To display census results in integrity and accurately demonstrate the development conditions of industries, there are two separate parts as “Summary Analysis” and “Comprehensive Summary Analysis” for the contents of statistic analysis of all industries in 2011 census results. Among them, “Summary Analysis” was compiled and extracted from the important information of industrial development in past five years, showing the development context of domestic industrial development. In terms of such themes as the number of enterprises and establishment units, inputs and outputs, operating efficiency, operation optimization, and regional development, the “Comprehensive Summary Analysis” will classify statistics according to the sector, industry, enterprise scale, and district for census objects, with time series presentation and comparison. Besides, industrial upgrading, operating efficiency and regional economy were surveyed, in terms of current industry trends, important industrial economic issues, and operation models, in order to fully demonstrate the development context of domestic industry.

(I) Summary Analysis

Looking back the last 5-year period between 2011 Census and its previous census, exports in 2007 continued to grow and the production of Manufacturing showed brilliant performance; however, the economy of the world were affected by the financial tsunami in 2008 and 2009. Fortunately, many countries had adopted active measures to revive the economy in response, the 2010 international economy gradually stabilized, and the domestic economy reversed upward accordingly. Although the European debts crisis had been spread in 2011, the expansion of international economy still presented an outstanding performance. Compared with the results in the previous census, statistically siginificant results were to be found. Among all sectors, Industrial Sector benefiting from Manufacturing of Consumer goods industry stabilized, and a steady recovery in demand for mobile electronic devices, as well as the economic boom of Construction and Materials Recovery related industries, grew more significantly; led by the real estate market boom and the growth of inbound visitors, Real Estate Activities, Accommodation and Food Service Activities, and Transportation in Service Sector grew significantly. However, Wholesale and Retail Trade, Financial, and Telecommunications became saturated, so that the development of the Service Sector was slightly lower than the Industrial Sector. The associated analysis is summarized as follows:

1. Changes of number and survival rate of enterprise units in all industries

(1) For past five years, the number of enterprise units increased 7.21%. Industrial Sector grew 10.24%, higher than 6.43%, the growth of Service Sector.

By the end of 2011, the number of enterprise units of all industries amounted to 1,184,811, with an increase of 79,707 units or 7.21% for past five years, among two Sectors, there were 249,201 enterprise units of Industrial Sector, or accounted for 21.03%, with an increase of 10.24%; there were 935,610 enterprise units of Service Sector, or accounted for 78.97%, with an increase of 6.43% for past five years.

(2) The number of enterprise units of Consumer goods industry in Manufacturing firstly showed positive growth for latest four censuses.

By the end of 2011, there were 157,284 enterprise units in Manufacturing, with an increase of 6.26% for past five years, higher than 4.70%, the growth rate of 2006 census; apart from Information and electronic industry among four main industries, the growth rate of other three industries were all higher than the same of 2006 census. Consumer goods industry increased 0.85% for past five years, but it firstly showed positive growth for latest four censuses.

(3) For past five years, the number of multi-establishment enterprises increased 3,094 units, with a decrease in average number of branch units per enterprise by 0.10 units.

By the end of 2011, among all industries, there were 1,165,437 single-establishment enterprises, or accounted for 98.36%, and 19,374 multi-establishment enterprises, accounted for 1.64%, with an increase number of 3,094 for past five years, and in average there were 3.17 branch units per enterprise, less 0.10 units than 3.27 units in 2006.

(4) The survival rates of enterprises respectively with operation more than 5 years, 10 years, 15 years and 20 years were higher than those correspondingly shown in 2006 census.

By the end of 2011, the survival rates of enterprises in all industries respectively with operation more than 5 years, 10 years, 15 years and 20 years were 75.73%, 59.18%, 44.18% and 34.34%. For past five years, they were lifted in 3.97, 7.29, 3.96, and 3.84 percentage points respectively, so that it showed enterprises became better in operation structure and stability. Among two Sectors, the survival rates of Industrial Sector increased 6.22, 13.89, 6.12 and 7.18 percentage points respectively, which were better than 3.45, 5.68, 3.19 and 2.79 percentage points, upswing in Service Sector.

2. Changes of inputs and outputs of enterprises in all industries

(1) More than 467 thousand persons engaged increased or employment opportunities grew 6.19% for past five years, where Food and Beverage Service Activities increased more than 80 thousand persons engaged, being the most of all.

By the end of 2011, persons engaged in all industries amounted to 8,017,072 persons.For past five years, there was increase of 467,160 persons engaged or 6.19%, with the growth rate lower than 13.31% in 2006 census. Among two Sectors, 343,425 persons engaged or 7.97% increased in Service Sector, and Food and Beverage Service Activities increased 80,728 persons engaged, being the most of all; Industrial Sector increased 3.82% for past five years, with lower growth rate as contrast to Service Sector for latest four censuses.

(2) Persons engaged in Micro enterprises increased 16.08% for past five years, with the fastest rapid growth.

SMEs have always been the main force creating jobs for our employed population. Their persons engaged amounted to 5,239,972 persons by the end of 2011, with an increase of 4.53% for past five years, among SMEs, the growth rate of Micro enterprises reached 16.08%, being the highest of all; as for Large enterprises, there were 2,777,100 persons engaged or accounted for 34.64%, with an increase of 9.47% for past five years.

(3) Annual average labor compensation per person engaged increased 7.06% for past five years, being the lowest of all for past four censuses.

The annual average labor compensation per person engaged in 2011 was NT$579,265. For past five years, with an increase of 7.06%, and the lowest growth for past four censuses; however, the proportion of non-salary compensation accounted for labor compensation was 12.97%, as the highest for past four censuses, and enhanced 0.72 percentage points more than that of 2006.

(4) The assets used in operation increased nearly 30% for past five years, and still concentrated on Large enterprises.

By the end of 2011, the assets used in operation of all industries amounted to NT$137 trillion 236.2 billion, with an increase of 28.66% as against the end of 2006, and the lowest growth rate for latest four censuses. The assets used in operation of Large enterprises amounted to NT$107 trillion 868.7 billion, or accounted for 78.60%, with an increase of

NT$24 trillion 651 billion or 29.62% for past five years, and the greatest growth rate of all; it shows the assets used in operation of all industries still concentrated on Large enterprises.

(5) The proportion of enterprises' long-term investments accounting for assets used in operation increased 6.10 percentage points for past five years.

By the end of 2011, the fixed assets used in operation of all industries accounted for 20.00% of assets used in operation, with a decrease of 3.00 percentage points for past five years; in addition, the proportion of long-term investments (mainly to foreign investment) increased 6.10 percentage points, with an increased amount of NT$15 trillion 59.3 billion. Among two Sectors, Service Sector increased NT$12 trillion 532.5 billion or accounted for 83.22%, being the highest of all.

(6) Research and development, employee training, marketing and purchasing of computer software and database among intangible investments showed growth for past five years.

The expenditure amounts of all industries input for research and development, employee training, marketing, and purchasing computer software and database were NT$507.1 billion, 27.2 billion, 555.5 billion, and 54.9 billion in 2011, with a growth of 51.78%, 18.13%, 34.94%, and 14.95% respectively for past five years.

(7) For past five years, total value of production in all industries increased 22.54%, and the proportion of Industrial Sector enhanced.

Annual total value of production of all industries in 2011 amounted to NT$29 trillion 422.7 billion, with an increase of 22.54% as against that of 2006 census. Among two Sectors, Industrial Sector increased 24.26%, higher than 19.44% increased by Service Sector; and its proportion of total value of production increased to 65.41%, the highest level for past four censuses. Among all subsectors, Manufacture of Chemical Material, Manufacture of Petroleum and Coal Products benefiting from international oil prices, increased NT$583.9 billion, and NT$382.8 billion of total value of production for past five years respectively, being the first and the second of all.

(8) Among the gross value of production of all industries in 2011, labor compensation accounted for 43.52%, being the highest, and operating surplus accounted for 40.29%, being the second of all.

The gross value of production of all industries in 2011 was NT$10 trillion 671.4 billion, with an increase of 9.87% for past five years, significantly lower than 43.87% of 2006 census. In the structure of gross value of production, labor compensation accounted for 43.52%, being the highest; operating surplus accounted for 40.29%, being the second; depreciation accounted for 12.92%, being the third, and indirect taxes accounted for 3.27%. Among which, operating surplus declined 2.41 percentage points for past five years, and labor compensation raised 1.46 percentage points for past five years.

3. Changes status of operating efficiency in all industries

(1) The labor input and output efficiency of all industries significantly improved for past five years.

The labor productivity of all industries for past five years enhanced 15.41%. Among two Sectors, Industrial Sector increased 19.69%, and Service Sector increased 10.62% as well; labor costs of unit output declined 7.23%, among which Industrial Sector decreased 7.53%, and Service Sector decreased 5.61% too, showing significantly improved all industries' labor input and output efficiency for past five years.

(2) Capital productivity of all industries declined 4.76%, but which of Industrial Sector enhanced 2.71% for past five years.

The capital productivity of all industries in 2011 was NT$0.21, with a decrease of 4.76% for past five years; Industrial Sector increased 2.71%, where Construction enhanced 25.70%, being the highest of all industries; Service Sector declined 8.92%, among which Knowledge-intensive services and Non-knowledge-intensive services decreased 12.26% and 2.39% respectively.

(3) The value added ratio of all industries in 2011 was 36.27%, lowering by 4.18 percentage points for past five years.

By the international raw materials prices continued in upscale, and increasingly competitive global market, the value added ratio of all industries in 2011 declined to 36.27% from 40.45% in 2006, amounted to lowering by 4.18 percentage points; Industrial Sector and Service Sector were 25.03% and 57.52% respectively, lowering by 4.94 and

1.98 percentage points respectively for past five years.

(4) Profit rate of all industries in 2011 was 6.37% with a decrease of 0.86 percentage points for past five years.

The profit rate of all industries in 2011 was 6.37%, with a decrease of 0.86 percentage points for past five years. Industrial Sector, due to operating loss of some Information and electronic industries, with the profit rate of 4.88%, amounted to a decrease of 2.99 percentage points; Service Sector, due to enhanced profits of finance, telecommunications, and real estate-related industries, increased 1.47 percentage points, reaching 8.07% in the same term.

(5) Among all subsectors for past five years, the value added ratio of Financial Intermediation increased 6.83 percentage points, queued as the first.

For past five years, among subsectors of Industrial Sectors, the value added ratio of Construction of Buildings, Manufacture of Leather, Fur and Related Products, Civil Engineering, and Manufacture of Wearing Apparel and Clothing Accessories were upswing, with an increase of 1.20, 1.01, 0.53, and 0.35 percentage points respectively. Among Service Sectors, the value added ratio of Financial Intermediation enhanced 6.83 percentage points, queued as the first.

4. Overview of optimized operations in all industries

(1) The number of enterprise units operating E-commerce increased nearly one times for past five years, showing the enhanced prevalence of internet trading.

For past five years, the number of enterprise units operating E-commerce increased 98.96%, among which the number of enterprise units “offering business information through internet” increased 1.05 times; “purchasing on internet” and “selling on internet” also increased 92.12% and 93.52%, showing the enhanced prevalence of internet trading in the same period.

(2) For past five years, the enterprises of Manufacturing and Wholesale and Retail Trade operating Original Brand Manufacture (OBM) increased nearly 50%, with a growth of OBM sales amount nearly 70%.

By the end of 2011, there were 31,197 enterprises of Manufacturing and Wholesale and Retail Trade operated OBM, with an increase of 49.18% for past five years; the sales amount of OBM products was NT$8 trillion 807.2 billion, also grew 67.63%, among which the same of Manufacturing was NT$520 million per enterprise, with an export ratio of 49.90%, both higher than NT$94 million and 20.34% of Wholesale and Retail Trade.

(3) By the end of 2011, there were 4,897 enterprises which carried out overseas deployment; averagely one out of two Large enterprises in Industrial Sectors carried out overseas deployment.

By the end of 2011, there were 4,897 enterprise units of all industries engaging in overseas deployment; averagely one out of two Large enterprises of Industrial Sector carried out overseas deployment. There were 19,268 enterprises with foreign (offshore) branch units established and enterprises controled, nearly 50% concentrating on Mainland China (including Hong Kong and Macau areas).

(4) In 2011, the overseas production ratio of Manufacturing was 38.10%, among which more than 94% of selling revenues were from triangular trade; however, the gross profit ratio of triangular trade declined 3.23 percentage points for past five years.

In 2011 the overseas production ratio of Manufacturing was 38.10%, more 11.00 percentage points than that of 2006. 94.34% of selling revenues of production overseas produced were from triangular trade; however, its gross profit ratio was 4.17% in 2011, declining 3.23 percentage points for past five years. Among four main industries, the overseas production ratio of Information and electronic industry was 68.40%, being the highest of all.

(5) By the end of 2011, there were 8,073 enterprises with Foreign Direct Investment (FDI) , among all subsectors, Wholesale Trade having 3,138 FDI enterprises was the most of all subsectors.

By the end of 2011, there were 8,073 FDI enterprises, accounting for 0.68% of all industries. Among the subsectors of two Sectors, the number of FDI enterprise units of Manufacture of Electronic Parts and Components and Wholesale Trade were the most, being 279 and 3,138 units respectively.

(6) In 2011, the purchase of professional techniques by all industries amounted to NT$181.0 billion, and more than 93% was purchased from foreign countries, while the sale of professional techniques reached NT$36.0 billion, and 54% was sold domestically.

In 2011, the purchase of professional techniques by all industries amounted to NT$181.0 billion, among which 93.64% was purchased from foreign countries, with an increase of 16.95 percentage points for past five years; sale of professional techniques amounted to NT$36.0 billion, with a foreign sale ratio of 46.24%, and also with an increase of 11.16 percentage points for past five years, but still did not reach 50%. It showed Taiwan was still a professional and technical input-oriented economy, and the degree of reliance on foreign technology support was enhanced for past five years.

5. Development status of regional and emerging industries of all industries

(1) Northern Region's Industrial and Service Sectors showed balanced development; Central and Southern Regions aimed at the Industrial Sector output; Eastern Region and Kinmen-Matsu Area aimed at the development of services.

In 2011, Northern Region in which total value of production accounted for 53.38% of all industries, with Industrial and Service Sectors proportions of 29.03% and 24.35% respectively, was the region where all industries were under balanced development; as for total value of production in Central and Southern Regions, they accounted for 21.57% and 24.15% of all industries respectively, both aiming at the Industrial Sector output; Eastern Region and Kinmen-Matsu Area accounted for 0.89% of all industries, among which Industrial Sector accounted for 0.45%, with a slightly higher.

(2) Kaohsiung City and Taoyuan County contributed to more than 30% of entire Industrial Sector's output; the output of Service Sector in Taipei City accounted for 46% of entire Service Sector.

Due to industrial cluster, in terms of the total value of production of Industrial Sector, Kaohsiung City was ranked first followed by Taoyuan County, contributing to more than 30% of the total value of production of entire Industrial Sector; as for Taipei City, due to convenient transportation and abundant resources, its Service Sector development lead as the first one of all cities/counties, accounting for more than 46% of the total value of production of Service Sector.

(3) Science Parks, Industrial Parks, Export Processing Zones, and Free Trade Zones contributed to one fourth of total value of production in Taiwan.

In 2011, Science Parks, Industrial Zones, Export Processing Zones, and Free Trade Zones, amounted to creating 896,921 employment opportunities, with a contribution to NT$7 trillion 867.8 billion of the total value of production, accounting for 11.19% and 26.74% of all industries' persons engaged and total value of production respectively; industry development focused on Manufacture of Electronic Parts and Components and

Manufacture of Chemical Material, with total value of production accounting for 64.26% and 57.53% respectively of that industry in Taiwan.

(4) Emerging industries and International logistics industry amounted to provide 1,150,899 employment opportunities, creating total value of production of NT$3 trillion 193.7 billion.

In 2011, Health and nursing care, Cultural creativity, Tourism, Green energy, and Biotechnology industry, and International logistics industry of all industries amounted to input 1,150,899 persons engaged, creating total value of production of NT$3 trillion 193.7 billion; among all industries, Health and nursing care industry provided 408,009 employment opportunities, being the most of all, and created total value of production of NT$781.3 billion, also being the most of all; as for the labor productivity, Green energy industry amounted to NT$5.90 million being the number one of all.

(II) Comprehensive Summary Analysis

In 2007, both export and industrial production in our economy showed brilliant performance, improving career market, domestic consumption momentum steadily warming, with annual economic growth of 5.98%; in 2008, due to the impact of financial tsunami which led global trade to decline significantly, domestic industrial production declined, and the number of unemployed people increased, so that the second half of the economy reversed down, with annual economic growth of 0.73% only. In the beginning of 2009, continued the downturn trend, the global economy was into the most severe recession situation since World War II; our economy showed a negative growth of 1.81%. Fortunately, under the motivation of the countries' adoption of policies to revitalize the economy, the international economy in 2010 gradually stabilized, plus a low base period, domestic economic growth rate reached 10.76%, with the highest record in recent 24 years. In 2011, the base period was already high, and by the interference of adverse factors from a number of natural disasters and the European debt crisis, the annual economic growth declined to 4.07%. In summary, from 2007 to 2011, our economic growth remained moderate, and the statistical results of 2011 Census also showed roughly similar situations.

By the end of 2011, the number of enterprise units in all industries was 1,184,811, with an increase of 7.21% as against 2006 census. As a whole, they absorbed about 8,017,072 persons engaged, with an increase of 6.19% for past five years. In addition, the assets used in operation reached NT$137 trillion 236.2 billion, with an increase of 28.66% in the same period, and total value of production amounted to NT$29 trillion 422.7 billion, with an increase of 22.54% for past five years. However, if such three industry groups as Zoological and Botanical Gardens, Museums and Galleries, and Educational Support Activities with operating which were added in 2011 census were excluded, the growth rate of above-mentioned four kinds of statistical results slightly declined to 7.19%, 6.13%, 28.58% and 22.52% respectively. In order to consider the time series analysis and keep the comprehensiveness of 2011 census information, this report regarding the change analysis between 2011 census and previous census, the above additional survey of industry groups were not excluded.

Hereby we analyze such themes as the number of enterprises (establishment) units of all industries, survival rate, input and output, structural changes, operating efficiency, optimized overview, regional development and emerging industry as follows:

1. Changes of number of and survival rate of enterprise units in all industries

(1) Changes of number of enterprise units of all industries

▲Number of enterprise units increased 7.21%; Industrial Sector grew by 10.24%, higher than the growth of Service Sector by 6.43% for past five years.

By the end of 2011, the number of enterprise units of all industries amounted to 1,184,811, with an increase of 79,707 units or 7.21% as against the end of 2006, and a growth rate lower than 18.15% of 2006 census, among which there were 249,201 enterprise units of Industrial Sector, with an increase of 23,151 units or 10.24% for past five years, accounting for 21.03% of all industries, and also with an increase of 0.57 percentage points, and its increasing proportion was firstly shown for past three censuses; there were 935,610 enterprise units of Service Sector, with an increase of 56,556 units or 6.43% for past five years, accounting for 78.97% of all industries, but it was still the most of all. Among all industries, there were 157,284 enterprise units of Manufacturing, with an increase of 6.26% for past five years, and growth rate higher than 4.70% in 2006 census; among four main industries, there were 84,393 enterprises units of Metal and mechanical industry, or accounted for 53.66%, being the highest, with an increase of 9.70% for past five years, and its growth rate accounted for the top one of four main industries; although Consumer goods industry increased 0.85% only, it firstly showed positive growth for latest four censuses, with gradually stable development; Chemical industry increased 3.55%, also higher than the growth rate 2.92% of 2006; although Information and electronic industry increased 4.80%, it was lower than the growth rate 5.44% of 2006 census. Among Service Sector, the number of enterprise units of Knowledge-intensive services and Non-knowledge-intensive services increased 14.86% and 5.18% respectively for past five years, with growth rate lower than 51.77% and 16.04% of 2006 census.

▲The number of Micro enterprise units grew by 8.02% and the enterprise employee size showed the trend of decrease for past five years.

In 2011, there were 1,180,131 SMEs in all industries, continuously being the main force, and accounting for 99.61% of all. Among which, Micro enterprises increased 8.02% for past five years, higher than the growth rate of that of all industries, as a result, the percentage of its enterprise units accounting for all enterprise units increased from 79.19% to 79.79%; there were 4,680 Large enterprises only, with an increase of 4.19% for past five years, showing the trend of decrease of the enterprises employee size. Among Industrial and Service Sectors, their growth rates of Micro enterprises were the highest, being 14.00% and 6.98% respectively; however the same of Large enterprises were 6.21% and 3.07% only.

