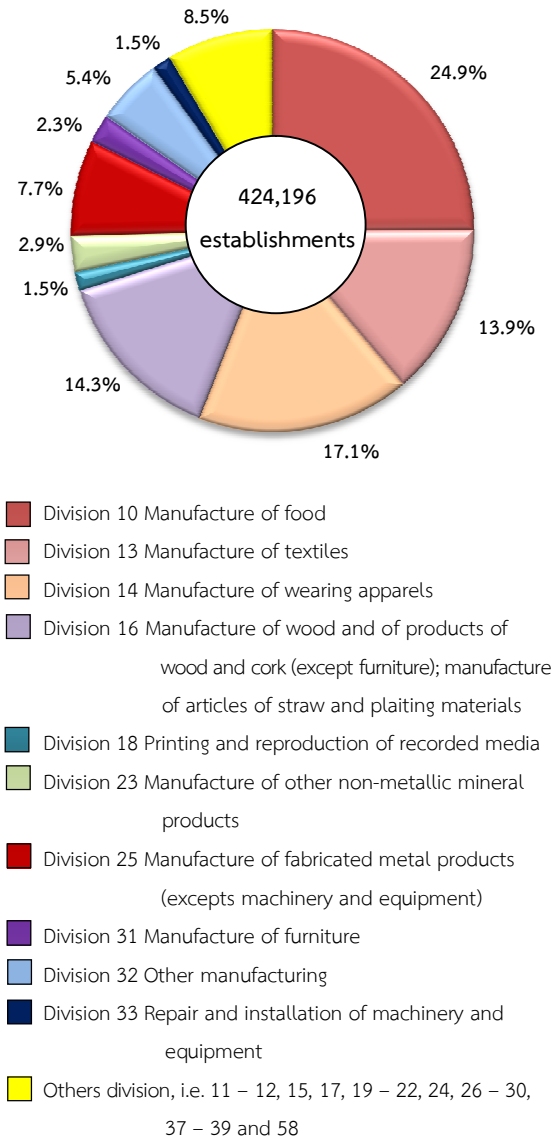
The NSO had carried The Business trade and Services Census for 3 times, in 1966 and 1988 and 2002. The Industrial Census had been conducted 3 times as well, in 1964 and 1997, in 2007. For the year 2012 will mature around 10 years for conducting the Census of Business trade and Services and 5 years for conducting the Census of Industrial. The NSO had integrated of such a census named “The 2012 Business trade and Industrial Census”.

The data presents in this report was the results of the 2012 Business and Industrial Census: Manufacturing Industry. The statistical methodology using for the establishments with 1 – 10 persons engaged were a sample survey and for the establishment with 11 persons engaged and over were completely enumerated. The enumeration stage, field work was conducted during May 1 to August 30, 2011. The data presented the operational information of manufacturing establishment in the **Whole Kingdom** in year 2011 (January 1 – December 31, 2011) and classified by Thailand Standard Industrial Classifications (TSIC-2009). The main findings are as follows:

Number of establishments by division of industry

The results of the 2012 Business and Industrial Census, there were totally 424,196 **manufacturing** establishments in the **Whole Kingdom**. The highlight industries of this region were *manufacture of food products* and *manufacture of wearing apparels*, which had the proportion, of about 24.9 and 17.1 percent respectively. The followings were *manufacture of wood and of products of wood and cork (except furniture); manufacture of articles of straw and plaiting materials* (about 14.3 percent), *manufacture of textiles* (13.9 percent). The other divisions of industry, not mentioned above, each division had less than 8.0 percent.

