#### **EXECUTIVE SUMMARY**

The National Statistical Office carried out the third Industrial Census in 2007, after having conducted the first one in 1964 and the second in 1997. The main objective of the census is to collect basic information on the structure, the distribution and the operation of manufacturing establishments.

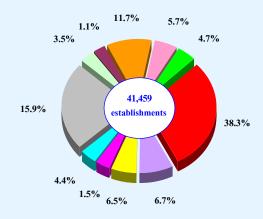
For this, all economic activities located in municipal areas and non-municipal areas were presented in the reports which were the results of the listing stage.

The data presented in the publication was of the year 2006, concerning manufacturing establishments located in **Bangkok.** The main findings are as follows:

## 1. Number of establishments by division of industry

The results of the 2007 Industrial Census, show that there were totally 41,459 manufacturing establishments, with one person engaged or more in Bangkok. The major industries were manufacture of textiles, wearing apparel; dressing and dyeing of fur, manufacture of fabricated metal products and manufacture of furniture manufacturing n.e.c., which had the proportion, of about 38.3, 15.9 and 11.7 percent respectively. The following industries were tanning and dressing of leather; manufacture of luggage handbags saddlery, harness and footwear and publishing, printing and reproduction of recorded media had the closes proportion, of about 6.7 and 6.5 percent respectively.

Figure 1 Percentage of manufacturing establishments by division of industry

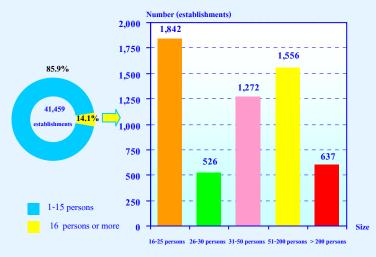


- Division 15 16 Manufacture of food products and tobacco
- Division 17 18 Manufacture of textiles, wearing apparel; dressing and dyeing of fur
- Division 19 Tanning and dressing of leather; manufacture of luggage handbags saddlery, harness and footwear
- Division 22 Publishing, printing and reproduction of recorded media
- Division 24 Manufacture of chemicals and chemicals products
- Division 25 Manufacture of rubber and plastic products
- Division 28 Manufacture of fabricated metal products
- Division 29 33 Manufacture of machinery and equipment, office,
  accounting and computing machinery, electrical
  machinery and apparatus, radio, television and
  communication equipment medical and precision, etc.
- Division 34 35 Manufacture of motor vehicles, trailers and semitrailers and other transport equipment
- Division 36 Manufacture of furniture
- Other divisions, i.e. 20 21, 23, 26 27 and 37

#### 2. Size of establishment

The majority of establishments or 85.9 percent were small scale establishments, with 1-15 persons. The establishments with more than 15 persons engaged were 5,833 establishments or about 14.1 percent. Out of these, about 1,842 establishments engaged in establishments with 16-25 persons. For those with 26-30 persons were about 526 establishments.

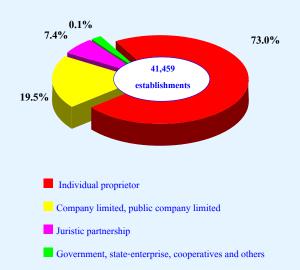
Figure 2 Number of manufacturing establishment by size of establishment (number of person engaged)



## 3. Form of legal organization

Most establishments (about 73.0 percent) were individual proprietor. The establishments, which were company limited, public company limited and juristic partnership had the proportion, of about 19.5 and 7.4 percent respectively. For those, which were in the form of government, state-enterprise cooperatives and others had the proportion of about 0.1 percent.

Figure 3 Percentage of manufacturing establishments by form of legal organization

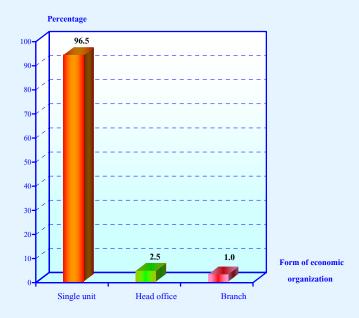


#### 4. Form of economic organization

The results of the census show that the establishments about 96.5 percent were single unit, which were not a branch of any establishments or which had no branch or subsidiary. While those were in head office and branch had about 2.5 and 1.0 percent respectively.

Figure 4 Percentage of manufacturing establishments

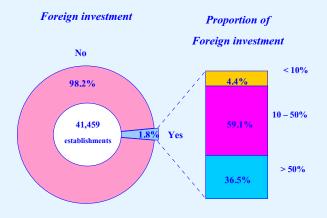
By form of economic organization



#### 5. Foreign investment or share holding

The majority of establishments engaged in manufacturing in Bangkok or 98.2 percent had no foreign investment or share holding, while the rest of about 751 establishments or about 1.8 percent did. Out of these, about 59.1 percent was 10 - 50 percent of share holding; and about 36.5 percent was over fifty percent of share holding. Those having less than ten percent of share holding were 4.4 percent.