Table 1 Changes of number of enterprise units for past four censuses

Unit: enterprise

	2011 census		2006 census		2001 census		1996 census	
	Number of enterprise units	Diff. with prev. census (%)	Number of enterprise units	Diff. with prev. census (%)	Number of enterprise units	Diff. with prev. census (%)	Number of enterprise units	Diff. with prev. census (%)
Grand Total	**1 184 811**	**7.21**	**1 105 104**	**18.15**	**935 316**	**7.93**	**866 573**	**17.28**
By Sector and enterprise scale								
Large enterprises	4 680	4.19	4 492	17.96	3 808	16.13	3 279	2.31
SMEs	1 180 131	7.22	1 100 612	18.15	931 508	7.90	863 294	17.34
Micro enterprises	*945 338*	*8.02*	*875 114*	*18.67*	*737 414*	*15.11*	*640 643*	*14.07*
Industrial Sector	**249 201**	**10.24**	**226 050**	**12.52**	**200 890**	**-2.44**	**205 907**	**22.82**
Large enterprises	1 693	6.21	1 594	3.17	1 545	8.42	1 425	-16.57
SMEs	247 508	10.27	224 456	12.60	199 345	-2.51	204 482	23.22
Micro enterprises	*148 807*	*14.00*	*130 530*	*9.23*	*119 502*	*15.54*	*103 431*	*38.01*
Service Sector	**935 610**	**6.43**	**879 054**	**19.69**	**734 426**	**11.16**	**660 666**	**15.65**
Large enterprises	2 987	3.07	2 898	28.06	2 263	22.06	1 854	23.85
SMEs	932 623	6.44	876 156	19.67	732 163	11.13	658 812	15.63
Micro enterprises	*796 531*	*6.98*	*744 584*	*20.50*	*617 912*	*15.02*	*537 212*	*10.38*
By industry								
Industrial Sector	**249 201**	**10.24**	**226 050**	**12.52**	**200 890**	**-2.44**	**205 907**	**22.82**
Manufacturing	157 284	6.26	148 019	4.70	141 376	-8.53	154 557	10.04
Consumer goods ind.	31 079	0.85	30 817	-1.97	31 435	-15.76	37 315	-7.03
Chemical industry	32 264	3.55	31 158	2.92	30 275	-10.23	33 724	6.19
Metal & mechanical ind.	84 393	9.70	76 933	8.32	71 025	-5.81	75 410	21.25
Information & electronic ind.	9 548	4.80	9 111	5.44	8 641	6.57	8 108	27.32
Construction	86 350	17.71	73 360	31.99	55 579	15.22	48 236	92.30
Others	5 567	19.18	4 671	18.70	3 935	26.36	3 114	47.37
Service Sector	**935 610**	**6.43**	**879 054**	**19.69**	**734 426**	**11.16**	**660 666**	**15.65**
Knowledge-intensive	130 901	14.86	113 961	51.77	75 089	12.86	66 531	42.37
Non-knowledge-intensive	804 709	5.18	765 093	16.04	659 337	10.97	594 135	13.27

Note: 1. The meaning and scope of each industry listed in this table are detailed in Appendix 2 (22) to (25).

2. “Others” includes Mining and Quarrying, Electricity and Gas Supply, Water Supply and Remediation Activities; same is for subsequent tables.

(2) Changes of number of single-establishment and multi-establishment enterprise units

▲The number of multi-establishment enterprises increased 3,094 units, with an average decrease number of 0.10 of each enterprise's branch units for past five years.

By the end of 2011, among all industries there were 1,165,437 single-establishment enterprises, or accounted for 98.36% of all industries; and 19,374 multi-establishment enterprises, or accounted for 1.64%, with an increase number of 3,094 units for past five years, and in average there were 3.17 branch units of each enterprise, less 0.10 branch units than 3.27 units of 2006. Among Industrial Sector, there were 5,790 multi-establishment enterprises, with an increase number of 209 units for past five years, and there were 1.97 branch units of each enterprise, less 0.03 units for past five years. Among Service Sector, there were 13,584 multi-establishment enterprises, with an increase number of 2,885 units for past five years, and in average 0.25 branch units of each enterprise were decreased too. Among all industries, there were 5,228 multi-establishment enterprises in Manufacturing, with a slight increase of 1.87% for past five years; however, among which multi-establishment enterprises of the Information and electronic industry decreased 9.51% for past five years, and in average their branch units increased 0.06; in addition, benefited from booming real estate market, both the number of Construction's multi-establishment enterprises, and the number of each enterprise's branch units were enhanced. As for the number of multi-establishment enterprises of both Knowledge-intensive services and Non-knowledge-intensive services in Service Sector increased, though the number of each enterprise's branch units of both services declined. Among all enterprises by scale, there were 2,186 multi-establishment enterprises of Large enterprises, with an increase of 7.84% for past five years, and in average, there were 16.64 branch units of each enterprise, with an increase number of 0.77 units in the same period. There were 17,188 multi-establishment enterprises in SMEs, with an increase over 20% for past five years, and in average the number of each enterprise's branch units was less 0.02 than that of 2006.

Table 2 Number of enterprise's branch units of all industries, by enterprise scale and industry

Unit: enterprise

	Number of enterprise units, by the end of 2011	Single-establishment enterprises		Multi-establishment enterprises			
				By the end of 2011		By the end of 2006	
		By the end of 2011	By the end of 2006		Average number of each enterprise's branch units		Average number of each enterprise's branch units
Grand Total (Overall average)	**1 184 811**	**1 165 437**	**1 088 824**	**19 374**	**3.17**	**16 280**	**3.27**
By Sector and enterprise scale							
Large enterprises	4 680	2 494	2 465	2 186	16.64	2 027	15.87
SMEs	1 180 131	1 162 943	1 086 359	17 188	1.46	14 253	1.48
Micro enterprises	*945 338*	*940 508*	*872 190*	*4 830*	*1.05*	*2 924*	*1.07*
Industrial Sector	**249 201**	**243 411**	**220 469**	**5 790**	**1.97**	**5 581**	**2.00**
Large enterprises	1 693	894	820	799	6.65	774	6.94
SMEs	247 508	242 517	219 649	4 991	1.22	4 807	1.20
Micro enterprises	*148 807*	*147 988*	*130 064*	*819*	*1.01*	*466*	*1.02*
Service Sector	**935 610**	**922 026**	**868 355**	**13 584**	**3.69**	**10 699**	**3.94**
Large enterprises	2 987	1 600	1 645	1 387	22.40	1 253	21.39
SMEs	932 623	920 426	866 710	12 197	1.56	9 446	1.62
Micro enterprises	*796 531*	*792 520*	*742 126*	*4 011*	*1.06*	*2 458*	*1.08*
By industry							
Industrial Sector	**249 201**	**243 411**	**220 469**	**5 790**	**1.97**	**5 581**	**2.00**
Manufacturing	157 284	152 056	142 887	5 228	1.93	5 132	1.97
Consumer goods industry	31 079	29 770	29 450	1 309	2.91	1 367	2.56
Chemical industry	32 264	31 137	30 027	1 127	2.40	1 131	2.58
Metal and mechanical industry	84 393	82 086	74 835	2 307	1.23	2 098	1.38
Information and electronic industry	9 548	9 063	8 575	485	1.52	536	1.46
Construction	86 350	85 870	72 981	480	1.41	379	1.14
Others	5 567	5 485	4 601	82	7.52	70	8.64
Service Sector	**935 610**	**922 026**	**868 355**	**13 584**	**3.69**	**10 699**	**3.94**
Knowledge-intensive	130 901	129 007	112 484	1 894	8.25	1 477	9.95
Non-knowledge-intensive	804 709	793 019	755 871	11 690	2.95	9 222	2.97

(3) Changes of survival rate of enterprises in all industries

▲The survival rates of enterprises with more than 5-year, 10-year, 15-year and 20-year operation were higher than that shown in 2006 census.

By the end of 2011, the survival rates of enterprises in all industries with more than 5-year, 10- year, 15-year, and 20-year operation were 75.73%, 59.18%, 44.18% and 34.34% respectively; among two Sectors, Industrial Sector were 85.71%, 70.97%, 51.36% and 40.50%; Service Sector were 73.10%, 55.96%, 41.94% and 32.53%, showing that whether from long-term or short-term observation, the survival rates of Industrial Sector with higher stability of enterprise in operation were higher than that of Service Sector. Comparing with 2006, the survival rates of enterprises with more than 5-year, 10-year, 15-year, and 20-year operation enhanced 3.97, 7.29, 3.96, and 3.84 percentage points respectively, showing that enterprise operation structure and stability enhanced; among two Sectors, the survival rates of Industrial Sector in each term enhanced 6.22, 13.89, 6.12, and 7.18 percentage points respectively, which were better than 3.45, 5.68, 3.19, and 2.79 percentage points enhanced in Service Sector.

a ▲The survival rate of Manufacturing with more than 5-year, 10-year, and 15-year operation was the highest; and Construction showed the best survival rate of more than 20-year operation.

By industry, the survival rates of Manufacturing with more than 5-year, 10-year, and 15-year operation were 90.15%, 74.85% and 53.87% respectively, being the highest of all industries; for the survival rate of industry with more than 20-year operation, Construction was the highest by 41.72%; as for the survival rates of four main industries in Manufacturing, Metal and mechanical industry holds the highest of all operation period categories. Among Service Sector, the survival rates of Knowledge-intensive services was with more than 5-year, 10-year, 15-year, and 20-year operation were 78.11%, 69.00%, 49.75% and 39.16% respectively, higher than those of Non-knowledge-intensive services. In terms of the changes of survival rates for past five years, the 5-year survival rate of Information and electronic industry in Manufacturing enhanced 10.24 percentage points; although it was the top one of four main industries, its growth rates of more than 10-year survival rates were less than those of other three main industries. The 5-year survival rate of Knowledge-intensive services in Service Sector declined 2.48 percentage points, and which of Non-knowledge-intensive services enhanced 4.04 percentage points; however, in terms of growth rates of more than 10-year survival rates, Knowledge-intensive services were better than Non-knowledge-intensive services.

Table 3 Survival rates of enterprise units of all industries, by industry

Unit: %

	More than 5-year		More than 10-year		More than 15-year		More than 20-year	
	2011	2006	2011	2006	2011	2006	2011	2006
Overall average	**75.73**	**71.76**	**59.18**	**51.89**	**44.18**	**40.22**	**34.34**	**30.50**
Industrial Sector	**85.71**	**79.49**	**70.97**	**57.08**	**51.36**	**45.24**	**40.50**	**33.32**
Manufacturing	90.15	82.04	74.85	59.64	53.87	45.46	40.53	32.42
Consumer goods ind.	85.44	78.94	67.16	54.18	45.40	37.29	30.81	25.26
Chemical industry	89.82	84.35	76.40	62.12	55.65	48.06	42.62	35.72
Metal and mechanical ind.	92.92	83.44	78.75	61.50	57.69	49.11	45.69	36.59
Information & electronic ind.	83.89	73.65	65.24	57.17	50.00	48.41	41.02	35.18
Construction	77.82	74.03	62.64	49.60	44.40	44.88	41.72	41.71
Others	68.64	64.90	49.45	46.15	34.55	34.45	24.37	22.67
Service Sector	**73.10**	**69.65**	**55.96**	**50.28**	**41.94**	**38.75**	**32.53**	**29.74**
Knowledge-intensive	78.11	80.59	69.00	56.74	49.75	44.68	39.16	30.37
Non-knowledge-intensive	72.45	68.41	54.47	49.55	41.07	38.22	31.94	29.69

Note: For unified baseline, Education, Residential Care Services and Other Social Work Services added in 2006 census, and Educational Support Activities, Botanical and Zoological Gardens and Nature Reserves Activities with operating, and Museums Activities and Operation of Historical Sites and Buildings with operating, added in 2011 census were not included in the statistical range.

2. Changes of inputs and outputs of enterprises in all industries

(1) Changes of input of enterprise labor

▲For past five years, number of persons engaged of all industries increased 6.19%, the proportion of Service Sector continued to enhance to 58.04%.

By the end of 2011, the number of persons engaged of all industries was 8,017,072, with an increase of 467,160 persons or 6.19% for past five years, and the growth rate was lower than 13.31% in 2006 census.Among two Sectors, the number of persons engaged of Service Sector was 4,653,071 or accounted for 58.04%, with an increase of 343,425 persons or 7.97% for past five years, contributing to an increase of 73.51% of all industries, and reckoned as the greatest number of working population. The number of person engaged of Industrial Sector was 3,364,001, with an increase of 3.82% only for past five years, and since its growth rates were lower than those of Service Sector for past four censuses, so that its proportion accounting for all industries continuously declined from 47.60% in 1996 census to 44.24%, 42.92% and 41.96% in 2001, 2006 and 2011 censuses respectively.

▲Information and electronic industry and Knowledge-intensive services were the major industries creating employment for Industrial and Service Sectors respectively for past five years.

By the end of 2011, among all industries of Industrial Sector, the number of persons engaged of Manufacturing was 2,789,296, accounting for 82.92% of the manpower of Industrial Sector, with an increase of 93,312 persons for past five years, being the main source of manpower growth of Industrial Sector. Among four main industries, Information and electronic industry, due to strong demand for mobile devices, increased 49,640 persons or 6.71%, with an contribution to Manufacturing of more than 53% of added persons engaged, among which the persons engaged of Large Information and electronic industry contributed to an increase of 123.43%, being the significant; however, by the impact of spreading European debt problem in the second half of 2011, its growth rate was lowest level for past four censuses; although Consumer goods industry and Chemical industry showed negative growth of 26.55% and 10.94% respectively for past four censuses, the former slightly increased 0.39% for past five years, showing positive growth for the first time. As for the Non-knowledge-intensive services of Service Sector, due to lower barriers to entry, they were still the main source of demand in labor market, amounting to take in 3,184,594 persons engaged, and accounting for 68.44% of Service Sector; however, for past four censuses, the number of persons engaged of Knowledge-intensive services increased 627,934, with a growth nearly 75%, and Non-knowledge-intensive services increased 573,330 persons or 21.96% , showing prominent contribution of Knowledge-intensive services to labor market.

▲The number of persons engaged of all industries developed toward the poles of enterprise scale for past five years.

By the end of 2011, the number of the persons engaged of SMEs was 5,239,972, continuously being the main force of all enterprises, with an increase of 4.53% for past five years; however, Micro enterprises increased 16.08%, the fastest growth of all enterprise scales. The number of persons engaged of Large enterprises was 2,777,100 or accounted for 34.64%, also with an increase of 9.47% for past five years. The growth rates of both Micro enterprises and Large enterprises were higher than entire growth rate, showing the increased number of persons engaged developed toward the poles of enterprise scale. Among two Sectors, for the past five years, the persons engaged of SMEs in Industrial Sector increased 0.48% only, and was lower than 7.40% in Service Sector; the persons engaged of Micro enterprises in Industrial Sector grew 13.49%, also lower than 16.73% in Service Sector; as for the growth rate of the number of persons engaged of Large enterprises, Industrial Sector was 9.81%, slightly higher than 9.18% in Service Sector.

Table 4 Changes of number of persons engaged for past four censuses, by enterprise scale and industry

Unit: person

	2011 census		2006 census		2001 census		1996 census	
	Persons	Diff. with prev. census (%)	Persons	Diff. with prev. census (%)	Persons	Diff. with prev. census (%)	Persons	Diff. with prev. census (%)
Grand Total	**8 017 072**	**6.19**	**7 549 912**	**13.31**	**6 663 350**	**1.16**	**6 587 172**	**12.32**
By Sector and enterprise scale								
Large enterprises	2 777 100	9.47	2 536 891	18.29	2 144 698	13.37	1 891 735	5.28
SMEs	5 239 972	4.53	5 013 021	10.94	4 518 652	-3.77	4 695 437	15.43
Micro enterprises	*1 818 986*	*16.08*	*1 566 967*	*9.95*	*1 425 165*	*9.02*	*1 307 265*	*20.76*
Industrial Sector	**3 364 001**	**3.82**	**3 240 266**	**9.93**	**2 947 651**	**-5.99**	**3 135 365**	**-1.86**
Large enterprises	1 272 119	9.81	1 158 460	14.30	1 013 484	4.53	969 541	-10.32
SMEs	2 091 882	0.48	2 081 806	7.63	1 934 167	-10.70	2 165 824	2.47
Micro enterprises	*356 102*	*13.49*	*313 777*	*20.82*	*259 709*	*-3.84*	*270 093*	*29.61*
Service Sector	**4 653 071**	**7.97**	**4 309 646**	**15.98**	**3 715 699**	**7.65**	**3 451 807**	**29.28**
Large enterprises	1 504 981	9.18	1 378 431	21.85	1 131 214	22.67	922 194	28.84
SMEs	3 148 090	7.40	2 931 215	13.42	2 584 485	2.17	2 529 613	29.44
Micro enterprises	*1 462 884*	*16.73*	*1 253 190*	*7.53*	*1 165 456*	*12.37*	*1 037 172*	*18.65*
By industry								
Industrial Sector	**3 364 001**	**3.82**	**3 240 266**	**9.93**	**2 947 651**	**-5.99**	**3 135 365**	**-1.86**
Manufacturing	2 789 296	3.46	2 695 984	11.09	2 426 791	-3.85	2 523 916	-5.30
Consumer goods ind.	491 821	0.39	489 888	-10.08	544 781	-18.65	669 640	-20.03
Chemical industry	478 009	-0.56	480 685	0.45	478 533	-10.84	536 699	-13.94
Metal and mechanical ind.	1 030 337	4.50	985 922	15.94	850 396	-7.56	919 964	6.37
Information & electronic industry	789 129	6.71	739 489	33.70	553 081	39.10	397 613	17.22
Construction	508 086	5.99	479 357	5.36	454 969	-15.35	537 446	18.39
Others	66 619	2.61	64 925	-1.47	65 891	-10.96	74 003	-2.25
Service Sector	**4 653 071**	**7.97**	**4 309 646**	**15.98**	**3 715 699**	**7.65**	**3 451 807**	**29.28**
Knowledge-intensive	1 468 477	13.71	1 291 425	33.73	965 695	14.89	840 543	38.34
Non-knowledge-intensive	3 184 594	5.51	3 018 221	9.75	2 750 004	5.31	2 611 264	26.61

▲Annual average labor compensation per person engaged amounted to NT$579,265, with an increase of 7.06% for past five years, being the lowest growth rate of past four censuses.

Annual average labor compensation per person engaged in 2011 was NT$579,265, with an increase of 7.06% for past five years, being the lowest growth rate of past four censuses. Due to the raise of compensation level for the entire Industrial Sector for past five years, the average labor compensation of Industrial Sector increased from NT$552,587 to NT$611,576, with an increase of 10.68%; however, it declined 2.36 percentage points as agasint 2006 census. As for Service Sector, its average labor compensation increased NT$23,522 or 4.42% for past five years, with an increase of 0.96 percentage points than 3.46% in 2006 census, just because the steady development of finance-related and tourism-related industries drove to improve the compensation level of related services. In addition, non-salary compensation of all industries in 2011 accounted for 12.97% of labor compensation, with an increase of 0.72 percentage points than 12.25% in 2006. Among past four censuses, the non-salary compensation proportion of 2006 census increasing 2.57 percentage points was the most significant because Labor Retirement Pension System was implemented in July 2005. Among two Sectors, the non-salary compensation of Industrial Sector accounted for 9.79%, 10.76%, 13.48% and 13.55% of labor compensation respectively for past four censuses, all higher than those of Service Sector; however, it increased 0.07 percentage points for past five years, lower than 1.20 percentage points in Service Sector.

▲The annual average labor compensation per person engaged of Micro enterprises in 2011 was NT$374,781, decreasing 1.45% for past five years.

In 2011, annual average labor compensation per person engaged of Large enterprises was NT$830,407, with an increase of 11.01% for past five years, and non-salary compensation accounted for 14.38% of labor compensation, better than NT$446,164, 2.26% and 11.57% in SMEs. If we make a further observation of Micro enterprises in SMEs, its annual average labor compensation per person engaged was NT$374,781, decreasing 1.45% for past five years, and firstly shown reduction for past four censuses. In terms of both Industrial and Service Sectors showed reduction, and Industrial Sector decreased 5.25% apparently higher than 0.47% in Service Sector.