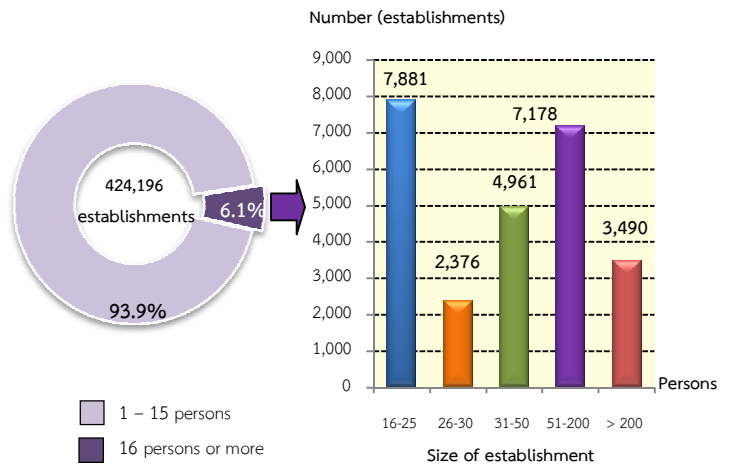
Figure 1 Percentage of manufacturing establishments by division of industry



Size of establishment

Most of manufacturing establishments (about 398,310 establishments or 93.9 percent) were establishments with 1 – 15 persons engaged. The establishments with 16 persons or more were about 25,886 or 6.1 percent. Out of these, with 16 – 25 percent and with 51 – 200 persons were about 7,881 and 7,178 respectively. While with 26 – 30 persons were about 2,376.

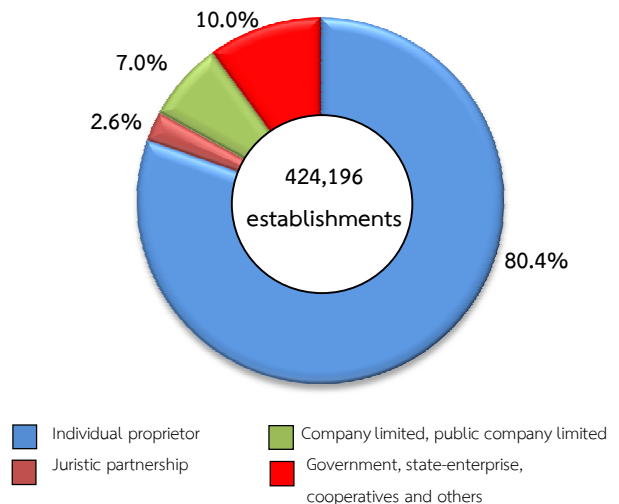
Figure 2 Number of manufacturing establishments by size of establishment (number of persons engaged)



Form of legal organization

Most establishments (about 80.4 percent) were individual proprietor. The establishments, which were in the form of government, state-enterprise, cooperatives and others was about 10.0 percent. For those, which were company limited, public company limited juristic partnership and had proportions (about 7.0 percent) and juristic partnership (about 2.6 percent).

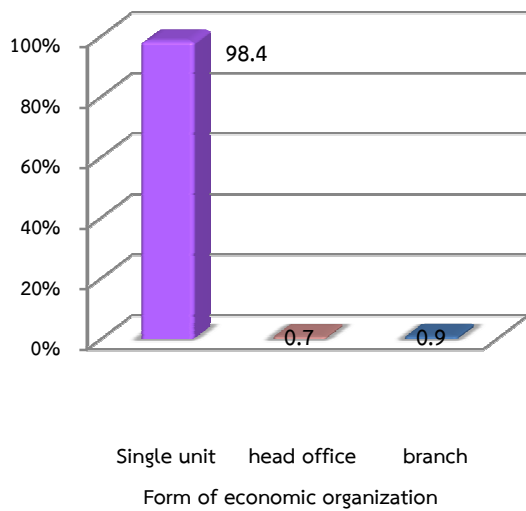
Figure 3 Percentage of manufacturing establishments by form of legal organization



Form of economic organization

The manufacturing establishments in the Whole Kingdom (about 98.4 percent) were in form of single unit. About 0.9 percent was an office branch or subsidiary and about 0.7 percent was head office.