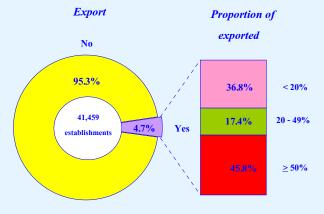
Figure 5 Percentage of manufacturing establishments by foreign investment or share holding



### 6. Export

For the export of goods of establishments, there were only 1,968 establishments or 4.7 percent. Out of these, about 45.8 percent exported with 50% or more of the total sales of goods produced and about 36.8 percent of establishments exported with less than 20%. The rest of about 17.4 percent of establishments exported between 20% and 49% of the total sales of goods produced.

Figure 6 Percentage of manufacturing establishments by export

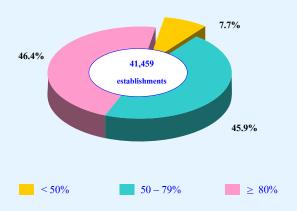


## 7. Capacity utilization rate

The average capacity utilization rate in 2006 of manufacturing establishments was about 72.7 percent. It was found that, most establishments (46.4 percent) had capacity

utilization rate about 80% or more. The establishments with the capacity utilization between 50% and 79% were about 45.9 percent, while those with capacity utilization rate less than 50% were about 7.7 percent.

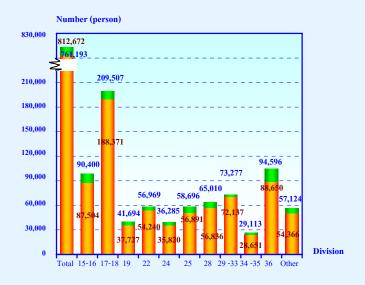
Figure 7 Percentage of manufacturing establishments by capacity utilization rate



### 8. Number of persons engaged and employees

In 2006, there were totally 812,672 persons engaged working in the manufacturing establishments in Bangkok. In terms of employees, there were totally 761,193 persons. For the distribution of employees by industry, it was found that most of them or 24.7 percent worked in manufacture of textiles and wearing apparel; dressing and dyeing of fur. Followed by those engaged in manufacture of furniture, manufacture of food products and tobacco and manufacture of machinery and equipment, office, accounting and computing machinery, electrical machinery and apparatus, radio, television, medical, precision and optical instruments, etc., had the proportion of about 11.6, 11.5 and 9.5 percent respectively. While those working in other division of industry, not mentioned above, each division had less than 8.0 percent.

Figure 8 Number of persons engaged and employees of manufacturing establishments by division of industry



#### **Employees**

Note: Persons engaged refer to owners or juristic partnerships, unpaid workers and employees.

Division 15 - 16 Manufacture of food products and tobacco

Division 17 - 18 Manufacture of textiles, wearing apparel; dressing
and dyeing of fur

Division 19 Tanning and dressing of leather; manufacture of luggage handbags saddlery, harness and footwear

Division 22 Publishing, printing and reproduction of recorded media

Division 24 Manufacture of chemicals and chemicals products

Division 25 Manufacture of rubber and plastic products

Division 28 Manufacture of fabricated metal products

Division 29 - 33 Manufacture of machinery and equipment, office,
accounting and computing machinery, electrical
machinery and apparatus, radio, television and
communication equipment medical and precision, etc.

Division 34 - 35 Manufacture of motor vehicles, trailers and semitrailers and other transport equipment

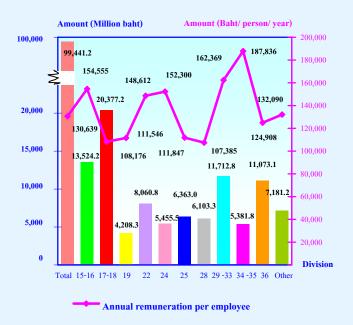
Division 36 Manufacture of furniture
Other divisions, i.e. 20 - 21, 23, 26 - 27 and 37

### 9. Remuneration

In 2006, the employees engaged in manufacturing industry in Bangkok received the total remuneration about 99,441.2 million baht or about 130,639 baht per person annually. The

employees engaged in manufacture of motor vehicles, trailers and semi-trailers and other transport equipment received the highest annual remuneration of about 187,836 baht per person. Followed by those engaged in Manufacture of machinery and equipment, office, accounting and computing machinery, electrical machinery and apparatus, radio, television, medical, precision and optical instruments, etc. and manufacture of food products and tobacco which were about 162,369 and 154,555 baht per person respectively.

Figure 9 Annual remuneration per employee
by division of industry



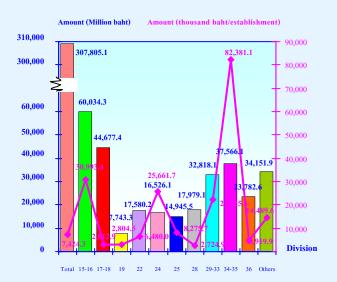
# 10. Value of gross output, intermediate consumption and value added

In 2006 the value of gross output of manufacturing establishments was totally 1.2 million million baht. The intermediate consumption and value added were about 847,513.9 million baht and 307,805.1 million baht respectively. The comparison of value added to value of gross output was about 26.6 percent.