Table 5 Annual average labor compensation per person engaged for past four census, by enterprise scale

	Grand Total (Overall average)				Industrial Sector				Service Sector			
	Average labor compensation (NT$)	Diff. with previous census (%)	Salary compensation (%)	Non-salary compensation (%)	Average labor compensation (NT$)	Diff. with previous census (%)	Salary compensation (%)	Non-salary compensation (%)	Average labor compensation (NT$)	Diff. with previous census (%)	Salary compensation (%)	Non-salary compensation (%)
1996 census	**436 357**	**51.36**	**90. 63**	**9. 37**	**431 029**	**51.09**	**90. 21**	**9. 79**	**441 196**	**51.15**	**91.00**	**9.00**
Large enterprises	627 601	47.49	87. 99	12. 01	591 107	55.37	88. 41	11. 59	665 968	34.93	87.61	12.39
SMEs	359 307	57.82	92. 48	7. 52	359 369	51.90	91. 53	8. 47	359 253	64.77	93.29	6.71
Micro enterprises	*325 782*	*76.02*	*93. 18*	*6. 82*	*334 272*	*60.45*	*91. 26*	*8. 74*	*323 572*	*80.22*	*93.70*	*6.30*
2001 census	**503 203**	**15.32**	**90. 32**	**9. 68**	**488 863**	**13.42**	**89. 24**	**10. 76**	**514 580**	**16.63**	**91.14**	**8.86**
Large enterprises	723 295	15.25	87. 59	12. 41	675 326	14.25	86. 13	13. 87	766 271	15.06	88.75	11.25
SMEs	398 741	10.98	92. 68	7. 32	391 158	8.85	92. 05	7. 95	404 416	12.57	93.13	6.87
Micro enterprises	*347 641*	*6.71*	*93. 83*	*6. 17*	*344 144*	*2.95*	*93. 07*	*6. 93*	*348 420*	*7.68*	*94.00*	*6.00*
2006 census	**541 054**	**7.52**	**87. 75**	**12. 25**	**552 587**	**13.04**	**86. 52**	**13. 48**	**532 383**	**3.46**	**88.70**	**11.30**
Large enterprises	748 028	3.42	85. 02	14. 98	747 119	10.63	83. 33	16. 67	748 792	-2.28	86.45	13.55
SMEs	436 313	9.42	90. 11	9. 89	444 336	13.60	89. 52	10. 48	430 614	6.48	90.54	9.46
Micro enterprises	*380 278*	*9.39*	*91. 87*	*8. 13*	*391 351*	*13.72*	*91. 52*	*8. 48*	*377 505*	*8.35*	*91.96*	*8.04*
2011 census	**579 265**	**7.06**	**87. 03**	**12. 97**	**611 576**	**10.68**	**86. 45**	**13. 55**	**555 905**	**4.42**	**87.50**	**12.50**
Large enterprises	830 407	11.01	85. 62	14. 38	874 905	17.10	85. 39	14. 61	792 793	5.88	85.83	14.17
SMEs	446 164	2.26	88. 43	11. 57	451 439	1.60	87. 70	12. 30	442 658	2.80	88.93	11.07
Micro enterprises	*374 781*	*-1.45*	*90. 27*	*9. 73*	*370 813*	*-5.25*	*89. 92*	*10. 08*	*375 747*	*-0.47*	*90.35*	*9.65*

▲In 2011, all industries averagely resorted to 131,296 dispatched labors per month and Large enterprises accounted for 66%.

In 2011, there were 7,428 enterprises resorted to dispatched persons, although which was less 4.67% than that in 2006, as an average, they resorted to 131,296 dispatched labors per month, with an increase of 14.66% for past five years, accounting for 1.79% of entire employees. The annual dispatched expenses amounted to NT$35.1 billion, with an increase of 35.05%. More than 20% of Large enterprises resorted to dispatched labors, with an average of 86,476 persons per month, increasing 25.38% than that in 2006, accounting for 65.86% of dispatched labors resorted, being the most of all enterprises resorting to dispatched labors, and accounting for 3.11% of its employees. As for the number of enterprise units utilizing dispatched labors and average number of dispatched labors utilized per month were decreased in SMEs, in terms of Micro enterprises decreased 22.05% and 29.96% respectively.

▲Manufacturing averagely resorted to nearly 64 thousand dispatched labors per month, being the number one in all industries.

In 2011, Industrial Sector averagely resorted to 74,795 dispatched labors per month, with an increase of 23.53% for past five years, both higher than 56,501 persons and 4.72% in Service Sector. Among all industries, Manufacturing averagely resorted to 63,934 dispatched labors, reckoning as the most of all, among which, Chemical industry grew 1.38 times in the same period, with the most growth rate in terms of four main industries. Information and electronic industry averagely resorted to 36,141 persons per month, accounting for 4.58% of employees, with NT$10.3 billion of annual expenses of dispatched labors, higher than that of other three main industries; Non-knowledge-intensive services in Service Sector resorted to 31,673 persons, higher than 24,828 persons of Knowledge-intensive services resorted; however, it accounted for 1.20% of employees, lower than 1.75% in Knowledge-intensive services.

Table 6 Utilization of dispatched labors of all industries, by enterprise scale and industry

2011

	Year-end number of enterprise units	Dispatched labors utilizing							
		Year-end number of enterprise units		Number of dispatched labors averagely utilized per month			Annual expenses of dispatched labors utilized	
			Diff. with 2006		Accounting for employees	Diff. with 2006		Diff. with 2006
	(enterprise)	(enterprise)	(%)	(person)	(%)	(%)	(NT$ million)	(%)
Grand Total (Overall average)	**1 184 811**	**7 428**	**-4.67**	**131 296**	**1.79**	**14.66**	**35 095**	**35.05**
By sector and enterprise scale								
Large enterprises	4 680	1 054	17.90	86 476	3.11	25.38	26 374	37.19
SMEs	1 180 131	6 374	-7.60	44 820	0.99	-1.57	8 721	28.97
Micro enterprises	*945 338*	*2 351*	*-22.05*	*8 576*	*0.75*	*-29.96*	*1 091*	*6.15*
Industrial Sector	**249 201**	**3 607**	**10.85**	**74 795**	**2.30**	**23.53**	**19 983**	**54.52**
Large enterprises	1 693	609	47.82	51 076	4.02	34.83	15 576	60.16
SMEs	247 508	2 998	5.49	23 719	1.19	4.64	4 408	37.43
Micro enterprises	*148 807*	*793*	*-23.38*	*3 571*	*1.41*	*-29.58*	*458*	*45.38*
Service Sector	**935 610**	**3 821**	**-15.80**	**56 501**	**1.39**	**4.72**	**15 111**	**15.77**
Large enterprises	2 987	445	-7.68	35 400	2.35	13.88	10 798	13.68
SMEs	932 623	3 376	-16.77	21 101	0.82	-7.74	4 314	21.35
Micro enterprises	*796 531*	*1 558*	*-21.35*	*5 005*	*0.57*	*-30.22*	*633*	*-11.18*
By industry								
Industrial Sector	**249 201**	**3 607**	**10.85**	**74 795**	**2.30**	**23.53**	**19 983**	**54.52**
Manufacturing	157 284	2 529	49.20	63 934	2.34	35.84	17 599	53.65
Consumer goods ind.	31 079	425	44.56	6 595	1.38	54.38	1 549	77.62
Chemical industry	32 264	430	37.82	6 260	1.34	137.75	1 635	179.80
Metal & mechanical ind.	84 393	1 027	53.74	14 938	1.50	-7.29	4 107	6.77
Information & electronic ind.	9 548	647	53.68	36 141	4.58	50.29	10 308	67.58
Construction	86 350	1 012	-33.51	9 553	2.07	-26.10	1 161	-9.97
Others	5 567	66	78.38	1 308	2.01	134.41	1 224	545.84
Service Sector	**935 610**	**3 821**	**-15.80**	**56 501**	**1.39**	**4.72**	**15 111**	**15.77**
Knowledge-intensive	130 901	1 139	-22.57	24 828	1.75	-3.11	7 323	1.76
Non-knowledge-intensive	804 709	2 682	-12.55	31 673	1.20	11.79	7 789	32.97

(2) Changes of input of assets used in operation

▲By the end of 2011, assets used in operation of all industries amounted to NT$137 trillion 236.2 billion, with an increase nearly 30% for past five years.

By the end of 2011, the assets used in operation of all industries amounted to NT$137 trillion 236.2 billion, with an increase of 28.66% as against the end of 2006; however, due to the impact of financial tsunami and European debt crisis, enterprises' capital expansion strategy become more conservative and cautious, there was the lowest growth rate for past four censuses. Among two Sectors, Service Sector's assets used in operation amounted to NT$105 trillion 852.6 billion, with an increase of NT$25 trillion 131.4 billion or 31.13% for past five years, contributing to 82.20% of the increased assets used in operation of all industries, so that its proportion increased from 75.68% to 77.13%. The assets used in operation of Knowledge-intensive services, due to upgraded loan and investment amounts of finance and insurance industries, grew 33.01%, with the highest growth rate of all industries; however, it was still lower than 49.37% in 2006 census; Non-knowledge-intensive services grew 24.53%, higher than 17.11% in 2006 census; among Industrial Sector, Manufacturing's growth rate declined to 23.14% from 36.51% in 2006 census; Construction's growth also declined to 3.29% from 13.18%. As for among four main industries of Manufacturing, only Consumer goods industry turned to 6.02% of positive growth from 6.18% of negative growth, and other three main industries' growth rates were lower than that in 2006 census.

▲Assets used in operation of Large enterprises increased 29.62%, higher than 25.26% of SMEs for past five years.

By the end of 2011, Large enterprises' assets used in operation amounted to NT$107 trillion 868.7 billion or accounted for 78.60%, with an increase of NT$24 trillion 651 billion or 29.62% for past five years, and the growth rate was higher than 25.26% of SMEs, showing that assets used in operation of all industries still concentrated in Large enterprises. Although the number of enterprise units of SMEs grew fast, its growth rate of assets used in operation was still less than that of Large enterprises, showing insufficient input; as for the assets used in operation of both Large enterprises and SMEs in Industrial Sector grew 23.90% and 13.07% respectively for past five years, lower than 31.31% and 30.45% in Service Sector.

Table 7 Assets used in operation for past four censuses, by enterprise scale and industry

Unit: NT$ million

	2011 census		2006 census		2001 census		1996 census	
	Year-end assets used in operation	Diff. with previous census (%)	Year-end assets used in operation	Diff. with previous census (%)	Year-end assets used in operation	Diff. with previous census (%)	Year-end assets used in operation	Diff. with previous census (%)
Grand Total	**137 236 176**	**28.66**	**106 663 190**	**38.82**	**76 835 689**	**43.17**	**53 666 911**	**66.79**
By Sector and enterprise scale								
Large enterprises	107 868 674	29.62	83 217 661	45.92	57 028 233	51.36	37 677 071	61.24
SMEs	29 367 502	25.26	23 445 528	18.37	19 807 456	23.88	15 989 841	81.54
Micro enterprises	*7 693 599*	*27.60*	*6 029 560*	*8.01*	*5 582 418*	*37.52*	*4 059 474*	*64.24*
Industrial Sector	**31 383 592**	**20.98**	**25 942 016**	**33.04**	**19 499 511**	**51.17**	**12 899 088**	**70.08**
Large enterprises	23 465 902	23.90	18 939 733	40.44	13 485 916	71.40	7 868 171	78.41
SMEs	7 917 690	13.07	7 002 283	16.44	6 013 595	19.53	5 030 917	58.51
Micro enterprises	*641 636*	*-4.54*	*672 178*	*-11.31*	*757 872*	*14.68*	*660 874*	*71.76*
Service Sector	**105 852 584**	**31.13**	**80 721 174**	**40.79**	**57 336 178**	**40.64**	**40 767 823**	**65.78**
Large enterprises	84 402 772	31.31	64 277 928	47.62	43 542 317	46.07	29 808 900	57.24
SMEs	21 449 812	30.45	16 443 245	19.21	13 793 861	25.87	10 958 924	94.52
Micro enterprises	*7 051 964*	*31.63*	*5 357 382*	*11.04*	*4 824 546*	*41.96*	*3 398 600*	*62.86*
By industry								
Industrial Sector	**31 383 592**	**20.98**	**25 942 016**	**33.04**	**19 499 511**	**51.17**	**12 899 088**	**70.08**
Manufacturing	27 083 265	23.14	21 993 595	36.51	16 111 047	59.62	10 093 269	68.12
Conumer goods ind.	3 434 305	6.02	3 239 419	-6.18	3 452 982	39.01	2 484 059	44.34
Chemical industry	5 639 579	21.10	4 656 951	30.37	3 571 977	34.14	2 662 777	61.56
Metal and mechanical industry	6 161 341	29.51	4 757 468	31.15	3 627 438	14.91	3 156 723	62.51
Information and electronic industry	11 848 041	26.86	9 339 756	71.10	5 458 650	205.00	1 789 709	158.62
Construction	1 857 624	3.29	1 798 473	13.18	1 589 081	10.18	1 442 256	93.45
Others	2 442 703	13.62	2 149 948	19.48	1 799 383	31.96	1 363 563	63.34
Service Sector	**105 852 584**	**31.13**	**80 721 174**	**40.79**	**57 336 178**	**40.64**	**40 767 823**	**65.78**
Knowledge-intensive	83 595 440	33.01	62 848 512	49.37	42 075 028	43.96	29 227 020	55.01
Non-knowledge-intensive	22 257 143	24.53	17 872 661	17.11	15 261 149	32.24	11 540 803	101.18

▲For past five years, the proportion of enterprises' fixed assets to assets used in operation decreased 3.00 percentage points; long-term investments proportion increased 6.10 percentage points, with significantly structural growth and decline.

By the end of 2011, total fixed assets used in operation of all industries (including owned fixed assets and fixed assets rented or borrowed) accounted for 20.00% of assets used in operation, less 3.00 percentage points than 23.00% by the end of 2006. Industrial and Service Sectors decreased 4.29 and 2.13 percentage points respectively. By the scale of enterprise, Large enterprises' fixed assets used in operation rate decreased 3.55 percentage points for past five years, being the most of all, because of Manufacturing's outsourcing production proportion increased and fixed assets used in operation decreased. As for intangible assets, increased more than 50% for past five years, amounting to NT$558.2 billion in 2011, up to 0.41% proportion over assets used in operation, increasing 0.07 percentage points than that of 2006; among two Sectors, there was 377.5 billion in Service Sector, being the most of all, and increased 52.40% for past five years, with growth rate slightly less than 55.59% in Industrial Sector, and its proportion was 0.36% only, also lower than 0.58% of Industrial Sector. For past five years, although fixed assets used in operation proportion of all enterprises declined, the long-term investment proportion (mainly to foreign investment) increased 6.10 percentage points, with increased amount up to NT$15 trillion 59.3 billion. In terms of Service Sector increased NT$12 trillion 532.5 billion or accounted for 83.22%, being the most of all, mainly due to increasing financial industry premiums, deposits and foreign exchange reserves, and rising long-term use of the relevant funds.

Table 8　Structure of the assets used in operation of all industries, by enterprise scale

Unit: NT$ billion, %

	End of 2011							End of 2006						
		Owned assets							Owned assets					
					Other assets							Other assets		
	Total	Current assets	Owned fixed assets	Long-term invest-ment		Intan-gible assets	Fixed assets rented or borrowed	Total	Current assets	Owned fixed assets	Long-term invest-ment		Intan-gible assets	Fixed assets rented or borrowed
Grand Total (Real number)	**137 236.2**	**41 981.4**	**19 170.6**	**38 411.5**	**29 402.8**	**558.2**	**8 269.9**	**106 663.2**	**35 148.5**	**17 811.5**	**23 352.2**	**23 634.3**	**363.9**	**6 716.8**
Large enterprises	107 868.7	30 963.0	12 674.0	33 622.0	27 545.4	442.2	3 064.2	83 217.7	25 653.9	12 059.8	20 393.2	22 075.3	315.7	3 035.4
SMEs	29 367.5	11 018.4	6 496.5	4 789.5	1 857.4	116.0	5 205.7	23 445.5	9 494.5	5 751.7	2 959.0	1 559.0	48.3	3 681.4
Micro enterprises	*7 693.6*	*1 879.9*	*2 332.8*	*1 110.9*	*102.6*	*4.4*	*2 267.3*	*6 029.6*	*1 542.3*	*2 201.6*	*607.9*	*119.2*	*4.7*	*1 558.6*
Industrial Sector	**31 383.6**	**12 105.8**	**10 412.1**	**6 450.7**	**757.8**	**180.8**	**1 657.2**	**25 942.0**	**9 867.1**	**9 802.2**	**3 923.9**	**1 061.9**	**116.2**	**1 286.8**
Large enterprises	23 465.9	8 473.7	8 059.7	5 744.4	574.6	149.5	613.4	18 939.7	6 509.2	7 653.7	3 539.1	771.9	99.1	465.7
SMEs	7 917.7	3 632.0	2 352.4	706.3	183.2	31.3	1 043.7	7 002.3	3 357.9	2 148.5	384.8	290.0	17.2	821.1
Micro enterprises	*641.6*	*180.2*	*248.4*	*4.8*	*7.6*	*0.4*	*200.5*	*672.2*	*186.2*	*299.5*	*1.9*	*14.2*	*0.2*	*170.4*
Service Sector	**105 852.6**	**29 875.7**	**8 758.4**	**31 960.8**	**28 644.9**	**377.5**	**6 612.7**	**80 721.2**	**25 281.3**	**8 009.3**	**19 428.3**	**22 572.3**	**247.7**	**5 429.9**
Large enterprises	84 402.8	22 489.3	4 614.3	27 877.7	26 970.8	292.8	2 450.8	64 277.9	19 144.7	4 406.1	16 854.1	21 303.4	216.6	2 569.7
SMEs	21 449.8	7 386.4	4 144.1	4 083.2	1 674.2	84.7	4 161.9	16 443.2	6 136.6	3 603.2	2 574.2	1 269.0	31.1	2 860.3
Micro enterprises	*7 052.0*	*1 699.7*	*2 084.4*	*1 106.1*	*95.0*	*4.1*	*2 066.8*	*5 357.4*	*1 356.1*	*1 902.1*	*606.0*	*105.0*	*4.4*	*1 388.2*
Overall average (Structure ratio)	**100.00**	**30.59**	**13.97**	**27.99**	**21.42**	**0.41**	**6.03**	**100.00**	**32.95**	**16.70**	**21.89**	**22.16**	**0.34**	**6.30**
Large enterprises	100.00	28.70	11.75	31.17	25.54	0.41	2.84	100.00	30.83	14.49	24.51	26.53	0.38	3.65
SMEs	100.00	37.52	22.12	16.31	6.32	0.39	17.73	100.00	40.50	24.53	12.62	6.65	0.21	15.70
Micro enterprises	*100.00*	*24.43*	*30.32*	*14.44*	*1.33*	*0.06*	*29.47*	*100.00*	*25.58*	*36.51*	*10.08*	*1.98*	*0.08*	*25.85*
Industrial Sector	**100.00**	**38.57**	**33.18**	**20.55**	**2.41**	**0.58**	**5.28**	**100.00**	**38.04**	**37.79**	**15.13**	**4.09**	**0.45**	**4.96**
Large enterprises	100.00	36.11	34.35	24.48	2.45	0.64	2.61	100.00	34.37	40.41	18.69	4.08	0.52	2.46
SMEs	100.00	45.87	29.71	8.92	2.31	0.40	13.18	100.00	47.95	30.68	5.50	4.14	0.25	11.73
Micro enterprises	*100.00*	*28.09*	*38.72*	*0.75*	*1.18*	*0.06*	*31.25*	*100.00*	*27.70*	*44.56*	*0.28*	*2.11*	*0.03*	*25.35*
Service Sector	**100.00**	**28.22**	**8.27**	**30.19**	**27.06**	**0.36**	**6.25**	**100.00**	**31.32**	**9.92**	**24.07**	**27.96**	**0.31**	**6.73**
Large enterprises	100.00	26.65	5.47	33.03	31.95	0.35	2.90	100.00	29.78	6.85	26.22	33.14	0.34	4.00
SMEs	100.00	34.44	19.32	19.04	7.81	0.39	19.40	100.00	37.32	21.91	15.66	7.72	0.19	17.40
Micro enterprises	*100.00*	*24.10*	*29.56*	*15.68*	*1.35*	*0.06*	*29.31*	*100.00*	*25.31*	*35.50*	*11.31*	*1.96*	*0.08*	*25.91*

Note: Other assets include intangible assets, accounts receivable longer than 1 year, deferred assets (expenses) and refundable deposits, but exclude the net value of fixed assets outrented, lent, idle and disposable.