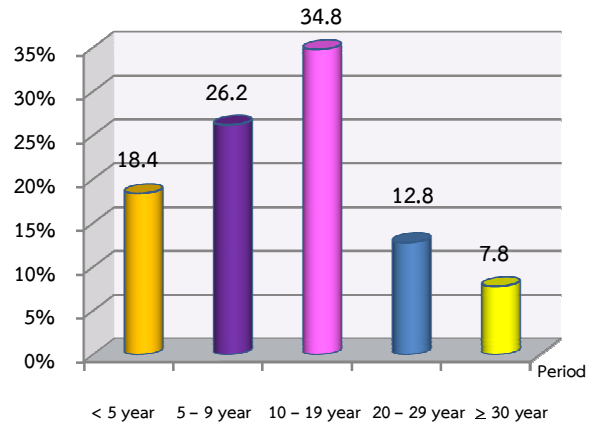
Figure 4 Percentage of manufacturing establishments by form of economic organization



Period of operation

Most of the establishments (about 34.8 percent) have operated their business for 10 – 19 years. The establishments operated their business for 5 – 9 years and less than 5 years were about 26.2 and 18.4 percent respectively. The establishments operated their business for 20 – 29 years was about 12.8 percent. While the establishments operated their business for 30 years or more had the lowest proportion of about 7.8 percent of the total.

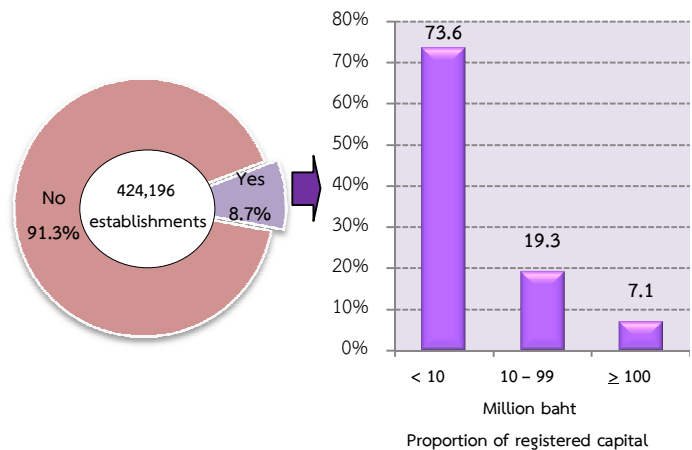
Figure 5 Percentage of manufacturing establishments by period of operation



Registered capital

The number of manufacturing establishments in the Whole Kingdom, with registered were about 8.7 percent of the total. Out of these, most of them (about 73.6 percent) had less than 10 million baht of registered capital. Those with 10 – 99 million baht of registered were about 19.3 percent. The establishment with 100 million baht of registered and over was only 7.1 percent.

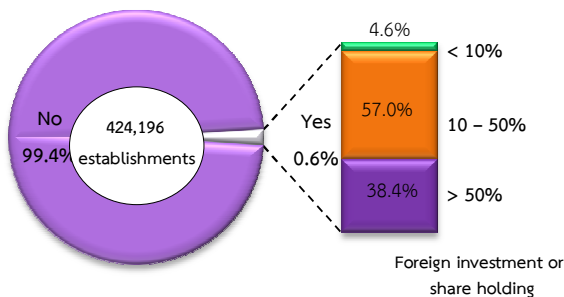
Figure 6 Percentage of manufacturing establishments by registered capital



Foreign investment or share holding

For the foreign investment share holding in the Whole Kingdom, about 99.4 percent of the corporate establishment (company limited and public company limited) had no foreign investment or share holding. For the establishments with foreign share holding about 0.6 percent did. Out of these, about 57.0 percent was between 10 - 50% of share holding and about 38.4 percent was over 50% of share holding. Those with less than 10% of share holding were 4.6 percent.