For the average value of gross output per establishment and per person engaged were about 27.9 million baht and 1.4 million baht respectively. In terms of average value added per establishment and per person engaged were about 7.4 million baht and 378,757 baht respectively.

Considering the value added by division of industry, it was found that most of establishment

Figure 10 Value added of manufacturing establishments by division of industry



Value added average per establishment

Note: Value added = Value of gross output minus intermediate consumption

Division 15 - 16 Manufacture of food products and tobacco

Division 17 - 18 Manufacture of textiles, wearing apparel; dressing

and dyeing of fur

Division 19 Tanning and dressing of leather; manufacture of luggage handbags saddlery, harness and footwear

Division 22 Publishing, printing and reproduction of recorded media

Division 24 Manufacture of chemicals and chemicals products

Division 25 Manufacture of rubber and plastic products

Division 28 Manufacture of fabricated metal products

Division 29 - 33 Manufacture of machinery and equipment, office,
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communication equipment medical and precision, etc.

Division 34 - 35 Manufacture of motor vehicles, trailers and semitrailers and other transport equipment

Division 36 Manufacture of furniture

Other divisions, i.e. 20 - 21, 23, 26 - 27 and 37

were form *manufacture of food products and tobacco* which provided the highest value added, of about 60,034.3 million baht. The following was *manufacture of textiles, wearing apparel; dressing and dyeing of fur*, of about 44,677.4 million baht. The other divisions of industry not mentioned above, each division had the value added about 7,700 - 37,600 million baht.

## 11. Data comparison of manufacturing establishments during 10 years

Comparing the data of the industrial census in 2007 and 1997 of which the operation period was of the year before the census year. It appeared that number of manufacturing establishments with 11 persons engaged or more decreased by 11.4%. However, number of persons engaged and average number of employees per establishment increased by 11.4% and 25.6% respectively.

In terms of employment, number of employees and average number of employees per establishment increased by 11.5% and 25.9% respectively. Moreover, the annual remuneration during 10 years increased by 39.8%.

For the value of gross output and the intermediate consumption grew by 38.8% and 53.1% respectively as well as the value added of manufacturing establishments in Bangkok during 10 years increased by 9.4%.

Table 1 Principal data of manufacturing establishments in year 1996 and 2006

Data items	1996 <sup>1</sup> /	2006 <sup>2</sup> /	% Change
Number of establishments (Establishments)	8,555	7,580	-11.4
Number of persons engaged (Person)	607,049	676,119	11.4
Average per establishment (Person)	71.0	89.2	25.6
Number of employees (Person)	601,444	670,783	11.5
Average per establishment (Person)	70.3	88.5	25.9
Remuneration (Million baht)	65,738.1	91,930.3	39.8
Average annual per employee (Baht)	109,300.5	137,049.2	25.4
Value of gross output (Million baht)	780,823.0	1,083,847.3	38.8
Average per establishment (Thousand baht)	91,270.9	142,987.8	56.7
Average per persons engaged (Thousand baht)	1,286.3	1,603.0	24.6
Intermediate consumption (Million baht)	525,851.1	804,976.1	53.1
Average per establishment (Thousand baht)	61,467.1	106,197.4	72.8
Average per persons engaged (Thousand baht)	866.2	1,190.6	37.5
Value added (Million baht)	254,971.8	278,871.2	9.4
Average per establishment(Thousand baht)	29,803.8	36,790.4	23.4
Average per persons engaged (Thousand baht)	420.0	412.5	-1.8

tote: The 1997 industrial census: Bangkok, Coverage: manufacturing establishments with 10 persons engaged or more.

## 12. Data summary and recommendation

The results of the 2007 Industrial Census show that there were in total 41,459 manufacturing establishments, with one person engaged or more in Bangkok. Most of them (about 85.9 percent) were small scale establishments with 1 - 15 persons. The major industries were manufacture of textiles, wearing apparel; dressing and dyeing of fur, manufacture of fabricated metal products and manufacture furniture, which had the proportion, of about 38.3, 15.9 and 11.7 percent respectively. In 2006, there were 812,672 persons engaged. In terms of employment, there were in total 761,193 employees who received the annual remuneration, of about 130,639 baht per person.

The manufacturing establishments in Bangkok provided the value of gross output, intermediate consumption and value added, of about 1.2 million million baht, 847,513.9 million baht and 307,805.1 million baht respectively.

Comparing the data of the industrial census between 1997 and 2007, the operation of establishments in Bangkok during 10 years was favourable growth. In spite of the number of establishments decreasing; the employment, value of gross output and value added increased. For this, the latter was affected by the overall economic conditions. Furthermore, the Thai economy continues its sustainable growth it should emphasize manufacturing development, investment promotion, increasing productivity and employment and goods and services promotion in order to support the demand in the country and abroad.

<sup>&</sup>lt;sup>21</sup> The 2007 industrial census: Bangkok, Only manufacturing establishments with 11 persons engaged or more.