(3) Changes in intangible investment

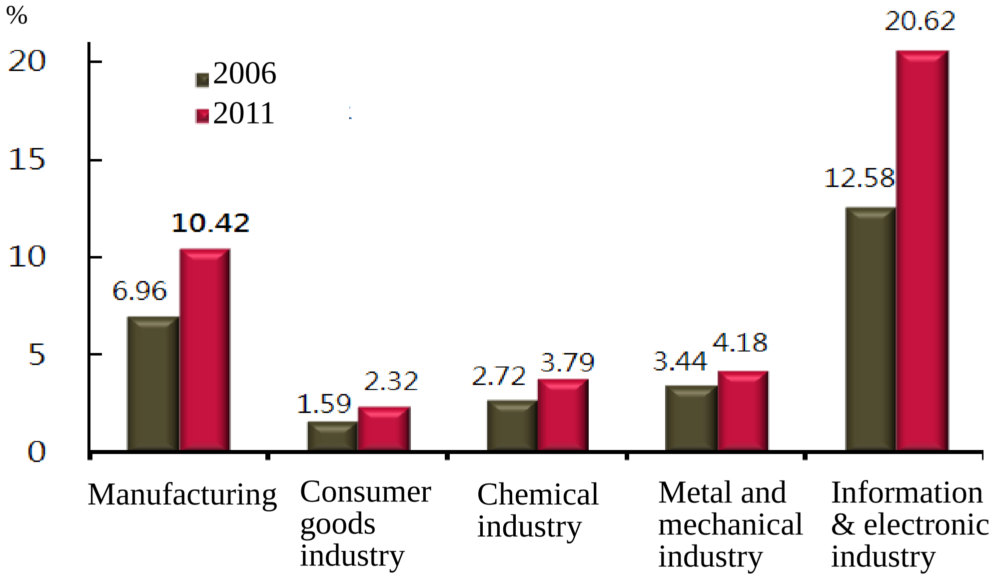
▲**In 2011, the R&D expenditures of all industries were NT$507.1 billion, with an increase more than 50% for past five years, in terms of Manufacturing accounted for about 85%.**

For having high-valued products or services to enhance the competitiveness of enterprises, the R&D is getting important. In 2011, the R&D expenditures of all industries amounted to NT$507.1 billion, with an increase of 51.78% for past five years, accounting for 4.75% of gross value of production of all industries, among which the expense-type expenditures accounted for more than 90%. By enterprise scale, NT$411.9 billion R&D expenditures of Large enterprises was the most, accounting for 81.23% of entire R&D expenditures. Large enterprises of Industrial Sector input NT$ 369.8 billion, being the major, and with an increase of 55.05% for past five years, higher than 19.52% in Large enterprises of Service Sector. Among all industries, Manufacturing's R&D expenditures, NT$432.1 billion, was the most, accounting for 85% of entire R&D expenditures; among Manufacturing, Information and electronic industry amounted to NT$341.5 billion, being the most; Consumer goods industry input NT$ 12.9 billion, being the last one of four main industries, however, it grew 58.72% for past five years, being the highest. As for Service Sector input NT$ 71 billion, Knowledge-intensive services input NT$38.8 billion, accounting for 1.43% of its gross value of production; however, its growth rate was 22.98% for past five years, less than 87.84% of Non-knowledge-intensive services. The R&D momentum should be improved, because of Knowledge-intensive services' Telecommunications capital R&D expenditures reduced and the growth rate was getting less. As for Non-knowledge-intensive services, because Wholesale Trade was attributed to own-design and outsourcing manufacturing, and the manufacturers who did not control the right to purchase or designate raw materials, increased R&D expenditures more, and the growth rate was higher.

▲**Manufacturing's R&D expenditures accounted for 10.42% of its gross value of production, and among which Information and electronic industry was reckoned as the most by 20.62%.**

In 2011, Manufacturing's R&D expenditures was up to NT$432.1 billion, with an increase of 53.11% for past five years, accounting for 10.42% of its gross value of production. Among four main industries, Information and electronic industry input NT$341.5 billion, being the most, accounting for 20.62% of gross value of production, and with an increase of 8.04 percentage points for past five years. Metal and mechanical industry was reckoned as the second by both NT$46.6 billion input and proportion of 4.18%, with an increase of 0.74 percentage points for past five years. As for the R&D expenditures of Chemical industry and Consumer goods industry accounted for 3.79% and 2.32% of gross value of production, with an increase of 1.07 and 0.73 percentage points respectively as against 2006.

Chart 1 Proportions of R&D expenditures to gross value of production, by four main industries



▲In 2011, the employee training expenditure of all industries amounted to NT$27.2 billion, with an increase nearly 20% for past five years, and Service Sector accounted for more than 64%.

Human qualities and improved skills have always been the key to improve the business performance of enterprises. In 2011, the employee training expenditure of all industries amounted to NT$27.2 billion, with a growth of 18.13% for past five years, accounting for 0.25% of gross value of production, among which expense-type expenditures accounted for more than 95%. By enterprise scale, the input amount was mainly from Large enterprises, up to NT$18.6 billion, accounting for 68.56% of entire employee training input amounts, with a growth of 20.76% for past five years, higher than 12.78% of SMEs. Industrial Sector's employee training input was NT$9.7 billion, lower than NT$17.5 billion of Service Sector; however, it increased more than 40% for past five years, significantly higher than 8.08% in Service Sector; in terms of Industrial Sector, Manufacturing input NT$8.5 billion, with a growth rate over 50% for past five years; among four main industries, Consumer goods industry grew over 90%, being the most of all. As for the Service Sector's employee training expenditures accounted for over 64% of all industries, Knowledge-intensive services input NT$10.7 billion, higher than NT$6.8 billion of Non-knowledge-intensive services.

Table 9 Overview of intangible investment of all industries, by enterprise scale and industry

2011

	R&D expenditures					Employee training expenditures				
	Amount (NT$ million)	Diff. with 2006 (%)	Proportion accounting for gross value of production (%)	Structure ratio (%) Expense-type exp.	Structure ratio (%) Capital-type exp.	Amount (NT$ million)	Diff. with 2006 (%)	Proportion accounting for gross value of production (%)	Structure ratio (%) Expense-type exp.	Structure ratio (%) Capital-type exp.
Grand Total (Overall average)	**507 101**	**51.78**	**4.75**	**90.66**	**9.34**	**27 175**	**18.13**	**0.25**	**95.44**	**4.56**
By sector and enterprise scale										
Large enterprises	411 901	50.48	7.03	89.78	10.22	18 631	20.76	0.32	95.54	4.46
SMEs	95 200	57.67	1.98	94.48	5.52	8 544	12.78	0.18	95.22	4.78
Micro enterprises	*2 120*	*225.28*	*0.15*	*94.58*	*5.42*	*1 364*	*-20.39*	*0.10*	*92.19*	*7.81*
Industrial Sector	**436 109**	**52.79**	**9.05**	**90.06**	**9.94**	**9 660**	**42.09**	**0.20**	**94.98**	**5.02**
Large enterprises	369 821	55.05	12.22	89.35	10.65	6 197	42.47	0.20	94.26	5.74
SMEs	66 288	41.30	3.70	94.02	5.98	3 463	41.42	0.19	96.25	3.75
Micro enterprises	*120*	*318.51*	*0.05*	*94.23*	*5.77*	*186*	*-35.39*	*0.08*	*97.94*	*2.06*
Service Sector	**70 992**	**45.85**	**1.21**	**94.33**	**5.67**	**17 515**	**8.08**	**0.30**	**95.70**	**4.30**
Large enterprises	42 080	19.52	1.49	93.51	6.49	12 434	12.24	0.44	96.18	3.82
SMEs	28 912	114.69	0.96	95.52	4.48	5 081	-0.90	0.17	94.52	5.48
Micro enterprises	*1 999*	*220.98*	*0.17*	*94.60*	*5.40*	*1 178*	*-17.37*	*0.10*	*91.28*	*8.72*
By industry										
Industrial Sector	**436 109**	**52.79**	**9.05**	**90.06**	**9.94**	**9 660**	**42.09**	**0.20**	**94.98**	**5.02**
Manufacturing	432 109	53.11	10.42	90.09	9.91	8 499	50.87	0.21	95.70	4.30
Consumer goods ind.	12 884	58.72	2.32	94.03	5.97	1 321	91.55	0.24	97.28	2.72
Chemical industry	31 079	49.23	3.79	91.66	8.34	1 876	57.31	0.23	89.41	10.59
Metal and mechanical industry	46 648	28.80	4.18	94.81	5.19	2 643	71.40	0.24	97.37	2.63
Information and electronic industry	341 498	57.33	20.62	89.15	10.85	2 659	20.37	0.16	97.68	2.32
Construction	754	40.65	0.16	78.70	21.30	369	21.02	0.08	77.84	22.16
Others	3 246	21.55	1.65	89.75	10.25	792	-7.98	0.40	95.22	4.78
Service Sector	**70 992**	**45.85**	**1.21**	**94.33**	**5.67**	**17 515**	**8.08**	**0.30**	**95.70**	**4.30**
Knowledge-intensive	38 756	22.98	1.43	94.41	5.59	10 732	8.32	0.40	95.66	4.34
Non-knowledge-intensive	32 236	87.84	1.02	94.23	5.77	6 783	7.71	0.22	95.76	4.24

Note: 1. Among "Research & Development", "Employee training" and "Marketing", related purchase of computer software and database were also accounted into "Purchase of computer software and database".
2. The gross value of production amounts referred in "Proportion accounting for gross value of production" were the statistic results of this census.

▲In 2011, marketing expenditure of all industries amounted to NT$555.5 billion, with an increase over 34%. The expenditure of Information and electronic industry increased 60% for past five years.

Marketing is an important strategy to enhance the image and the value of product or service. In 2011, the marketing expenditure of all industries was up to NT$555.5 billion, with an increase of 34.94% for past five years, accounting for 5.21% of gross value of production, among which, expense-type expenditures was still the major, accounting for 99.39%. By enterprise scale, Large enterprises' input amounted to NT$427.3 billion, accounting for 76.91% of all industries' marketing expenditures, with an increase of 37.10% for past five years, higher than SMEs' growth rate of 28.19%. Industrial Sector's marketing expenditures amounted to NT$327.3 billion, with a growth rate of 39.13% for past five years, among which Manufacturing input NT$316.6 billion, being the most. In terms of Manufacturing, Information and electronic industry input NT$165.7 billion, with a growth rate of 60.16% for past five years, the product marketing was more and more important significantly, and gradually escaped the operation mode of professional manufacturing. Service Sector's expenditures amounted to NT$228.3 billion, with a growth rate nearly 30% for past five years, and Non-knowledge-intensive services accounted for more than 63%. In addition, although Service Sector's marketing was most input by Large enterprises, SMEs grew 39.10% for past five years, with higher growth rate as against Large enterprises. Obviously, SMEs enhance the product or service image gradually has become a trend, so that marketing input grew rapidly.

▲In 2011, the purchase expenditure of computer software and database of all industries amounted to NT$54.9 billion, with an increase of 14.95% for past five years.

Digitization and Informatization were also key factors to upgrade industry and to enhance competeiveness. In 2011, the purchase expenditure of computer software and database of all industries amounted to NT$54.9 billion, with an increase of 14.95% for past five years, accounting for 0.51% of gross value of production, among which, expense-type expenditures accounted for 57.55%. By enterprise scale, Large enterprises input NT$42.3 billion as the major, accounting for 77% of entire input amount, with an increase of 26.15% for past five years. However, SMEs showed negative growth of 11.38%. Among two Sectors, Industrial Sector's purchase expenditure of computer software and database amounted to

NT$22.7 billion, and Manufacturing's input amount was NT$21.7 billion, being the major. Information and electronic industry input NT$15.2 billion, being the most of Manufacturing. Service Sector's expenditures of that amounted to NT$32.2 billion, and Knowledge-intensive services input NT$21.7 billion as the most of Service Sector.

Table 9 Overview of intangible investment of all industries, by enterprise scale and industry (continued)

2011

	Marketing expenditures					Purchase expenditures of computer software and database				
	Amount (NT$ million)	Diff. with 2006 (%)	Proportion accounting for gross value of production (%)	Structure ratio (%) Expense-type exp.	Structure ratio (%) Capital-type exp.	Amount (NT$ million)	Diff. with 2006 (%)	Proportion accounting for gross value of production (%)	Structure ratio (%) Expense-type exp.	Structure ratio (%) Capital-type exp.
Grand Total (Overall average)	**555 531**	**34.94**	**5.21**	**99.39**	**0.61**	**54 905**	**14.95**	**0.51**	**57.55**	**42.45**
By sector and enterprise scale										
Large enterprises	427 285	37.10	7.30	99.43	0.57	42 270	26.15	0.72	52.98	47.02
SMEs	128 246	28.19	2.66	99.27	0.73	12 635	-11.38	0.26	72.84	27.16
Micro enterprises	*12 508*	*11.96*	*0.89*	*98.57*	*1.43*	*2 608*	*-12.94*	*0.18*	*76.36*	*23.64*
Industrial Sector	**327 263**	**39.13**	**6.79**	**99.33**	**0.67**	**22 669**	**21.82**	**0.47**	**54.66**	**45.34**
Large enterprises	277 189	44.84	9.16	99.29	0.71	18 945	42.56	0.63	53.05	46.95
SMEs	50 074	14.21	2.80	99.54	0.46	3 724	-29.99	0.21	62.84	37.16
Micro enterprises	*855*	*-4.80*	*0.36*	*99.54*	*0.46*	*112*	*-52.76*	*0.05*	*88.48*	*11.52*
Service Sector	**228 268**	**29.35**	**3.90**	**99.48**	**0.52**	**32 237**	**10.56**	**0.55**	**59.59**	**40.41**
Large enterprises	150 096	24.79	5.30	99.68	0.32	23 325	15.36	0.82	52.93	47.07
SMEs	78 172	39.10	2.59	99.10	0.90	8 911	-0.32	0.29	77.02	22.98
Micro enterprises	*11 653*	*13.43*	*0.99*	*98.50*	*1.50*	*2 496*	*-9.52*	*0.21*	*75.81*	*24.19*
By industry										
Industrial Sector	**327 263**	**39.13**	**6.79**	**99.33**	**0.67**	**22 669**	**21.82**	**0.47**	**54.66**	**45.34**
Manufacturing	316 621	41.20	7.64	99.34	0.66	21 715	22.72	0.52	54.35	45.65
Consumer goods ind.	43 563	41.73	7.86	99.38	0.62	1 245	-8.10	0.22	48.66	51.34
Chemical industry	63 784	19.64	7.78	97.69	2.31	2 490	4.04	0.30	61.31	38.69
Metal and mechanical industry	43 623	18.65	3.91	99.59	0.41	2 769	-20.18	0.25	56.46	43.54
Information and electronic industry	165 650	60.16	10.00	99.89	0.11	15 211	45.17	0.92	53.29	46.71
Construction	3 312	91.84	0.70	97.15	2.85	493	6.95	0.10	69.06	30.94
Others	7 331	-20.74	3.73	99.95	0.05	461	2.00	0.23	53.55	46.45
Service Sector	**228 268**	**29.35**	**3.90**	**99.48**	**0.52**	**32 237**	**10.56**	**0.55**	**59.59**	**40.41**
Knowledge-intensive	83 163	26.93	3.07	99.25	0.75	21 747	10.60	0.80	52.01	47.99
Non-knowledge-intensive	145 105	30.77	4.61	99.61	0.39	10 489	10.46	0.33	75.29	24.71

Note: 1. Among "Research & Development", "Employee training" and "Marketing", related purchase of computer software and database were also accounted into "Purchase of computer software and database".
2. The gross value of production amounts referred in "Proportion accounting for gross value of production" were the statistic results of this census.

(4) Changes in production and its distribution

▲For past five years, total value of production of all industries increased 22.54% with slow growth; Industrial Sector's proportion climbed to 65.41%.

In 2011, all industries' annual total value of production amounted to NT$29 trillion 422.7 billion, with an increase of 22.54% as against 2006 census, but lower than the growth rate 49.44% of 2006 census. Industrial Sector amounted to NT$19 trillion 246.3 billion, with an increase of 24.26% for past five years, higher than 19.44% of Service Sector, so that the proportion of Service Sector's total value of production to all industries climbed to 65.41%, showing the highest level for past four censuses; however, the growth rate decreased 37.88 percentage points for past five years.

In terms of two Sectors, in creating the Industrial Sector's total value of production, Manufacturing was still the major, contributing nearly 90% of output value to the Sector, and with advances in technology to drive innovation, it sustainably developed towards high-tech industry; particularly with remarkable growth in Information and electronic industry which has risen to the top one of four main industries in Manufacturing till 2001 census; however, due to overseas production becoming mainstream, fierce competition in the international market, and slowing output amplification, so that the growth rate shown in 2011 census was 11.89% only, less 63.53 percentage points than that of 2006, and Manufacturing's growth rate of total value of production declined to 23.24% from 67.78% of 2006 census, affecting the Industrial Sector slowdown. As for Service Sector, its growth rate of total value of production continued to lower level. Knowledge-intensive services, due to stabilized domestic development of telecommunications and finance, grew 16.69% for past five years, with a decrease 11.48 percentage points. Non-knowledge-intensive services, benefiting from tourism industry's open, increasing visitors to Taiwan, people focusing on leisure activities, and hot housing market, took significant growth of accommodation, food and beverage service and real estate industries, with an increase of 21.56% for past five years; however, it was still less than 32.93% in 2006 census.

▲Among Large enterprises, the total value of production of Industrial Sector grew 26.80%, much higher than 15.17% of Service Sector for past five years.

In 2011, Large enterprises' total value of production amounted to NT$16 trillion 950.3 billion, with an increase of 23.14% for past five years, and SMEs' amounted to NT$12 trillion 472.4 billion, with an increase of 21.74% for past five years; both growth rates were lower than that of 2006 census. Although Micro enterprises' total value of production amounted to NT$2 trillion 591 billion only, it increased 27.95% for past five years, with a better momentum of growth; particularly, it was more significant in Industrial Sector's Micro enterprises which grew more than 30%. Because Large enterprises' and Micro enterprises' growth rates were higher than entire growth rate, entire output for past five years developed towards two poles of the scale. Industrial Sector's Large and Micro enterprises grew 26.80% and 31.09%, higher than Service Sector's 15.17% and 26.81% respectively; however, to observe entire SMEs' growth rate, Industrial Sector was 20.29% less than 23.83% of Service Sector.

Table 10 Changes in the total value of production of enterprise units for past four censuses, by enterprise scale and industry

Unit: NT$ million

	2011 census		2006 census		2001 census		1996 census	
	Annual total value of production	Diff. with previous census (%)	Annual total value of production	Diff. with previous census (%)	Annual total value of production	Diff. with previous census (%)	Annual total value of production	Diff. with previous census (%)
Grand Total	**29 422 674**	**22.54**	**24 009 726**	**49.44**	**16 066 518**	**19.58**	**13 435 430**	**63.10**
By sector & enterprise scale								
Large enterprises	16 950 307	23.14	13 764 619	55.59	8 847 000	28.26	6 897 807	62.06
SMEs	12 472 367	21.74	10 245 107	41.91	7 219 517	10.43	6 537 622	64.20
Micro enterprises	*2 591 032*	*27.95*	*2 024 957*	*33.90*	*1 512 257*	*31.88*	*1 146 715*	*84.48*
Industrial Sector	**19 246 257**	**24.26**	**15 489 307**	**62.14**	**9 552 939**	**11.86**	**8 540 246**	**49.19**
Large enterprises	11 967 015	26.80	9 437 871	71.98	5 487 643	23.85	4 431 044	49.10
SMEs	7 279 241	20.29	6 051 436	48.86	4 065 296	-1.07	4 109 202	49.28
Micro enterprises	710 415	31.09	541 930	41.26	383 638	17.48	326 547	71.97
Service Sector	**10 176 417**	**19.44**	**8 520 419**	**30.81**	**6 513 578**	**33.06**	**4 895 184**	**94.79**
Large enterprises	4 983 292	15.17	4 326 748	28.80	3 359 357	36.18	2 466 764	92.06
SMEs	5 193 125	23.83	4 193 671	32.95	3 154 221	29.89	2 428 420	97.64
Micro enterprises	*1 880 617*	*26.81*	*1 483 027*	*31.40*	*1 128 619*	*37.61*	*820 168*	*89.98*
By industry								
Industrial Sector	**19 246 257**	**24.26**	**15 489 307**	**62.14**	**9 552 939**	**11.86**	**8 540 246**	**49.19**
Manufacturing	17 084 891	23.24	13 863 134	67.78	8 262 639	14.06	7 243 853	46.42
Consumer goods ind.	1 973 729	24.22	1 588 917	14.94	1 382 339	-13.60	1 599 967	20.70
Chemical industry	4 957 750	33.40	3 716 455	80.79	2 055 690	17.12	1 755 274	34.04
Metal and mechanical industry	5 180 365	25.94	4 113 226	79.54	2 290 962	-3.50	2 374 034	44.22
Information and electronic industry	4 973 047	11.89	4 444 536	75.42	2 533 647	67.28	1 514 579	127.35
Construction	1 415 272	29.83	1 090 064	26.00	865 129	-8.23	942 694	78.67
Others	746 093	39.17	536 109	26.09	425 171	20.21	353 699	41.72
Service Sector	**10 176 417**	**19.44**	**8 520 419**	**30.81**	**6 513 578**	**33.06**	**4 895 184**	**94.79**
Knowledge-intensive	4 336 877	16.69	3 716 449	28.17	2 899 554	45.38	1 994 525	95.14
Non-knowledge-intensive	5 839 540	21.56	4 803 970	32.93	3 614 024	24.59	2 900 659	94.55

▲The gross value of production of all industries increased nearly 10%, with slowdown of growth for past five years.