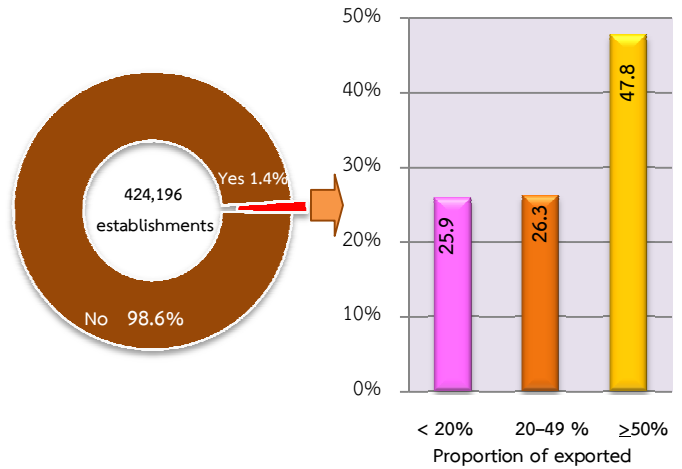
Figure 7 Percentage of manufacturing establishments by foreign investment or share holding



Export

There were 1.4 percent of manufacturing establishments, which exported their goods produced. Out of these, about 47.8 percent, exported over 50% of the total sales of goods. About 26.3 percent of establishments exported between 20 - 49%. The rest of about 25.9 percent exported less than 20% of export.

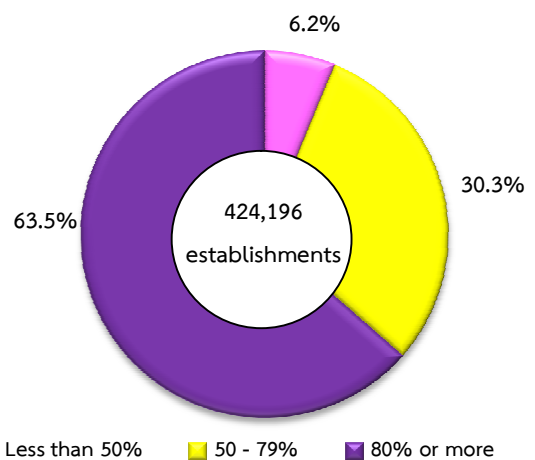
Figure 8 Percentage of manufacturing establishments by export



Capacity utilization rate

The average capacity utilization rate in 2011 of manufacturing establishments was about 79.9%. The majority of manufacturing establishments (about 63.5 percent) had capacity utilization rate about 80% or more. The establishment with the capacity utilization rate between 50 - 79% was about 30.3 percent. While those with capacity utilization rate less than 50% was about 6.2 percent.

Figure 9 Percentage of manufacturing establishments by capacity utilization rate

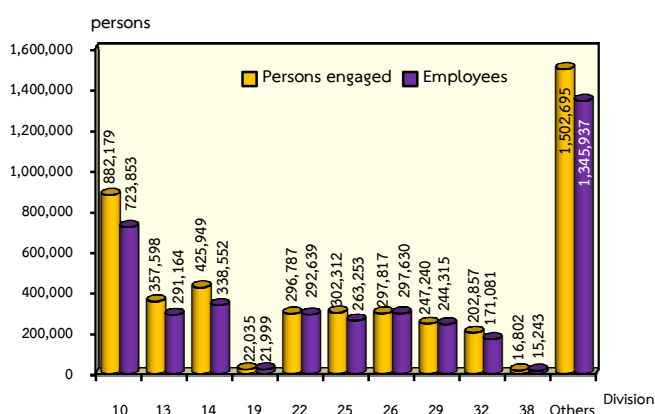


Capacity Utilization Refers to the proportion of production and capacity

Number of persons engaged and employees

In 2011 the workers of the manufacturing establishments in the Whole Kingdom were totally 4.55 million persons. In term of employees, there were totally 4.0 million persons. Most of them about 18.1 percent worked in *manufacture of food*. Followed by those worked in *manufacture of wearing apparels* and *manufacture of computers, electronic and optical products* were about 8.5 and 7.4 percent respectively. The other division of industry not mentioned above, each division had less than 8.0 percent.

Figure 10 Number of persons engaged and employees of manufacturing establishments by division of industry



Note : Persons engaged refer to owner or juristic partnerships unpaid worker and employees.