In 2011, the gross value of production of all industries amounted to NT$10 trillion 671.4 billion, with an increase of 9.87% for past five years, significantly lower than 43.87%, the growth rate of 2006 census, showing slowdown of growth momentum; in terms of two Sectors, the gross value of production of Industrial Sector amounted to NT$4 trillion 817.5 billion or accounted for 45.14%, with an increase of 3.77% for past five years; the same of Service Sector amounted to NT$5 trillion 853.9 billion, with an increase of 15.47% for past five years, so that its proportion over entire enterprises raised to 54.86% from 52.20% of 2006, with an increase of 2.66 percentage points. Among all industries, Manufacturing's gross value of production amounted to NT$4 trillion 145 billion, with an increase of NT$89.2 billion or 2.20% only for past five years; although accounting for 38.84% of entire enterprises, it still was the top one of all industries; however, it used more than 80% of Industrial Sector's capital input, with an increase of assets used in operation more than NT$5 trillion for past five years, its output growth momentum remained to be strengthened. Gross value of production of Consumer goods, Chemical, Metal and mechanical industries among four main industries increased for past five years; Information and electronic industry decreased 4.04%, however, it contributed to NT$1 trillion 656.2 billion of gross value of production, still being the top one of four main industries. Construction, due to continued public works input, and raising subcontract business, showed most significant gross value of production growth rate up to 26.06% for past five years; as for Knowledge-intensive services, it grew 14.27% only, due to downturn of Financial and Insurance Activities' interest rate, and spreads reduction; Non-knowledge-intensive services due to benefiting from such factors as lively real estate transactions, growing passengers to Taiwan, and people's increasing emphasis on leisure, driven by the gross value of production growth of Real Estate Activities, Accommodation and Food Service Activities, showed the gross value of production growth of 16.51%, slightly higher than that of Knowledge-intensive services.

Table 11 Changes in the gross value of production of enterprise units of all industries for past four censuses, by enterprise scale and industry

Unit: NT$ million

	2011 census		2006 census		2001 census		1996 census	
	Annual gross value of production	Diff. with previous census (%)	Annual gross value of production	Diff. with previous census (%)	Annual gross value of production	Diff. with previous census (%)	Annual gross value of production	Diff. with previous census (%)
Grand Total	**10 671 382**	**9.87**	**9 712 401**	**43.87**	**6 750 699**	**17.60**	**5 740 172**	**64.46**
By Sector & Enterprise Scale								
Large enterprises	5 856 931	7.58	5 444 436	53.29	3 551 745	24.73	2 847 628	55.29
SMEs	4 814 451	12.80	4 267 966	33.42	3 198 954	10.59	2 892 545	74.61
Micro enterprises	*1 412 341*	*18.20*	*1 194 888*	*32.04*	*904 957*	*23.67*	*731 736*	*88.83*
Industrial Sector	**4 817 467**	**3.77**	**4 642 662**	**51.50**	**3 064 473**	**9.17**	**2 807 024**	**45.73**
Large enterprises	3 025 967	2.67	2 947 412	61.74	1 822 342	20.43	1 513 149	38.39
SMEs	1 791 500	5.68	1 695 249	36.48	1 242 131	-4.00	1 293 876	55.36
Micro enterprises	240 712	6.00	227 078	50.31	151 070	1.93	148 211	93.44
Service Sector	**5 853 915**	**15.47**	**5 069 740**	**37.53**	**3 686 226**	**25.67**	**2 933 148**	**87.53**
Large enterprises	2 830 963	13.37	2 497 024	44.39	1 729 403	29.59	1 334 479	80.26
SMEs	3 022 952	17.50	2 572 716	31.47	1 956 823	22.40	1 598 669	94.05
Micro enterprises	*1 171 628*	*21.06*	*967 810*	*28.38*	*753 888*	*29.20*	*583 525*	*87.70*
By Industry								
Industrial Sector	**4 817 467**	**3.77**	**4 642 662**	**51.50**	**3 064 473**	**9.17**	**2 807 024**	**45.73**
Manufacturing	4 145 015	2.20	4 055 778	57.30	2 578 435	13.48	2 272 141	41.06
Consumer goods ind.	554 222	8.79	509 439	5.42	483 252	-13.15	556 448	17.54
Chemical industry	819 401	6.96	766 077	30.22	588 275	0.81	583 521	25.98
Metal & mechanical ind.	1 115 222	5.77	1 054 335	49.87	703 476	-3.64	730 086	47.45
Info & electronic ind.	1 656 171	-4.04	1 725 928	114.82	803 432	99.82	402 087	124.62
Construction	476 168	26.06	377 728	46.39	258 022	-21.06	326 876	92.55
Others	196 284	-6.15	209 156	-8.27	228 016	9.62	208 008	42.77
Service Sector	**5 853 915**	**15.47**	**5 069 740**	**37.53**	**3 686 226**	**25.67**	**2 933 148**	**87.53**
Knowledge-intensive	2 707 015	14.27	2 368 871	55.02	1 528 065	32.96	1 149 255	91.97
Non-knowledge-intensive	3 146 901	16.51	2 700 868	25.15	2 158 161	20.98	1 783 893	84.77

▲In 2011, among all industries’ gross value of production, labor compensation accounted for 43.52%, queued as the first. Operating surplus decreased by 2.41 percentage points for past five years.

In 2011, among all industries’ gross value of production structure, labor compensation accounted for 43.52%, being the highest, followed by operating surplus for 40.29%, depreciation for 12.92%, and indirect taxes for 3.27%. If compares with 2006 census, operating surplus’ proportion declined to 40.29% from 42.70% of 2006, with a decrease of 2.41 percentage points for past five years, that was affected by the deficit of semi-conductor and part of optoelectronics Industry among Manufacturing, because Manufacturing’s operating surplus proportion decreased by 9.62 percentage points for past five years. All enterprises' labor compensation proportion raised 1.46 percentage points. Among all industries, Manufacturing's labor compensation proportion increased 4.88 percentage points with more increase. Additionally, since petrochemicals, basic metals and semi-conductor industries continued to expand the plant and other investments, Manufacturing's depreciation proportion increased 4.50 percentage points for past five years, so that all industries' depreciation proportion increased to 12.92% from 11.81% of 2006, with an increase of 1.11 percentage points.

▲For the proportion of labor compensation over gross value of production, Large enterprises increased 4.51 percentage points, while SMEs decreased by 2.69 percentage points.

In 2011, due to Industrial Sector's sharp drop in profit, Large enterprises' proportion of operating surplus over gross value of production declined to 37.49% from 44.26% of 2006, with a decrease of 6.77 percentage points; as a result, labor compensation proportion increased 4.51 percentage points, up to 39.37%. SMEs who absorbed 65% persons engaged increased operating surplus to 43.69% from 40.70% of 2006, with an increased proportion by 2.99 percentage points for past five years; however, labor compensation proportion declined to 48.56% from 51.25% of 2006, with a decrease of 2.69 percentage points for past five years. Among all enterprises, Industrial and Service Sector declined 1.86 and 2.96 percentage points respectively, showing that entire SMEs' labor compensation growth for past five years was not raised as gross value of production.

Table 12 The gross value of production distribution of enterprise units of all industries,

by enterprise scale and industry

Unit: %

	Labor compensation		Operating surplus		Depreciation		Indirect taxes	
	2011	2006	2011	2006	2011	2006	2011	2006
Overall average	**43.52**	**42.06**	**40.29**	**42.70**	**12.92**	**11.81**	**3.27**	**3.43**
By Sector & Enterprise Scale								
Large enterprises	39.37	34.86	37.49	44.26	19.00	16.64	4.13	4.25
SMEs	48.56	51.25	43.69	40.70	5.53	5.66	2.22	2.39
Micro enterprises	*48.27*	*49.87*	*44.95*	*42.54*	*3.87*	*4.24*	*2.91*	*3.35*
Industrial Sector	**42.71**	**38.57**	**31.14**	**39.15**	**21.62**	**17.90**	**4.54**	**4.38**
Large-scale enterprises	36.78	29.36	27.28	41.06	29.72	23.70	6.22	5.87
SMEs	52.71	54.57	37.66	35.83	7.94	7.81	1.69	1.79
Micro enterprises	*54.86*	*54.08*	*38.43*	*38.84*	*4.50*	*4.59*	*2.22*	*2.49*
Service Sector	**44.19**	**45.26**	**47.81**	**45.94**	**5.77**	**6.24**	**2.23**	**2.56**
Large enterprises	42.15	41.34	48.40	48.03	7.55	8.30	1.90	2.33
SMEs	46.10	49.06	47.26	43.92	4.10	4.23	2.54	2.79
Micro enterprises	*46.92*	*48.88*	*46.29*	*43.41*	*3.74*	*4.16*	*3.06*	*3.55*
By Industry								
Industrial Sector	**42.71**	**38.57**	**31.14**	**39.15**	**21.62**	**17.90**	**4.54**	**4.38**
Manufacturing	41.75	36.87	31.00	40.62	22.23	17.73	5.02	4.78
Consumer goods industry	43.09	46.64	37.81	33.65	10.43	10.90	8.67	8.81
Chemical industry	36.57	37.26	34.95	33.92	16.03	15.22	12.44	13.60
Metal & mechanical Ind.	48.38	47.68	35.97	39.41	11.10	9.59	4.56	3.32
Info & electronic Ind.	39.40	27.20	23.42	46.40	36.75	25.84	0.43	0.56
Construction	55.04	61.79	40.81	32.94	2.89	3.62	1.26	1.66
Others	32.96	29.59	10.54	21.75	54.11	46.95	2.39	1.71
Service Sector	**44.19**	**45.26**	**47.81**	**45.94**	**5.77**	**6.24**	**2.23**	**2.56**
Knowledge-intensive	40.83	40.49	51.87	51.13	5.00	5.73	2.29	2.64
Non-knowledge-intensive	47.07	49.43	44.33	41.39	6.42	6.68	2.18	2.49

(5) Changes in industrial structure

▲Industrial Sector's proportion of input and output over all industries decreased for past five years, due to Manufacturing's growth slowdown.

From 1960s, domestic labor-intensive products export have grown rapidly, driving industrial economy industrialization; till 1970s, the Government planned to develop capital-intensive Industry, promoting more solid and complete entire industrial structure, so that Industrial Sector's output rose significantly, becoming the spindle of domestic economic growth. In 1991 census, Industrial Sector's persons engaged and gross value of production accounted for 54.47% and 55.19% of all industries. Thereafter by the rising of developing countries, domestic labor-intensive industry's advantage gradually lost, causing to move out, and the number of persons engaged of Industrial Sector declined to 2 million 948 thousand in

2001 census from 3 million 195 thousand found in 1991 census; in the same period, the proportion of gross value of production over all industries also declined to 45.39% from 55.19%, while the proportion of assets used in operation showed increase by capital-intensive industry's input.

In 2006 census, under stabilized Consumer goods industry and flourishing Information and electronic industry, Industrial Sector showed significant growth, particularly, the annual average labor compensation of per person engaged was NT$553 thousand, beyond NT$532 thousand that of Service Sector for the first time with the difference of NT$21 thousand. In the 2011 census, the difference between two Sectors expanded to NT$56 thousand, showing more significant growth of salary of Industrial Sector for past five years. In 2011 census, owing to real estate boom and the rising awareness of environmental protection, drove significant growth of number of construction and pollution remediation related industries. In addition, the stability has returned to Consumer goods industry, and Metal and mechanical industry became more prosperous, the number of enterprise units in Industrial Sector for past five years grew by 10.24%, higher than 6.43% found in Service Sector; however, because the highly competitive market of Information and electronic industry, ups and downs of global economic, and the demand of Industrial Sector was weak, that related resources input was conservative, and output increase was limited. In the same period, although the number of persons engaged, gross value of production, and assets used in operation increased 3.82%, 3.77% and 20.98% respectively, they were below the growth rate of all industries, and showed significant decline as contrast to the growth rate of 9.93%, 51.50% and 33.04% found in 2006, so that various input and output proportions showed decrease.

▲Service Sector was better than Industrial Sector in creating employment opportunities and the momentum of added value for past five years.

Service Sectors accounting for most of enterprise units for long, benefited by export boom, driving the people's income levels and improving the quality of life, from 1991 to 2001, its output and assets showed doubling increase, and the number of persons engaged has already been beyond Industrial Sector's from 1996, becoming the main force of domestic labor market, creating a lot of employment opportunities, and making up for the released manpower of relocated traditional industries. Its number of persons engaged for past four censuses showed growing, with successive increases of proportion over all industries. Till the end of 2011, it has reached 58.04% already, with the growth rate of 7.97% for past five years, showing slowdown, but was still higher that 3.82% of Industrial Sector. In addition, its assets used in operation input reached NT$105 trillion 852.6 billion, showing increase of proportion over all industries for nearly two censuses. Till the end of 2011, its proportion was up to 77.13%. Among all industries, Financal and Insurance Activities (including Compulsory Social Security Activities) contributed to NT$82 trillion 615.8 billion, being the number one; its gross value of production of NT$5 trillion 853.9 billion, grew by 15.47% for past five years, and the growing momentum of added value was higher than that of Industrial Sector, so that its proportion over all industries promoted to 54.86%; however, its growth rate was the lowest for past four censuses, these were mainly due to the stabilized development of financial and telecommunications industries, and Wholesale and Retail Trade was not easy to expand the domestic demand market.

Table 13 Operation status of enterprise units of all industries for past five censuses

	Year-end no. of enterprise units (enterprise)		Year-end no. of persons engaged (1,000 persons)		Average annual labor compensation per person engaged (NT$1,000)		Annual gross value of production (NT$ billion)		Year-end assets used in operation (NT$ billion)	
	Industrial Sector	Service Sector	Industrial Sector	Service Sector	Industrial Sector	Service Sector	Industrial Sector	Service Sector	Industrial Sector	Service Sector
Grand Total (real number)										
1991 census	167 654	571 260	3 195	2 670	285	292	1 926.2	1 564.1	7 584.0	24 591.5
1996 census	205 907	660 666	3 135	3 452	431	441	2 807.0	2 933.1	12 899.1	40 767.8
2001 census	200 890	734 426	2 948	3 716	489	515	3 064.5	3 686.2	19 499.5	57 336.2
2006 census	226 050	879 054	3 240	4 310	553	532	4 642.7	5 069.7	25 942.0	80 721.2
2011 census	249 201	935 610	3 364	4 653	612	556	4 817.5	5 853.9	31 383.6	105 852.6
Overall average (Structure ratio (%))										
1991 census	22.69	77.31	54.47	45.53	-	-	55.19	44.81	23.57	76.43
1996 census	23.76	76.24	47.60	52.40	-	-	48.90	51.10	24.04	75.96
2001 census	21.48	78.52	44.24	55.76	-	-	45.39	54.61	25.38	74.62
2006 census	20.46	79.54	42.92	57.08	-	-	47.80	52.20	24.32	75.68
2011 census	21.03	78.97	41.96	58.04	-	-	45.14	54.86	22.87	77.13

▲The Information and electronic industry developed rapidly for past 20 years; however, relevant input slowed down for past 5 years, leading to insufficient production of added value created.

With the principles of international comparative advantage, Manufacturing's structure had significant adjustments. In 1991 census, Consumer goods industry, Chemical industry and Metal and mechanical industry were three major industries of Manufacturing, with input and output accounting for about 30% of Manufacturing respectively. However, the low production costs in emerging countries stimulated the relocation of domestic industry; particularly Consumer goods industry was the most significant, with relevant input and output decreased to the low point of 2006 census from 1991 census. In the same period, the number of enterprise units reduced nearly ten thousand, and the number of persons engaged reduced more than 40%; its proportions of gross value of production and assets used in operation over entire Manufacturing declined to 12.56% and 14.73% respectively. Although, it slightly stabilized in 2011 census, its gross value of production and assets used in operation was still the last one among four main industries of Manufacturing. Information and electronic industry was the development focus of industry for past 20 years. Since 1991 census, both relevant input and output showed significant growth, particularly the most significant being the gross value of production and assets used in operation, both proportions over entire Manufacturing greatly increased to 40% of 2011 census to about 10% of 1991 census. It has pulled up from the last one to the first place of four main industries in Manufacturing. However, for past five years, although its persons engaged and assets input showed continuous increase, the gross value of production showed decline, and its proportion also reduced by 2.59 percentage points, showing insufficient momentum to produce added value. In addition, to make an observation from creating employment opportunities, Information and electronic industry was the main source of increased number of persons engaged among Manufacturing, the growth rate of both 2001 and 2006 census were more than 30%; however, due to the impact of changes in the international economy and industry, and the formation of overseas production, in 2011 census, the growth rate increased 6.71% only, showing slowdown of growth momentum.

As for Chemical industry, due to impact by the rise of environmental awareness, its relevant input proportion declined most signifiacntly from 1991 to 2001. Especially the number of persons engaged decreased by nearly a quarter was the most significant; however, it has stabilized since 2006 census, and to 2011 census, its output growth rate was better than overall Manufacturing. The relevant input and output of Metal and mechanical industry was the number one among four main industries of Manufacturing found in both 1991 and 1996 census; however, due to the rapid expansion of Information and electronic industry, its assets used in operation and gross value of production has been relegated to second place since 2001 Census.

Table 14 Operation status of enterprise units of Manufacturing for past five censuses, by industry

	Year-end no. of enterprise units		Year-end no. of persons engaged		Labor compensation		Annual gross value of production		Year-end assets used in operation	
	(enterprise)	Structure ratio (%)	(1,000 persons)	Structure ratio (%)	(NT$ million)	Structure ratio (%)	(NT$ billion)	Structure ratio (%)	(NT$ billion)	Structure ratio (%)
1991 census	**140 457**	**100.00**	**2 665**	**100.00**	**752 576**	**100.00**	**1 610.7**	**100.00**	**6 003.7**	**100.00**
Consumer goods ind.	40 138	28.58	837	31.42	217 637	28.92	473.4	29.39	1 721.0	28.67
Chemical industry	31 759	22.61	624	23.40	185 893	24.70	463.2	28.76	1 648.2	27.45
Metal & mechanical ind.	62 192	44.28	865	32.45	250 938	33.34	495.1	30.74	1 942.4	32.35
Info & electronic ind.	6 368	4.53	339	12.73	98 109	13.04	179.0	11.11	692.0	11.53
1996 census	**154 557**	**100.00**	**2 524**	**100.00**	**1 065 445**	**100.00**	**2 272.1**	**100.00**	**10 093.3**	**100.00**
Consumer goods ind.	37 315	24.14	670	26.53	262 327	24.62	556.4	24.49	2 484.1	24.61
Chemical industry	33 724	21.82	537	21.26	246 678	23.15	583.5	25.68	2 662.8	26.38
Metal & mechanical ind.	75 410	48.79	920	36.45	381 312	35.79	730.1	32.13	3 156.7	31.28
Info & electronic ind.	8 108	5.25	398	15.75	175 128	16.44	402.1	17.70	1 789.7	17.73
2001 census	**141 376**	**100.00**	**2 427**	**100.00**	**1 175 875**	**100.00**	**2 578.4**	**100.00**	**16 111.0**	**100.00**
Consumer goods ind.	31 435	22.24	545	22.45	239 555	20.37	483.3	18.74	3 453.0	21.43
Chemical industry	30 275	21.41	479	19.72	249 428	21.21	588.3	22.82	3 572.0	22.17
Metal & mechanical ind.	71 025	50.24	850	35.04	384 850	32.73	703.5	27.28	3 627.4	22.52
Info & electronic ind.	8 641	6.11	553	22.79	302 042	25.69	803.4	31.16	5 458.7	33.88
2006 census	**148 019**	**100.00**	**2 696**	**100.00**	**1 495 253**	**100.00**	**4 055.8**	**100.00**	**21 993.6**	**100.00**
Consumer goods ind.	30 817	20.82	490	18.17	237 590	15.89	509.4	12.56	3 239.4	14.73
Chemical industry	31 158	21.05	481	17.83	285 414	19.09	766.1	18.89	4 657.0	21.17
Metal & mechanical ind.	76 933	51.98	986	36.57	502 713	33.62	1 054.3	26.00	4 757.5	21.63
Info & electronic ind.	9 111	6.16	739	27.43	469 536	31.40	1 725.9	42.55	9 339.8	42.47
2011 census	**157 284**	**100.00**	**2 789**	**100.00**	**1 730 584**	**100.00**	**4 145.0**	**100.00**	**27 083.3**	**100.00**
Consumer goods ind.	31 079	19.76	492	17.63	238 798	13.80	554.2	13.37	3 434.3	12.68
Chemical industry	32 264	20.51	478	17.14	299 658	17.32	819.4	19.77	5 639.6	20.82
Metal & mechanical ind.	84 393	53.66	1 030	36.94	539 520	31.18	1 115.2	26.91	6 161.3	22.75
Info & electronic ind.	9 548	6.07	789	28.29	652 608	37.71	1 656.2	39.96	11 848.0	43.75

▲Knowledge-intensive services were the main force in increasing contribution to manpower and capital input for Service Sector; however, its momentum to produce added value for past 5 years was less than that of Non-knowledge-intensive services.