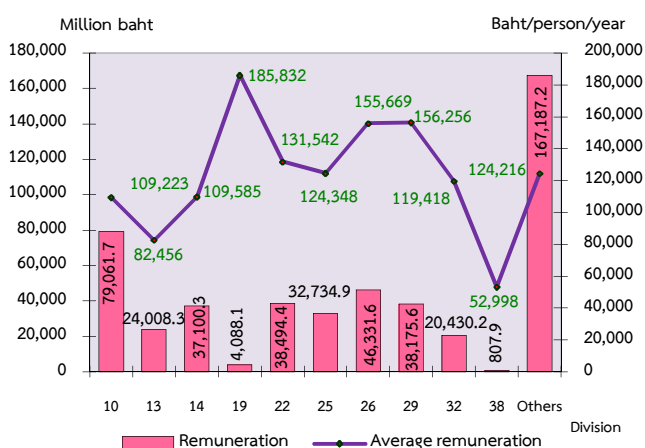
Division of industry:

- Division 10 Manufacture of food
- Division 13 Manufacture of textiles
- Division 14 Manufacture of wearing apparels
- Division 19 Manufacture of coke and refined petroleum products
- Division 22 Manufacture of rubber and plastic products
- Division 25 Manufacture of fabricated metal products (excepts machinery and equipment)
- Division 26 Manufacture of computers, electronic and optical products
- Division 29 Manufacture of motor vehicles, trailers and semi-trailers
- Division 32 Other manufacturing
- Division 38 Waste collection, treatment and disposal activities; materials recovery
- Others division, i.e. 11 – 12, 15 – 18, 20 – 21, 23 – 24, 27 – 28, 30 – 31, 33, 37 39 and 58

Remuneration

In 2011 the employees working in manufacturing establishments in the Whole Kingdom received the total remuneration about 488,420.1 million baht or 121,932 baht per person annually. The employees engaged in *manufacture of coke and refined petroleum products* received the highest annual remuneration, of about 185,832 baht per person. Those employees engaged in *waste collection, treatment and disposal activities; materials recovery* received the lowest annual remuneration, of about 52,998 baht per persons.

Figure 11 Remuneration of manufacturing establishments by division of industry



Division of industry:

- Division 10 Manufacture of food
- Division 13 Manufacture of textiles
- Division 14 Manufacture of wearing apparels
- Division 19 Manufacture of coke and refined petroleum products
- Division 22 Manufacture of rubber and plastic products
- Division 25 Manufacture of fabricated metal products (excepts machinery and equipment)
- Division 26 Manufacture of computers, electronic and optical products
- Division 29 Manufacture of motor vehicles, trailers and semi-trailers
- Division 32 Other manufacturing
- Division 38 Waste collection, treatment and disposal activities; materials recovery
- Others division, i.e. 11 – 12, 15 – 18, 20 – 21, 23 – 24, 27 – 28, 30 – 31, 33, 37 39 and 58

Value of gross output, intermediate consumption and value added

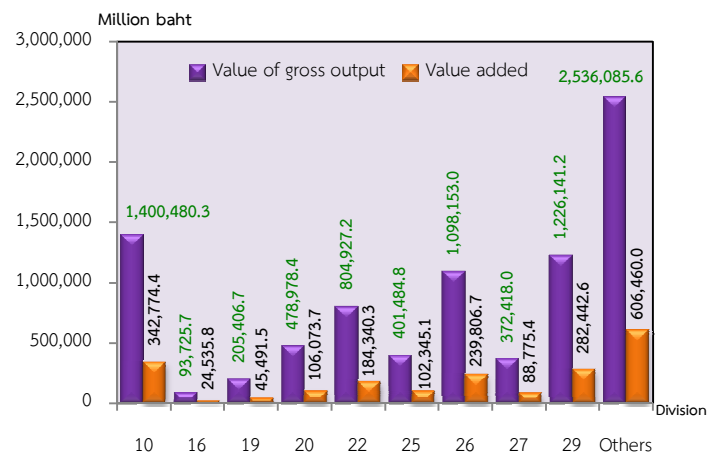
In 2011, the value of gross output of manufacturing establishments was totally 8.89 trillion baht. The intermediate consumption and value added were totally 6.81 trillion baht and 2.08 trillion baht respectively. Comparing the value added to value of gross output was about 23.3 percent.