Knowledge-intensive services industry's spillover effect was obvious, and one of the keys to drive new momentum for industry, with more open and liberalized industry policy. From 1991 census, Knowledge–intensive service of industry continued to be the major industry in increasing contribution to relevant input and output for Service Sector. In 2011 census, the number of enterprise units, persons engaged, labor compensation, assets used in operation, and gross value of production of Knowledge-intensive service accounted for overall Service Sector were 13.99%, 31.56%, 42.73%, 78.97% and 46.24% respectively, with the increase of 3.77, 5.57, 3.59, 5.59, and 4.79 percentage points respectively as against 2001; however, the gross value of production proportion slightly decreased by 0.49 percentage points for past 5 years, the main reasons were the development of finance and telecommunications toward mature, while Non-knowledge-intensive services driven by tourism and leisure-related industry, its gross value of production showed better than that of Knowledge-intensive services.

Table 15 Operation status of enterprise units of Service Sector for last five censuses, by Industry

	Year-end no. of enterprise units		Year-end no. of persons engaged		Labor compensation		Annual gross value of production		Year-end assets used in operation	
	(enterprise)	Structure ratio (%)	(1,000 persons)	Structure ratio (%)	(NT$ million)	Structure ratio (%)	(NT$ billion)	Structure ratio (%)	(NT$ billion)	Structure ratio (%)
1991 census	**571 260**	**100.00**	**2 670**	**100.00**	**779 367**	**100.00**	**1 564.1**	**100.00**	**24 591.5**	**100.00**
Knowledge-intensive	46 732	8.18	608	22.76	278 529	35.74	598.7	38.28	18 854.9	76.67
Non-knowledge-intensive	524 528	91.82	2 062	77.24	500 838	64.26	965.5	61.72	5 736.7	23.33
1996 census	**660 666**	**100.00**	**3 452**	**100.00**	**1 522 922**	**100.00**	**2 933.1**	**100.00**	**40 767.8**	**100.00**
Knowledge-intensive	66 531	10.07	841	24.35	548 249	36.00	1 149.3	39.18	29 227.0	71.69
Non-knowledge-intensive	594 135	89.93	2 611	75.65	974 673	64.00	1 783.9	60.82	11 540.8	28.31
2001 census	**734 426**	**100.00**	**3 716**	**100.00**	**1 912 023**	**100.00**	**3 686.2**	**100.00**	**57 336.2**	**100.00**
Knowledge-intensive	75 089	10.22	966	25.99	748 356	39.14	1 528.1	41.45	42 075.0	73.38
Non-knowledge-intensive	659 337	89.78	2 750	74.01	1 163 667	60.86	2 158.2	58.55	15 261.1	26.62
2006 census	**879 054**	**100.00**	**4 310**	**100.00**	**2 294 381**	**100.00**	**5 069.7**	**100.00**	**80 721.2**	**100.00**
Knowledge-intensive	113 961	12.96	1 291	29.97	959 261	41.81	2 368.9	46.73	62 848.5	77.86
Non-knowledge-intensive	765 093	87.04	3 018	70.03	1 335 120	58.19	2 700.9	53.27	17 872.7	22.14
2011 census	**935 610**	**100.00**	**4 653**	**100.00**	**2 586 666**	**100.00**	**5 853.9**	**100.00**	**105 852.6**	**100.00**
Knowledge-intensive	130 901	13.99	1 468	31.56	1 105 404	42.73	2 707.0	46.24	83 595.4	78.97
Non-knowledge-intensive	804 709	86.01	3 185	68.44	1 481 262	57.27	3 146.9	53.76	22 257.1	21.03

(6) Employment and output contribution of all industries

▲Information and electronic industry absorbed nearly 50 thousand new employment populations, accounting for 40% of that in Industrial Sector for past five years.

For past five years, the number of increased persons engaged of top best 10 subsectors in Industrial Sector amounted to 132,515, with a contribution rate of 107.10% to the number of increased persons engaged of that Sector. Among all subsectors, Manufacture of Electronic Parts and Components, Manufacture of Computers, Electronic and Optical Products of Information and electronic industry, due to deepening internationalization level, with the global economy gradually rivived, its assets used in operation increased 26.86% and persons engaged increased 49,640 for past five years, accounting for 40.12% of increased persons engaged of Industrial Sector, and total value of production increased NT$528.5 billion, up to NT$4 trillion 973.0 billion, accounting for 25.84% of that in Industrial Sector, with significant expansion of operation scale. However, because keen market competition, the value added ratio presented decline, especially, Manufacture of Electronic Parts and Components declined 7.41 percentage points, being the most significant. The warming up of real estate had a great effect on Specialized Construction Activities, its number of enterprise units increased more than 11 thousand and the number of persons engaged increased 22,085, being the second, and total value of production increased more than 40% for past five years. In addition, because the people’s concept of health and driving by tourism industry, the number of enterprise units of Manufacture of Food Products increased nearly 20%, the number of persons engaged increased 17,765 and total value of production increased nearly 50% for past five years; however, by the influence of entrenched upscale international price of bulk materials, its value added ratio declined by 6.56 percentage points.

▲Food and Beverage Service Activities increased more than 80 thousand employment opportunities, ranks first place of Service Sector for past five years.

For past five years, the top best 10 industry divisions of Service Sector by increased persons engaged, amounted to increase 294,150 persons in total, with contribution rate of 85.65% to the number of increased persons engaged of that sector. Among all subsectors, Food And Beverage Service Activities, driving by increase of eating-out population and leisure travel, showed the most vigorous development. The number of enterprise units increased more than 22 thousand, and the number of persons engaged increased more than 80 thousand for past five years, both being the top one of all subsectors. In addition, due to sustainable development of foreign workers and dispatch business, for past five years the number of enterprises for Employment Activities increased 22.10%, and the number of persons engaged increased 53,842, being the second, showing growth of total value of production nearly 50%, and significant increase of value added ratio by 5.38 percentage points, up to 84.05%. As for Human Health Activities, with an aging population and rising health consciousness, and increasing demand for public health, increased 45,025 persons for past five years, rank the third. Moreover, in recent years, the real estate has been boomed, and builders launched the construction projects actively, promoting to increase employment opportunities of related industries. Real Estate Operation and Related Activities increased 22,801 persons; Security and Investigation Activities increased 20,464 persons; Architecture and Engineering Activities; Technical Testing and Analysis also increased 13,344 persons.

Table 16 Increases in the number of persons engaged of enterprise units of all industries, by subsector

2011

	Year-end no. of persons engaged (person)	Diff with 2006 (person)	Year-end no. of enterprise units (enterprise)	Diff.with 2006 (%)	Annual total value of production (NT$ million)	Diff.with 2006 (%)	Value added ratio (%)	Diff. with 2006 (percentage points)
Grand Total (Overall average)	**8 017 072**	**467 160**	**1 184 811**	**7.21**	**29 422 674**	**22.54**	**36.27**	**-4.18**
Top 10 industry divisions of Industrial Sector, by increased no. of persons engaged								
Manufacture of Electronic Parts and Components	569 832	29 758	5 975	5.34	3 511 092	10.52	33.35	-7.41
Specialized Construction Activities	331 906	22 085	68 871	19.78	757 912	40.62	38.62	-3.85
Manufacture of Computers, Electronic and Optical Products	219 297	19 882	3 573	3.90	1 461 954	15.32	33.20	-0.79
Manufacture of Food Products	124 481	17 765	6 993	19.60	554 951	48.40	20.67	-6.56
Repair and Installation of Industrial Machinery and Equipment	46 640	9 664	6 758	77.00	129 633	57.90	36.40	-9.46
Manufacture of Electrical Equipment	130 929	9 195	6 246	6.44	626 975	14.99	22.99	-1.32
Manufacture of Fabricated Metal Products	341 098	7 574	41 200	7.27	1 156 284	21.79	23.79	-3.82
Manufacture of Basic Metals	105 833	6 765	4 676	3.77	1 494 751	28.35	12.91	-7.26
Manufacture of Other Transport Equipment and Parts	69 628	5 604	2 852	1.10	337 972	46.49	23.44	-3.59
Manufacture of Pharmaceuticals and Medicinal Chemical Products	25 623	4 223	499	2.89	92 325	54.06	34.90	-7.20
Top 10 industry divisions of Service Sector, by increased no. of persons engaged								
Food and Beverage Service Activities	350 722	80 728	106 269	26.27	439 963	47.33	50.30	1.43
Employment Activities	136 844	53 842	2 878	22.10	64 946	48.68	84.05	5.38
Human Health Activities	326 943	45 025	23 635	7.95	616 677	14.01	55.83	-2.89
Wholesale Trade	1 063 981	23 124	213 060	6.44	1 998 396	23.58	62.77	-3.64
Real Estate Operation and Related Activities	74 646	22 801	12 101	50.47	174 539	56.08	60.66	1.87
Security and Investigation Activities	84 591	20 464	676	24.72	50 732	28.50	81.59	1.84
Accommodation	68 058	14 360	6 095	33.02	105 947	30.57	56.22	3.61
Architecture and Engineering Activities; Technical Testing and Analysis	54 923	13 344	7 077	20.30	137 033	45.00	45.29	-5.24
Computer Systems Design Services	61 260	10 738	5 467	24.02	157 093	10.45	42.52	2.00
Specialized Design Activities	21 967	9 724	6 594	49.83	61 464	94.02	44.37	3.59

▲As for annual total value of production, Manufacture of Chemical Material increased NT$583.9 billion, being the first in Industrial Sector for past five years.

In 2011, the top 10 subsectors of Industrial Sector by the increased amount of total value of production, showed contribution rate up to 74.87% to increase total value of production of the Sector. Among all subsectors, petrochemical-related industries, under the international oil prices maintaining with top grade, presented brisk performance of output growth. For past five years, Manufacture of Chemical Material and Manufacture of Petroleum and Coal

Products increased NT$583.9 billion and NT$382.8 billion of total value of production respectively, being reckoned the first and second respectively, with total contributions to a quarter of increased total value of production of entire Industrial Sector. Manufacture of Electronic Parts and Components was reckoned number one of all subsectors in 2006 census, by increased amount of total value of production, and due to intense competition and low price of semi-conductor and optoelectronics Industry, total value of production increased NT$334.3 billion only for past five years, down at number 3, and value added ratio also reduced by 7.41 percentage points. Metal-related industry plays an important role and can been seen as industrial base in Taiwan, among which Manufacture of Basic Metals and Manufacture of Fabricated Metal Products amounted to increase more than 30% of assets input for past five years, with moderate growth of operation scale; in first half of 2011, soared high international prices of raw materials pushed up selling price, while in the second half of 2011, although affected by European debt crisis, with slowing demand, the annual international raw materials prices was still in top grade, so that their total value of production increased NT$330.1 billion and NT$206.9 billion for past five years, being the 4th and 7th position respectively, and value added ratio reduced by 7.26 and 3.82 percentage points respectively. In addition, due to economic boom of real estate and public construction's continuous input, for past five years, the number of enterprise units, and persons engaged of Specialized Construction Activities increased nearly 20%, and 7.13% respectively, driving to increase NT$218.9 billion of the total value of production, being reckoned number five.

▲In 2011, Wholesale Trade increased NT$381.3 billion of annual total value of production, ranks first place among Service Sector.

In 2011, the top 10 subsectors of Service Sector, by increased amount of total value of production, showed contribution rate up to 77.28% to increase total value of production of the Sector. Among all subsectors, Wholesale Trade's total value of production amounted to NT$1 trillion 998.4 billion, with an increase of NT$381.3 billion for past five years, contributing to 23% of increased total value of production of entire Service Sector. The total value of production of Insurance (including Compulsory Social Security Activities) and Food and Beverage Service Activities increased NT$149.5 billion and NT$141.3 billion respectively, being the second and the third; as for Retail Trade and Financial Intermediation of Service Sector which were reckoned the 2nd and 3rd in 2006 census, relegated to the 8th and the 5th position in this census respectively because sluggish domestic consumption of the former, and the latter was affected by the downturn in interest rates and spreads down.

Table 17 The increases of total value of production enterprise units of all industries, by subsector

2011

	Annual total value of production			Year-end No. of enterprise units		Year-end number of persons engaged		Value added ratio	
	(NT$ million)	Diff. with 2006 (NT$ million)	Contribution rate of increased total value of prod. (%)	(enterprise)	Diff. with 2006 (%)	(person)	Diff. with 2006 (%)	(%)	Diff. with 2006 (percentage points)
Grand Total (Overall average)	**29 422 674**	**5 412 947**	**100.00**	**1 184 811**	**7.21**	**8 017 072**	**6.19**	**36.27**	**-4.18**
Top 10 subsectors of Industrial Sector, by increased total of production									
Manufacture of Chemical Material	2 207 033	583 856	15.54	1 547	16.75	85 101	0.53	15.55	-1.75
Manufacture of Petroleum and Coal Products	1 425 242	382 778	10.19	154	-21.03	20 665	9.58	9.09	-6.38
Manufacture of Electronic Parts and Components	3 511 092	334 293	8.90	5 975	5.34	569 832	5.51	33.35	-7.41
Manufacture of Basic Metals	1 494 751	330 137	8.79	4 676	3.77	105 833	6.83	12.91	-7.26
Specialized Construction Activities	757 912	218 931	5.83	68 871	19.78	331 906	7.13	38.62	-3.85
Manufacture of Machinery and Equipment	952 775	209 753	5.58	19 086	5.37	239 005	0.63	26.05	-2.69
Manufacture of Fabricated Metal Products	1 156 284	206 888	5.51	41 200	7.27	341 098	2.27	23.79	-3.82
Manufacture of Computers, Electronic and Optical Products	1 461 954	194 217	5.17	3 573	3.90	219 297	9.97	33.20	-0.79
Manufacture of Food Products	554 951	181 005	4.82	6 993	19.60	124 481	16.65	20.67	-6.56
Electricity and Gas Supply	598 104	170 932	4.55	171	3.01	32 550	1.25	23.31	-14.15
Top 10 subsectors of Service Sector, by increased total of production									
Wholesale Trade	1 998 396	381 251	23.02	213 060	6.44	1 063 981	2.22	62.77	-3.64
Insurance; Compulsory Social Security Activities	620 476	149 510	9.03	1 106	-6.51	124 900	-4.43	26.51	-16.13
Food and Beverage Service Activities	439 963	141 331	8.53	106 269	26.27	350 722	29.90	50.30	1.43
Land Transportation	389 394	121 279	7.32	45 392	-10.74	206 276	-2.34	49.83	-1.94
Financial Intermediation	1 444 701	108 770	6.57	11 024	45.59	203 564	1.96	86.92	6.83
Real Estate Development Activities	255 165	107 944	6.52	8 212	7.59	37 057	15.49	65.80	1.40
Human Health Activities	616 677	75 763	4.58	23 635	7.95	326 943	15.97	55.83	-2.89
Retail Trade	1 002 063	68 760	4.15	282 640	-2.48	848 510	-0.07	67.15	-0.82
Real Estate Operation and Related Activities	174 539	62 713	3.79	12 101	50.47	74 646	43.98	60.66	1.87
Telecommunications	404 644	62 503	3.77	349	154.74	41 283	1.46	56.53	-4.90

3. Change status of operating efficiency in all industries

(1) Changes of operating efficiency

▲SMEs was better than Large enterprises in upgrade rate of labor input and output efficiency for past five years.

In 2011, all industries' labor productivity (total value of production per person engaged) was NT$3.67 million, with an increase of 15.41% for past five years, while unit labor cost (average labor compensation of total value of production per NT$) was NT$0.16, lower 7.23% as against 2006, showing upgraded labor input and output efficiency for past five years, among all industries, Large enterprises benefited from efficiency of scale economy, its labor productivity was NT$6.10 million, being 2.56 times of SMEs' NT$2.38 million, and its unit labor cost was NT$0.14, lower than SMEs' NT$0.19; however, for past five years SMEs' labor productivity grew by 16.44%, and unit labor cost declined 12.20%, while Large enterprises grew by 12.50% and declined 1.32% respectively, showing SMEs' upgrade rate of labor input and output efficiency was more significant during the same period.

▲Industrial Sector's labor productivity increased 19.69%, higher than 10.62%, the growth rate of Service Sector, for past five years.

In 2011, Industrial Sector's labor productivity increased 19.69%, higher than 10.62% of Service Sector's growth rate, among which Energy Supply, and Remediation Activities-based "Others" industries due to benefiting from the warming of related industries such as Energy Supply, Materials Recovery, their labor productivity increased 35.63%, being the number one. Construction, driven by such factors as real estate boom, continuous infrastructure input, grew by 22.47%; in addition, since Information and electronic industry's overseas production ratio rose, and intense competition in the international market, its labor productivity grew by 4.86% only for past five years, so that Manufacturing's growth rate was lower than other industries of Industrial Sector. As for Service Sector's output value promoted for past five years, though, its labor productivity growth was lower than that of Industrial Sector, because the number of persons engaged in Knowledge-intensive services increased rapidly.

▲Industrial Sector's unit output labor costs decreased by 7.53%, with larger degree of reduction than Service Sector's 5.61% for past five years.

In 2011, Industrial Sector's unit output labor costs declined 7.53%, among which "Others" industries were the most by decreasing of 24.90%. Service Sector declined 5.61%, among which Non-knowledge-intensive services declined 8.73%, and Knowledge-intensive services declined 1.25%. Among four main industries of Manufacturing, Chemical industry declined 21.30% to the highest, Consumer goods industry declined 19.09% to the second; as for Information and electronic industry because of amplified overseas production, slowed-down output growth, and domestic personnel were most of R&D and management staff with higher labor compensation, instead its unit output labor costs increased 24.22% for past five years.

Table 18 Labor productivity and unit output labor costs of all industries, by enterprise scale and industry

	Labor productivity (NT$1,000)			Unit output labor costs (NT$)		
	2011	2006	Rate of change (%)	2011	2006	Rate of change (%)
Overall average	**3 670**	**3 180**	**15.41**	**0.16**	**0.17**	**-7.23**
By Sector & Enterprise scale						
Large enterprises	6 104	5 426	12.50	0.14	0.14	-1.32
SMEs	2 380	2 044	16.44	0.19	0.21	-12.20
Micro enterprises	*1 424*	*1 292*	*10.22*	*0.26*	*0.29*	*-10.59*
Industrial Sector	**5 721**	**4 780**	**19.69**	**0.11**	**0.12**	**-7.53**
Large enterprises	9 407	8 147	15.47	0.09	0.09	1.41
SMEs	3 480	2 907	19.71	0.13	0.15	-15.13
Micro enterprises	*1 995*	*1 727*	*15.52*	*0.19*	*0.23*	*-17.97*
Service Sector	**2 187**	**1 977**	**10.62**	**0.25**	**0.27**	**-5.61**
Large enterprises	3 311	3 139	5.48	0.24	0.24	0.37
SMEs	1 650	1 431	15.30	0.27	0.30	-10.84
Micro enterprises	*1 286*	*1 183*	*8.71*	*0.29*	*0.32*	*-8.38*
By Industry						
Industrial Sector	**5 721**	**4 780**	**19.69**	**0.11**	**0.12**	**-7.53**
Manufacturing	6 125	5 142	19.12	0.10	0.11	-6.09
Consumer goods industry	4 013	3 243	23.74	0.12	0.15	-19.09
Chemical industry	10 372	7 732	34.14	0.06	0.08	-21.30
Metal and mechanical industry	5 028	4 172	20.52	0.10	0.12	-14.78
Information and electronic industry	6 302	6 010	4.86	0.13	0.11	24.22
Construction	2 785	2 274	22.47	0.19	0.21	-13.51
Others	11 199	8 257	35.63	0.09	0.12	-24.90
Service Sector	**2 187**	**1 977**	**10.62**	**0.25**	**0.27**	**-5.61**
Knowledge-intensive	2 953	2 878	2.61	0.25	0.26	-1.25
Non-knowledge-intensive	1 834	1 592	15.20	0.25	0.28	-8.73

Note: 1.Labor productivity = Total value of production ÷ Number of persons engaged; Unit output labor Costs = Labor compensation ÷ Total value of production.