For the average value of gross output were about 21.0 million baht per establishment and 2.0 million baht per person. In terms of the average value added, these were about 4.9 million baht per establishment and 455,638 baht per person respectively.

Considering by division of industry, it was found that establishments engaged in *manufacture of coke and refined petroleum products* had the highest average value of gross output per establishment about 1,477.7 million baht and average value of gross output per person about 9.3 million baht.

For the establishments engaged in *manufacture of coke and refined petroleum products* had the highest average value added per establishment and per person had about 327.3 million baht and 2.1 million baht respectively. Those engaged in *manufacture of wood and of products of wood and cork (except furniture); manufacture of articles of straw and plaiting materials* had average value of gross output, and value added per person, of about 405,604 baht and 112,818 baht respectively.

Figure 12 Value of gross output and value added of manufacturing establishments by division of industry



Value added = Value of gross output – Intermediate consumption
Value of gross output refers to receipts of establishment in 2006
Intermediate consumption refers to all expenses on the production process of goods or services in the establishment in 2011

Division of industry:

- Division 10 Manufacture of food
- Division 16 Manufacture of wood and of products of wood and cork (except furniture); manufacture of articles of straw and plaiting materials
- Division 19 Manufacture of coke and refined petroleum products
- Division 20 Manufacture of chemicals and chemical products
- Division 22 Manufacture of rubber and plastic products
- Division 25 Manufacture of fabricated metal products (excepts machinery and equipment)
- Division 26 Manufacture of computers, electronic and optical products
- Division 27 Manufacture of electrical equipment
- Division 29 Manufacture of motor vehicles, trailers and semi-trailers
- Other division, i.e. 11 – 15, 17 – 18, 21, 23 – 24, 28, 30 – 33, 37 – 39 and 58

Data comparison of manufacturing establishments during 5 years

Comparing the data of the 2012 Business and Industrial Census and the 2007 Industrial Census, which the operation period was of the year in 2011 and 2006, the results showed that number of manufacturing establishment decreased by 7.4 percent and number of persons engaged increased by 2.1 percent, while the average number of person engaged per establishment increased by 10.3 percent (table 1).

Table 1 Principal data of manufacturing establishments in year 2006 and 2011

Data items	2006	2011	% Change
Number of establishments (Establishments)	457,968	424,196	-7.4
Number of persons engaged (Persons)	4,460,284	4,554,271	2.1
<i>Average establishment (Persons)</i>	9.7	10.7	10.3
Number of employees (Persons)	3,818,955	4,005,666	4.9
<i>Average establishment (Persons)</i>	8.3	9.4	13.3
Remuneration (Million baht)	430,894.9	488,420.1	13.4
<i>Average annual per employee (Baht)</i>	112,830.6	121,932.3	8.1
Value of gross output (Million baht)	7,304,514.0	8,888,040.2	21.7
<i>Average per establishment (Thousand baht)</i>	15,949.8	20,952.7	31.4
<i>Average per person (Thousand baht)</i>	1,637.7	1,951.6	19.2
Intermediate consumption (Million baht)	5,545,755.5	6,812,940.5	22.9
<i>Average per establishment (Thousand baht)</i>	12,109.5	16,060.8	32.6
<i>Average per person (Thousand baht)</i>	1,243.4	1,496.0	20.3
Value added (Million baht)	1,758,758.5	2,075,099.8	18.0
<i>Average per establishment (Thousand baht)</i>	3,840.4	4,891.8	27.4
<i>Average per person (Thousand baht)</i>	394.3	455.6	15.6

In terms of employment, number of employees and average number of employees per establishment increased about 4.9 and 13.3 percent respectively and the annual remuneration during 5 year increased by 13.4 percent.

For the value of gross output, intermediate consumption and value added of manufacturing establishments during 5 year increased by 21.7, 22.9 and 18.0 percent respectively.

The performance of establishments in the Whole Kingdom during 5 years ago has gradually grown due to the world economy slowed down and flood crisis.

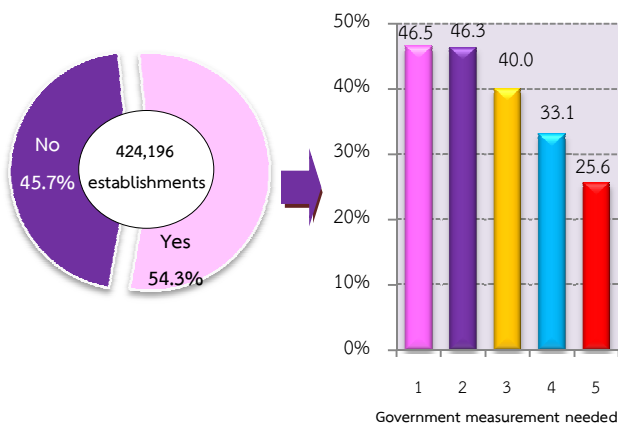
Data summary and recommendation

The results of the 2012 Business and Industrial Census show that there were totally 424,196 manufacturing establishments in the Whole Kingdom. Most of them engaged in establishments with 1 – 15 persons, of about 93.9 percent. The highlight industry was *manufacture of food products* (about 24.9 percent). There were totally 4.55 million persons and out of these, about 4.0 million persons were employees. They received the annual remuneration, of about 121,932 baht per person. The manufacturing establishments contributed value of gross output, intermediate consumption and value added of about 8.89, 6.81 and 2.08 trillion baht respectively.

● **Governments measurement needed**

For the manufacturing establishments in the Whole Kingdom did not need government measurement about 45.7 percent, the rest of about 54.3 percent did. The top 5 measurements needed are investment promotion for the establishments (about 46.5 percent), reducing production cost (about 46.3 percent), providing the low interest of loan (about 40.0 percent), expand the marketing (about 33.1 percent) and provide training and employee development (about 25.6 percent).

Figure 13 Percentage of manufacturing establishments by government measurement needed the top 5



Note: The establishment can be done by more than 1

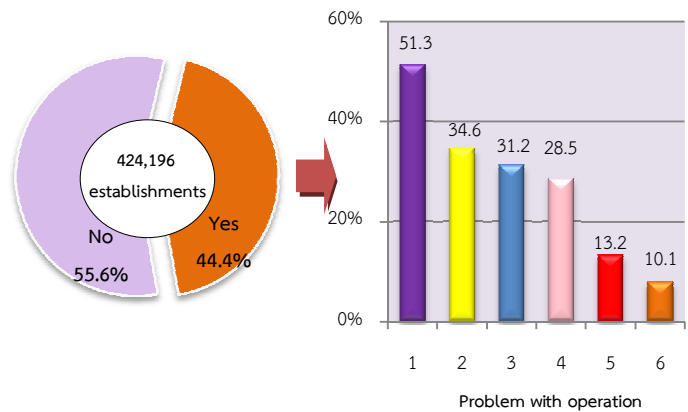
Government measurement needed:

1. Investment promotion for the establishments
2. Reducing production cost
3. Providing the low interest of loan
4. Expand the marketing
5. Provide training and employee development

● **Problem with operation**

The establishment, about 44.4 percent reported the problem their operation. Most of them about 51.3 percent inadequate capital. The followings were product marketing; raw material shortages used in the production and labor shortage were about 34.6, 31.2 and 28.5 percent respectively. While the uncertainty of government trade policy was about 13.2 percent.

Figure 14 Percentage of manufacturing establishments by problem with operation



Note: The establishment can be done by more than 1

Problem with operation:

1. Inadequate capital
2. Product marketing
3. Raw material shortages used in the production
4. Labor shortage
5. Uncertainty of government trade policy
6. Others