2. The rate of change of “Unit output labor Costs” in this table is calculated by two-year values taking five decimals.

▲For past five years, the capital productivity of all industries declined 4.76%, but that of Industrial Sector increased 2.71%.

In 2011, all industries' capital productivity (average total production value of assets used in operation per NT$) was NT$0.21, with decline of 4.76% as against 2006. Among two main sectors, Industrial Sector's capital productivity was NT$0.61, with an increase of 2.71% for past five years, among which Construction, due to relatively stable capital growth and brisk output performance for past five years, its capital productivity upgraded 25.70% to the highest, while Manufacturing slightly rose 0.08%, because Information and electronic industry actively carried out overseas deployment, overseas production continued to rise, affecting output contribution to decline 11.80% for past five years. As for Service Sector, its capital productivity was NT$0.10 with a decrease of 8.92%, due to related industry development toward matured, limited overall output growth, and larger financial sector's long-term investments growth rate; among which Knowledge-intensive services' capital productivity declined 12.26% for past five years, being the most significant.

▲During 5-year period, the value added ratio of all industries declined 4.18 percentage points, among which Information electronic industry declined 5.53 percentage points.

Because international raw material prices continuously stayed in top grade, and encountered the European debt crisis, as a result consumer markets became more conservative, and product prices were not easy to raise, in 2011, all industries' value added ratio (the proportion of gross value of production over total value of production) declined 36.27% from 40.45% in 2006, with a decrease of 4.18 percentage points for past five years, among which Large enterprises declined 5.00 percentage points, being the most. Industrial Sector's value added ratio was 25.03%, among which Information and electronic industry of Manufacturing actively deployed overseas and operated international resources, lowering production cost, so that its value added ratio was 33.30%, being the top one of Manufacturing; however, it declined 5.53 percentage points for past five years, showing its operating mode to emphasize production efficiency, and failure to effectively master the key technology, so that to enhance added value was limited. Service Sector's value added ratio was 57.52%, with a decline of 1.98 percentage points for past five years, among which Non-knowledge-intensive services declined 2.33 percentage points, showing more significant mainly because Wholesale Trade's soaring cost of purchase, and the price was difficult to pass on, plus the impact of market-related operating costs. As for Knowledge-intensive services due to intense competition in the domestic market, in order to strengthen the competitive niche, its enterprises gradually focused on customer satisfaction-oriented, driving increase of related service costs, that caused value added ratio to decline 1.32 percentage points for past five years .

▲In 2011, the profit rate of all industries was 6.37%, with a decline of 0.86 percentage points for past five years.

In 2011, all industries' profit rate was 6.37%, with a decline of 0.86 percentage points as against 2006. SMEs' profit rate was 8.28%, higher than 5.25% that of Large enterprises, and Micro enterprises reached 11.84% with the best performance, showing that smaller enterprises have stronger ability to respond the changes of market demand, being able to demonstrate high flexible operating mode in production or marketing aspect. Due to operating loss of part of Semi-conductor and Optoelectronics Industries, in Manufacturing, Information and electronic industry's profit rate was 2.60% only, amounting to decrease of 5.29 percentage points, so that Industrial Sector's profit rate also decreased by 2.99 percentage points, being 4.88%. Service Sector's profit rate was 8.07%, with an increase of 1.47 percentage points in the same period, among Service Sector Knowledge-intensive services benefiting from improved quality of Financial Activities' assets, and such mobile carrier as smart-phone drove 3G business development, promoted 4.01 percentage points for past five years, higher than 0.29 percentage points of Non-knowledge-intensive services.

Table 19 Capital productivity and profit making of enterprise of all industries, by enterprise scale and industry

	Capital productivity (NT$)			Value added ratio (%)			Profit rate (%)		
	2011	2006	Rate of change (%)	2011	2006	Percentage points of increase/ decrease	2011	2006	Percentage points of increase/ decrease
Overall average	**0.21**	**0.23**	**-4.76**	**36.27**	**40.45**	**-4.18**	**6.37**	**7.23**	**-0.86**
By Sector & Enterprise Scale									
Large enterprises	0.16	0.17	-5.00	34.55	39.55	-5.00	5.25	6.98	-1.73
SMEs	0.42	0.44	-2.81	38.60	41.66	-3.06	8.28	7.61	0.67
Micro enterprises	*0.34*	*0.34*	*0.28*	*54.51*	*59.01*	*-4.50*	*11.84*	*11.95*	*-0.11*
Industrial Sector	**0.61**	**0.60**	**2.71**	**25.03**	**29.97**	**-4.94**	**4.88**	**7.87**	**-2.99**
Large enterprises	0.51	0.50	2.34	25.29	31.23	-5.94	4.12	8.29	-4.17
SMEs	0.92	0.86	6.38	24.61	28.01	-3.40	6.78	6.97	-0.19
Micro enterprises	*1.11*	*0.81*	*37.33*	*33.88*	*41.90*	*-8.02*	*11.32*	*14.61*	*-3.29*
Service Sector	**0.10**	**0.11**	**-8.92**	**57.52**	**59.50**	**-1.98**	**8.07**	**6.60**	**1.47**
Large enterprises	0.06	0.07	-12.29	56.81	57.71	-0.90	6.97	5.26	1.71
SMEs	0.24	0.26	-5.07	58.21	61.35	-3.14	9.34	8.03	1.31
Micro enterprises	*0.27*	*0.28*	*-3.66*	*62.30*	*65.26*	*-2.96*	*11.95*	*11.46*	*0.49*
By Industry									
Industrial Sector	**0.61**	**0.60**	**2.71**	**25.03**	**29.97**	**-4.94**	**4.88**	**7.87**	**-2.99**
Manufacturing	0.63	0.63	0.08	24.26	29.26	-5.00	4.79	8.02	-3.23
Consumer goods industry	0.57	0.49	17.17	28.08	32.06	-3.98	9.40	8.43	0.97
Chemical industry	0.88	0.80	10.16	16.53	20.61	-4.08	6.27	7.99	-1.72
Metal and mechanical industry	0.84	0.86	-2.75	21.53	25.63	-4.10	6.63	8.11	-1.48
Information and electronic industry	0.42	0.48	-11.80	33.30	38.83	-5.53	2.60	7.89	-5.29
Construction	0.76	0.61	25.70	33.64	34.65	-1.01	8.88	7.57	1.31
Others	0.31	0.25	22.49	26.31	39.01	-12.70	-0.84	3.72	-4.56
Service Sector	**0.10**	**0.11**	**-8.92**	**57.52**	**59.50**	**-1.98**	**8.07**	**6.60**	**1.47**
Knowledge-intensive	0.05	0.06	-12.26	62.42	63.74	-1.32	12.55	8.54	4.01
Non-knowledge-intensive	0.26	0.27	-2.39	53.89	56.22	-2.33	5.90	5.61	0.29

Note: 1. Capital productivity = Total value of production ÷ Assets used in operation.

2. The rate of change of “Capital productivity” in this table is calculated by two-year values taking five decimals.

(2) Changes of value added ratio

▲During 5-year period, among subsectors which value added ratios increased, Construction of Buildings in Industrial Sector was the number one, and Financial Intermediation in Service Sector was ranked champion.

Industry promotion is the key direction of domestic industry policy, hoping by enhancement of operating advantage, promotion industrial core technology, and development of key products to promote added value. To observe the changes of value added ratio of all subsectors in 2011, it is found that Industrial Sector's value added ratio decreased by 4.94 percentage points for past five years; however, value added ratio of Construction of Buildings, Manufacture of Leather, Fur and Related Products, Civil Engineering and Manufacture of Wearing Apparel and Clothing Accessories increased. In terms of Construction of Buildings, due to gradual adoption of the operating model of special subcontractor, accelerated to upgrade added value, and then reduced the demand of machinery and equipment, affecting expansion of assets used in operation, so that its value added ratio increased 1.20 percentage points, and assets used in operation lowered 0.73% for past five years. Civil Engineering, under continuous promotion of public work, and increase of natural disaster repair, the significant expansion of overall industry's boom, drove slight increase of added value. As for Manufacture of Leather, Fur and Related Products, and Manufacture of Wearing Apparel and Clothing Accessories, due to contributing to overseas deployment, integrating upstream, midstream, and downstream for vertical division of labor, and branching out into international production-marketing cooperation for horizontal division of labor, drove value added ratio to increase 1.01 and 0.35 percentage points respectively. However, due to industrial relocation, overseas production proportion increased; its number of enterprise units, manpower, and total value of production all declined. The value added ratios of subsectors ranked from the 5th to the 10th were lower than that of 2006, mainly because of affected by rising price of raw materials, and weakening ability of enterprises to pass price. Wastewater (Sewage) Treatment, Manufacture of Other Non-metallic Mineral Products, and Manufacture of Chemical Material still could maintain the level above the growth rate of Industrial Sector. However, Manufacture of Computers, Electronic and Optical Products created operating revenues more than NT$8 trillion 500 billion, with an increase of 80% for past five years, its overseas production proportion was more than 86%, so that total value of production increased 15.32%

only, and value added ratio slightly decreased by 0.79 percentage points.

Although affecting by interest spread down, Financial Intermediation’s total value of production for past five years grew less than 10%; however its assets quality improved and bad debts significantly lowered, so that value added ratio reached 86.92%, with an increase of 6.83 percentage points, being the top one of Service Sector; Gambling and Betting Activities benefiting from flexible marketing and increasingly diverse species of lottery, for past five years its total value of production increased more than 30%, and value added ratio also increased 5.72 percentage points, being the number two; Employment Activities, due to continuous development of foreign workers and dispatch operations, increased nearly 50% of total value of production, and the growth rate of value added ratio was ranked to the third. Benefiting from increasing prevalence of tourism, increase of international visitors, and rising average room rate, the added value had risen in Accommodation. As for Specialized Design Activities, Motion Picture, Video and Television Programme Activities, Sound Recording and Music Publishing Activities and Computer Systems Design Services, due to higher level of expertise, their added valued created was more obviously.

Table 20 The increases of value added ratio of enterprise units of all industries, by subsector

2011

	Value added ratio		Year-end number of persons engaged		Year-end No. of enterprise units		Year-end assets used in operation		Annual total value of production	
		Diff. with 2006		Diff. with 2006		Diff. with 2006		Diff. with 2006		Diff. with 2006
	(%)	(percentage points)	(person)	(%)	(enterprise)	(%)	(NT$ billion)	(%)	(NT$ billion)	(%)
Grand Total(Overall average)	**36.27**	**-4.18**	**8 017 072**	**6.19**	**1 184 811**	**7.21**	**137 236.2**	**28.66**	**29 422.7**	**22.54**
Top 10 Subsectors of Industrial Sector, by increased percentage points of value added ratio										
Construction of Buildings	27.73	1.20	84 094	3.16	7 815	4.17	550.0	-0.73	305.4	6.54
Manufacture of Leather, Fur and Related Products	31.94	1.01	26 403	-12.29	1 768	-2.80	146.6	20.22	61.7	-3.54
Civil Engineering	28.06	0.53	92 086	4.62	9 664	15.60	629.6	-1.32	352.0	33.10
Manufacture of Wearing Apparel and Clothing Accessories	36.75	0.35	50 319	-11.84	3 799	-4.16	149.9	-2.78	93.9	-7.26
Wastewater (Sewage) Treatment	38.40	-0.11	2 038	21.89	661	18.46	5.2	-0.94	4.8	37.47
Manufacture of Computers, Electronic and Optical Products	33.20	-0.79	219 297	9.97	3 573	3.90	4 837.8	56.67	1 462.0	15.32
Manufacture of Motor Vehicles and Parts	26.65	-1.29	97 204	4.41	3 575	5.15	556.8	-0.32	482.0	21.06
Manufacture of Electrical Equipment	22.99	-1.32	130 929	7.55	6 246	6.44	1 153.5	37.45	627.0	14.99
Manufacture of Other Non-metallic Mineral Products	31.74	-1.70	74 738	3.01	3 405	-0.29	885.4	24.39	492.5	27.48
Manufacture of Chemical Material	15.55	-1.75	85 101	0.53	1 547	16.75	2 748.8	15.86	2 207.0	35.97
Top 10 Subsectors of Service Sector, by increased percentage points of value added ratio										
Financial Intermediation	86.92	6.83	203 564	1.96	11 024	45.59	64 727.0	29.92	1 444.7	8.14
Gambling and Betting Activities	47.56	5.72	7 009	70.37	5 721	45.46	17.5	76.81	9.3	31.60
Employment Activities	84.05	5.38	136 844	64.87	2 878	22.10	37.0	16.30	64.9	48.68
Accommodation	56.22	3.61	68 058	26.74	6 095	33.02	425.2	17.43	105.9	30.57
Specialized Design Activities	44.37	3.59	21 967	79.42	6 594	49.83	64.9	76.35	61.5	94.02
Motion Picture, Video and Television Programme Production, Sound Recording and Music Publishing Activities	33.47	2.11	16 896	5.68	2 349	16.40	84.8	13.91	53.5	4.57
Computer Systems Design Services	42.52	2.00	61 260	21.25	5 467	24.02	228.2	4.16	157.1	10.45
Real Estate Operation and Related Activities	60.66	1.87	74 646	43.98	12 101	50.47	916.8	98.02	174.5	56.08
Security and Investigation Activities	81.59	1.84	84 591	31.91	676	24.72	62.3	9.89	50.7	28.50
Residential Care Activities	59.75	1.55	26 948	13.34	1 097	-2.05	117.4	-10.33	18.8	-0.88

4. Overview of optimized operations in all industries

(1) Digitalization

▲The number of enterprises operating E-commerce increased nearly one times, and internet trading popularity enhanced for past five years.

There were 390,670 enterprises operated E-commerce by computer or network equipment, increasing 98.96% for past five years; as for among enterprises operating E-commerce, the number of enterprises “Offering business information through internet”, “Purchasing on internet” and “Selling on internet” increased 1.05 times, 92.12% and 93.52% respectively, showing the promotion of enterprises’ internet trading popularity. Micro enterprises focused on “Offering business information through internet” and “Selling on internet”, amounting to increase of 1.40 times and 1.07 times respectively, both being the top of all enterprise scales. As for Large enterprises, the proportion of the enterprises “Purchasing on internet” increased 1.03 times, being the highest of all, and more concentrated in Service Sector; in addition, the number of enterprises “Selling on internet” increased 68.55%, among which Industrial Sector increased more by 1.09 times, displaying its increasingly diversified sales channels.

For past five years, enterprises in Service Sector offered business information through internet increased 1.07 times, higher than 99.73% of Industrial Sector; as for the growth rate of enterprises adopting internet trading type, Industrial Sector showed better; among all industries, the enterprises of “Other” industries in Industrial Sector, offering business information through internet increased 1.34 times, being the highest. The number of enterprises of Manufacturing adopting internet trading grew more than one times, better than other industries. As for Service Sector, the growth of enterprises operating E-commerce in Non-knowledge-intensive services was higher than that in Knowledge-intensive services.

▲In 2011, for the enterprise units purchasing on internet, the amount of purchasing on internet accounted for 16.69% of operating expenditures; for the enterprise units selling on internet, the amount of selling on internet accounted for 17.83% of operating revenues.

In terms of internet trading of E-commerce, in 2011, for the enterprise units purchasing on internet, the amount of their purchasing on internet accounted for 16.69% of operating expenditures; for the enterprise units selling on internet, the amount of their selling on internet accounted for 17.83% of operating revenues. Significantly, internet trading has become an important operating channel. The proportions of Large enterprises' purchasing and selling amounts on internet were 17.72% and 17.88% respectively, higher than those of SMEs, especially those of Industrial Sector's Large enterprises were up to 27.48% and 34.05% respectively, being the highest. As for Service Sector, the proportion of its SMEs' internet trading amount was higher. Among all industries, the proportion of Manufacturing's internet trading amount over operating revenues or expenditures was the highest, and with the rapidest growth rate; among Manufacturing Information and electronic industry's purchasing-on-internet expenditures accounted for 32.27% of operating expenditures, and revenues selling on internet accounted for 42.70% of operating revenues, with an increase of 21.57 percentage points and 23.79 percentage points respectively for past five years, being the industry of rapidest growth of internet trading.

Table 21 Overview of operating E-commerce of enterprise units of all industries, by enterprise scale and industry

2011

	Number of enterprise units (enterprise)	Diff. with 2006 (%)	Offering business information through internet: Number of enterprise units (enterprise)	Offering business information through internet: Diff. with 2006 (%)	Purchasing on internet: Number of enterprise units (enterprise)	Purchasing on internet: Diff. with 2006 (%)	Purchasing on internet: The proportion of amount over operating expenditures (%)	Purchasing on internet: Diff. with 2006 (percentage points)	Selling on internet: Number of enterprise units (enterprise)	Selling on internet: Diff. with 2006 (%)	Selling on internet: The proportion of amount over operating revenues (%)	Selling on internet: Diff. with 2006 (percentage points)
Grand Total (Overall average)	**390 670**	**98.96**	**377 980**	**105.11**	**79 530**	**92.12**	**16.69**	**5.26**	**70 933**	**93.52**	**17.83**	**8.29**
By Sector & Enterprise Scale												
Large enterprises	4 345	20.09	4 323	20.52	904	103.15	17.72	7.32	895	68.55	17.88	9.17
SMEs	386 325	100.44	373 657	106.79	78 626	92.00	14.20	-0.38	70 038	93.88	17.62	3.66
Micro enterprises	*245 219*	*131.16*	*235 894*	*140.25*	*45 043*	*97.64*	*14.01*	*-2.41*	*43 646*	*107.24*	*19.16*	*3.49*
Industrial Sector	**97 082**	**97.30**	**93 390**	**99.73**	**18 637**	**100.94**	**24.30**	**9.95**	**11 485**	**96.09**	**31.31**	**8.01**
Large enterprises	1 617	24.19	1 613	24.65	247	87.12	27.48	13.16	196	108.51	34.05	9.83
SMEs	95 465	99.29	91 777	101.87	18 390	101.14	12.78	-1.73	11 289	95.89	16.41	-1.75
Micro enterprises	*38 425*	*155.54*	*36 300*	*158.64*	*5 817*	*104.61*	*9.84*	*-2.56*	*3 459*	*105.28*	*12.23*	*0.87*
Service Sector	**293 588**	**99.52**	**284 590**	**106.93**	**60 893**	**89.57**	**9.29**	**1.39**	**59 448**	**93.03**	**7.41**	**4.02**
Large enterprises	2 728	17.79	2 710	18.19	657	109.90	5.96	1.69	699	59.95	3.69	2.00
SMEs	290 860	100.83	281 880	108.44	60 236	89.37	15.01	0.39	58 749	93.50	18.19	5.98
Micro enterprises	*206 794*	*127.13*	*199 594*	*137.18*	*39 226*	*96.64*	*14.57*	*-2.36*	*40 187*	*107.41*	*19.73*	*3.69*
By Industry												
Industrial Sector	**97 082**	**97.30**	**93 390**	**99.73**	**18 637**	**100.94**	**24.30**	**9.95**	**11 485**	**96.09**	**31.31**	**8.01**
Manufacturing	74 470	101.90	73 170	106.14	13 006	115.76	25.54	10.69	9 697	105.18	32.03	8.46
Consumer goods industry	13 268	105.90	13 058	109.36	1 912	120.28	9.85	-1.97	2 173	121.06	5.82	-0.34
Chemical industry	16 687	103.48	16 413	107.81	2 753	109.83	27.78	9.48	2 069	108.15	24.62	10.53
Metal and mechanical industry	37 611	116.47	36 895	121.49	6 371	124.25	16.66	-0.98	4 141	104.09	49.63	-8.88
Information and electronic industry	6 904	41.94	6 804	44.70	1 970	95.63	32.27	21.57	1 314	82.50	42.70	23.79
Construction	20 852	80.58	18 501	75.73	5 366	73.04	3.60	-2.15	1 677	56.29	0.98	-1.81
Others	1 760	127.39	1 719	134.20	265	81.51	4.21	1.54	111	91.38	15.99	-6.45
Service Sector	**293 588**	**99.52**	**284 590**	**106.93**	**60 893**	**89.57**	**9.29**	**1.39**	**59 448**	**93.03**	**7.41**	**4.02**
Knowledge-intensive	66 227	89.45	64 721	97.60	13 023	69.46	4.36	2.47	8 209	64.91	1.47	0.70
Non-knowledge-intensive	227 361	102.66	219 869	109.85	47 870	95.90	11.37	0.63	51 239	98.45	14.69	3.48

Note: Because enterprises took advantage of computer information system to help manage internal operations, and operated E-commerce at the same time, or enterprises operating E-commerce may also comply with more than one way of “Offering business information through internet”, “Purchasing on internet” and “Selling on internet”, so that the sum of each item were greater than Year-end No. of enterprise units.

(2) Branding

▲The enterprises of Manufacturing and Wholesale and Retail Trade operating OBM increased nearly 50% and OBM sales amount increased 67.63% for past five years.

By the end of 2011, there were 31,197 enterprises of Manufacturing and Wholesale and Retail Trade operating OBM, with a growth of 49.18% for past five years. The number of Large enterprises and SMEs operating OBM grew by 54.90% and 48.98% respectively for past five years, showing the situation that under intense competition, industries enhancing product differentiation and creating enterprise's value was increasingly common. In 2011, sales amount of OBM products was NT$8 trillion 807.2 billion, grew by 67.63% as against 2006; Large enterprises and SMEs grew by 65.26% and 74.50% respectively.

In 2011, there were 17,400 enterprises of Wholesale and Retail Trade operating OBM, higher than 13,797 enterprises of Manufacturing; however, its growth was 44.83%, lower than 55.04% of Manufacturing for past five years. In addition, Manufacturing's sales on OBM products amounted to NT$7 trillion 175.5 billion, and each enterprise's OBM sales amount was NT$520 million in average, far beyond NT$1 trillion 631.7 billion and NT$94 million of Wholesale and Retail Trade. Among four main industries of Manufacturing, Information and electronic industry of which each enterprise's sales amount was NT$1.302 billion in average, ranked the number one, and NT$888 million of Chemical industry was the next; in addition, Wholesale Trade's NT$103 million was higher than Retail Trade's NT$69 million.

▲The proportion of Manufacturing OBM products domestic sale and export was equal and Wholesale and Retail Trade focused on domestic market.

In 2011, the export proportion over sales amount of OBM products was 44.42%, with an increase of 0.50 percentage points for past five years. Large enterprises' ratio was 48.85%, growing by 3.28 percentage points for past five years; as for SMEs, the ratio declined to 32.30% from 39.15% in the same period, amounting to decline of 6.85 percentage points. Among all industries, Manufacturing's export ratio was 49.90%, with an increase of 2.46 percentage points in the same period, among Manufacturing Information and electronic industry was 83.79% by increase of 4.37 percentage points, being the top one of four main industries; Wholesale and Retail Trade's export ratio was 20.34%, far below that of Manufacturing, and decreased by 6.01 percentage points for past five years. Significantly, Manufacturing's OBM operating scale was larger, and because of export-oriented, OBM export ratio was relatively higher. Wholesale and Retail Trade's OBM operating still focused on the domestic market with superficial internationalization.

Table 22 The status of Manufacturing and Wholesale and Retail Trade operating OBM, by enterprise scale and industry

	The number of enterprises operating OBM (enterprise)			Sales amount (NT$ million)			Proportion of export amount (%)		
	2011	2006	Diff. with 2006 (%)	2011	2006	Diff. with 2006 (%)	2011	2006	Diff. with 2006 (percentage points)
Grand Total (Overall average)	**31 197**	**20 913**	**49.18**	**8 807 238**	**5 253 838**	**67.63**	**44.42**	**43.92**	**0.50**
By Enterprise scale									
Large enterprises	1 044	674	54.90	6 448 622	3 902 189	65.26	48.85	45.57	3.28
SMEs	30 153	20 239	48.98	2 358 616	1 351 649	74.50	32.30	39.15	-6.85
Micro enterprises	*12 222*	*7 633*	*60.12*	*102 288*	*57 205*	*78.81*	*13.66*	*26.18*	*-12.52*
By Industry									
Manufacturing	**13 797**	**8 899**	**55.04**	**7 175 494**	**4 377 442**	**63.92**	**49.90**	**47.44**	**2.46**
Consumer goods industry	3 679	2 507	46.75	730 769	495 446	47.50	13.56	15.38	-1.82
Chemical industry	2 500	1 608	55.47	2 220 374	1 393 633	59.32	29.21	28.59	0.62
Metal and mechanical industry	5 647	3 505	61.11	1 657 552	945 854	75.24	41.14	39.84	1.30
Information and electronic industry	1 971	1 279	54.10	2 566 799	1 542 509	66.40	83.79	79.42	4.37
Wholesale and Retail Trade	**17 400**	**12 014**	**44.83**	**1 631 744**	**876 396**	**86.19**	**20.34**	**26.35**	**-6.01**
Wholesale Trade	12 628	8 733	44.60	1 301 515	664 277	95.93	25.10	32.59	-7.49
Retail Trade	4 772	3 281	45.44	330 229	212 119	55.68	1.56	6.80	-5.24

(3) Business globalization

1. Overseas deployment

▲By the end of 2011, the number of enterprises engaging in overseas deployment amounted to 4,897. In average, there was one of two Industrial Sector's Large enterprises conducting overseas deployment.

Enterprises, by overseas deployment (including establishment of foreign (offshore) branch units, having ability to control the foreign (offshore) enterprises by reinvestment) to plan and manage global resources and expand markets, were always the important indicator for industries operating globalization. By the end of 2011, there were 4,897 enterprise units of all industries engaging in overseas deployment. There were 2,123 enterprises established 4,512 foreign (offshore) branch units and 3,450 enterprises had ability to control 14,756 foreign (offshore) enterprises. There were 1,187 Large enterprises conducted overseas deployment, accounting for 25.36% of the enterprise units of that scale, among Large enterprises there was one of every two enterprises conducting overseas deployment in Industrial Sector, being the most active. In addition, in average each Large enterprise established 4.11 branch units, and controlled 7.94 enterprises, and in average each enterprise which was controlled was input NT$ 380 million, all higher than SMEs' 1.82 branch units, and 2.60 enterprises, and NT$ 90 million respectively. Although SMEs' average overseas deployment scale was smaller than Large enterprises', the total number of their established branch units and controlled enterprises was 9,510, just as 9,758 of Large enterprises, showing that in order to response the characteristics of shallow-plate economy, enterprises of all scales faced the pressure of international competition to actively expand resources and markets was inevitable.

▲The number of Information and electronic industry's establishment of foreign operating bases accounted for nearly 30% of all foreign operating bases.

In terms of industries, the number of Industrial Sector's enterprises conducting overseas deployment amounted to 2,585, slightly higher than 2,312 of that Service Sector's enterprises conducted, and total number of their established branch units or controlled enterprises was 12,489, far beyond 6,779 of that Service Sector's enterprises established and controlled, showing Industrial Sector's higher deepening degree of global deployment. Among Industrial Sector's enterprises conducting overseas deployment, there were 2,472 enterprises of Manufacturing, accounting for nearly 96%, and among which Information and electronic industry of 954 enterprises was the most, and total number of their established branch units and controlled enterprises amounted to 5,568, accounting for 28.90% of all enterprises; as for Service Sector, 1,671 enterprises of Non-knowledge-intensive services conducting overseas deployment was the major, and total number of their established branch units and controlled enterprises amounted to 4,813, accounting for 25% of all enterprises; the bases established by Wholesale and Retail Trade was mainly for the purpose to expand foreign sale channels.

▲Enterprises' foreign operating bases nearly 50% was located in Mainland China (including Hong Kong and Macao).

By the end of 2011, among foreign (offshore) branch units established and enterprises controlled by overall enterprises, 49.54% was located in Mainland China (including Hong Kong and Macao), because the region acted the roles of both world factory and the new emerging market, not only having production resources of rich deposits and low-cost, but also a vast market, and caused by the similar geography, culture, and language, there was indeed the best choice of area for domestic enterprises to go overseas conduting deployment. As for "Other Areas", owing to covering many duty-free countries, where enterprises established paper companies, and then conducted reinvestment, enjoying preferential tax, being reckoned as the second with a percentage of 17.19%; Asia area (excluding Mainland China, Hong Kong and Macao) in which part countries due to cheap production cost, was reckoned as the third with 17.11%. For two Sectors, 53.43% of Service Sector invested in Mainland China, being more concentrated than 47.43% of Industrial Sector.

Table 23 Overview of all industries' establishment of foreign (offshore) branch units and investment deployment, by enterprise scale and industry

End of 2011 Unit: enterprise

	No. of enterprise units	Overseas deployment											
		No. of enterprise units	With foreign (offshore) branch units established		With foreign (offshore) enterprises controled				Regional distribution (%)				
			No. of enter-prise units	Total No. of branch units	No. of enter-prise units	Total investment amount (NT$ million)	Propor-tion of assets (%)	Total number of controlled enterprises	Main-land China (incl. HK and Macao)	Asia (excl. Main-land China)	America	Europe	Other areas
Grand Total (Overall average)	**1 184 811**	**4 897**	**2 123**	**4 512**	**3 450**	**3 822 329**	**8.43**	**14 756**	**49.54**	**17.11**	**11.87**	**4.29**	**17.19**
By Sector & Enterprise Scale													
Large enterprises	4 680	1 187	279	1 147	1 084	3 269 580	7.90	8 611	43.10	18.47	13.92	6.14	18.37
SMEs	1 180 131	3 710	1 844	3 365	2 366	552 749	14.03	6 145	56.14	15.72	9.78	2.39	15.97
Micro enterprises	*945 338*	*737*	*492*	*856*	*331*	*26 694*	*9.83*	*654*	*55.56*	*15.76*	*13.38*	*1.06*	*14.24*
Industrial Sector	**249 201**	**2 585**	**848**	**1 631**	**2 111**	**3 202 199**	**17.30**	**10 858**	**47.43**	**16.57**	**12.24**	**4.86**	**18.90**
Large enterprises	1 693	849	155	490	811	2 802 369	16.42	7 049	43.03	17.40	14.26	6.21	19.10
SMEs	247 508	1 736	693	1 141	1 300	399 829	27.70	3 809	54.12	15.29	9.17	2.81	18.61
Micro enterprises	*148 807*	*102*	*75*	*107*	*37*	*1 741*	*47.10*	*56*	*69.94*	*20.25*	*4.29*	*0.61*	*4.91*
Service Sector	**935 610**	**2 312**	**1 275**	**2 881**	**1 339**	**620 130**	**2.31**	**3 898**	**53.43**	**18.11**	**11.20**	**3.23**	**14.03**
Large enterprises	2 987	338	124	657	273	467 211	1.92	1 562	43.35	22.08	12.75	5.90	15.91
SMEs	932 623	1 974	1 151	2 224	1 066	152 920	6.13	2 336	58.33	16.18	10.44	1.93	13.11
Micro enterprises	*796 531*	*635*	*417*	*749*	*294*	*24 953*	*9.32*	*598*	*53.82*	*15.22*	*14.48*	*1.11*	*15.37*
By Industry													
Industrial Sector	**249 201**	**2 585**	**848**	**1 631**	**2 111**	**3 202 199**	**17.30**	**10 858**	**47.43**	**16.57**	**12.24**	**4.86**	**18.90**
Manufacturing	157 284	2 472	777	1 525	2 055	3 186 891	17.61	10 660	47.38	16.14	12.47	4.97	19.03
Consumer goods industry	31 079	326	98	169	261	268 825	13.99	1 288	48.11	22.99	10.43	3.36	15.10
Chemical industry	32 264	370	114	175	304	550 701	17.33	1 543	48.95	18.45	12.92	2.44	17.23
Metal and mechanical industry	84 393	822	294	542	643	632 083	21.80	2 900	50.58	16.91	11.01	3.78	17.72
Information and electronic industry	9 548	954	271	639	847	1 735 281	17.18	4 929	44.72	13.16	13.78	6.91	21.43
Construction	86 350	106	67	102	52	12 681	3.70	185	48.43	34.84	2.79	0.35	13.59
Others	5 567	7	4	4	4	2 627	3.64	13	64.71	11.76	5.88	0.00	17.65
Service Sector	**935 610**	**2 312**	**1 275**	**2 881**	**1 339**	**620 130**	**2.31**	**3 898**	**53.43**	**18.11**	**11.20**	**3.23**	**14.03**
Knowledge-intensive	130 901	641	261	732	452	208 308	0.85	1 234	41.00	17.14	17.24	3.36	21.26
Non-knowledge-intensive	804 709	1 671	1 014	2 149	887	411 823	17.76	2 664	58.51	18.51	8.73	3.18	11.07

Note: 1. Regional distribution includes two items as "with establishment of foreign (offshore) branch units" or "with foreign (offshore) enterprises controlled".

2. Because enterprises probably established foreign (offshore) branch units and reinvested foreign (offshore) enterprises at the same time, the sum of their enterprise units may be larger than Grand Total.

2. Outline of domestic and oversea production and selling in Manufacturing

▲In 2011, the proportion of Manufacturing's overseas production was 38.10%, with an increase of 11.00 percentage points as against 2006.

Manufacturing basing on such factors as the principle of comparative advantage, considering the cost of production, industry cluster, technology acquisition, export incentives, and market proximity, with operating mode of "Receiving orders in Taiwan and manufacturing overseas", "Keeping core technology in Taiwan, and managing global logistics" in recent years, the proportion of overseas production gradually elevated. In 2011, Manufacturing's overseas production ratio was 38.10%, increasing 11.00 percentage points as against 2006; among four main industries, Information and electronic industry's overseas production ratio was 68.40%, being the highest of all, with an increase of 18.25 percentage points for past five years, and its selling revenues of production overseas producted amounted to NT$9 trillion 82.1 billion, accounting for nearly 90% of Manufacturing; among which of production overseas producted in Manufacture of Large-scale information products was 78.01%, with an increase of 19.65 percentage points as against 2006, and a contribution about 84% of Manufacturing's selling revenues of production overseas producted, showing Information and electronic industry's profound level of international division of labor. As for other three of main industries, Metal and mechanical industry's overseas production proportion was higher of 10.80%.

▲In 2011, over 94% selling revenue of Manufacturing's overseas-production products was from triangular trade; however, triangular trade's gross profit ratio for past five years declined 3.23 percentage points.

In 2011, among the selling revenues of Manufacturing's overseas-production products, 94.34% from triangular trade (i.e., receiving orders in Taiwan and manufacturing overseas, the goods are directly shipped to foreign buyers without through Taiwan customs), amounted to NT$9 trillion 552.7 billion, accounting for 35.94% of entire Manufacturing's operating revenues, with an increase of NT$4 trillion 744.5 billion or 98.68% as against 2006; as for back sale to domestic market accounted for 5.66% only, and decreased by 4.38 percentage points as against 2006. Among four main industries, 69.71% of Chemical industry's selling revenues of overseas-production products were sold back to domestic market, with the highest proportion; the others were mainly by triangular trade, particularly, Information and electronic industry's 97.06% as the highest, and Metal and mechanical industry's 85.49% as the second.

By impact of international economic downturn and intense market competition, demand for electronic components related products were not expected. In 2011, the gross profit ratio of triangular trade in Manufacturing was 4.17%, declining 3.23 percentage points for past five years. Among four main industries in Manufacturing, Consumer goods industry was 12.93% in 2011, with a decrease of 2.18 percentage points, still ranks the top of four main industries; the same of Information and electronic industry declined to 3.63% from 7.19%, with the lowest gross profit ratio, and decreased by 3.56 percentage points for past five years, being the most drastic. Among four main industries, only Metal and mechanical industry raised 2.80 percentage points.

Chart 2 Triangular trade revenues and gross profit ratio of Manugacturing

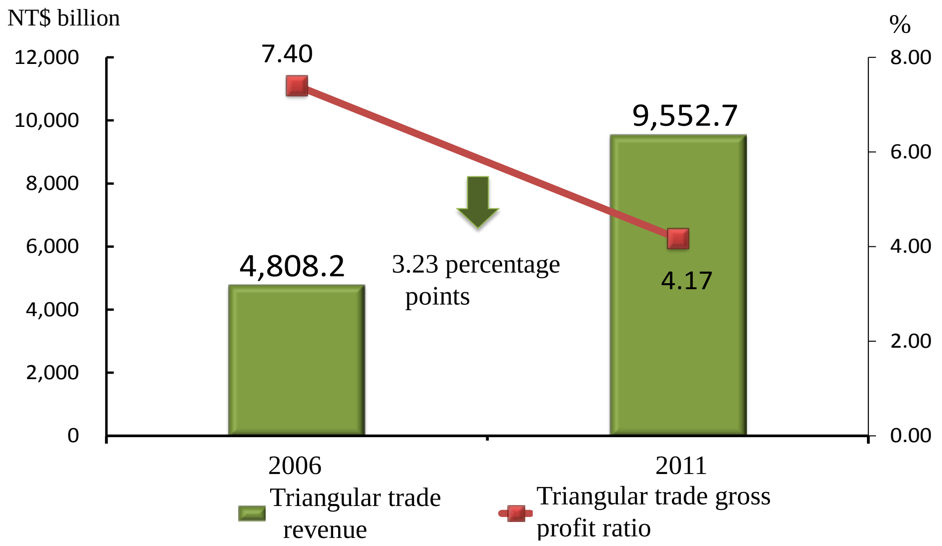


Table 24 Overseas production of enterprise units in Manufacturing, by industry

2011

	Operating revenues			Selling revenues of production oversea produced						
		Overseas production ratio			Sold back to domestic market		triangular trade			
									gross profit ratio	
	(NT$ million)	(%)	Diff. with 2006 (percentage points)	(NT$ million)	(%)	Diff. with 2006 (percent-age points)	(%)	Diff. with 2006 (percent-age points)	(%)	Diff. with 2006 (percent-age points)
Grand Total (Overall average)	**26 577 819**	**38.10**	**11.00**	**10 126 376**	**5.66**	**-4.38**	**94.34**	**4.38**	**4.17**	**-3.23**
Consumer goods industry	2 203 234	6.72	0.00	148 022	21.73	-8.87	78.27	8.87	12.93	-2.18
Chemical industry	5 222 928	5.02	0.69	262 252	69.71	-0.73	30.29	0.73	7.76	-2.58
Metal and mechanical industry	5 873 063	10.80	1.44	634 053	14.51	-10.35	85.49	10.35	10.56	2.80
Information and electronic industry	13 278 594	68.40	18.25	9 082 050	2.94	-2.87	97.06	2.87	3.63	-3.56
Manufacture of Large-scale information product	10 912 434	78.01	19.65	8 512 571	2.13	-1.52	97.87	1.52	3.14	-3.43

Note: Manufacture of Large-scale information products refers to top 100 enterprises of Information and electronic industry in 2011 Census, by operating revenues.

3. Foreign Direct Investment (FDI)

▲By the end of 2011, the number of FDI enterprises amounted to 8,073, accounting for 0.68% of all industries.

FDI (Single foreign shareholder’s shareholding of 10% (or more), but excluding foreign mutual fund investment) to domestic enterprises, not only injected domestic market funds, but also could provide professional technology through investment; therefore, it was an important indicator of degree of internationalization for industries. By the end of 2011, the number of FDI enterprises amounted to 8,073, which account for 0.68% of all industries, however, 6.66% of persons engaged and 8.92% of assets used in operation of all industries were used by FDI enterprises. In average, each enterprise used 66.12 persons engaged and NT$15.16 billion assets used in operation. In terms of output and operating efficiency, it’s found that FDI enterprises contributed to 11.79% of total value of production. In 2011, its profit rate was 7.02%, also higher than profit rate of all enterprises by 0.65 percentage points, showing most of Taiwan’s FDI enterprises with considerable scale, and better operating efficiency.

▲For the scale and operating performance of FDI enterprises, Industrial Sector was

better than Service Sector.

In average, the number of persons engaged, assets used in operation, and total value of production per FDI enterprise in Industrial Sector were 144.92 persons, NT$1.681 billion, and NT$1.306 billion respectively; as for Service Sector, the number of that were 45.22 persons, NT$1.472 billion, and NT$197 million. In addition, profit rate of FDI enterprises in Industrial Sector was 7.38%, higher 2.50 percentage points than the average of that in the Sector. Profit rate of FDI enterprises in Service Sector was 6.78%, lower 1.29 percentage points than the average of that in the Sector. Industrial Sector's FDI enterprises were better than Service Sector no matter in operating scale or performance.

Among the top 10 subsectors of Industrial Sector's FDI enterprises, Manufacture of Electronic Parts and Components and Manufacture of Computer, Electronic and Optical Products, both belonging to Information and electronic industry, were reckoned as the first and the third respectively, accounting for 4.67% and 4.14% of its subsector's enterprise units, with profound degree of globalization, and more active no matter in overseas deployment or FDI, and their profit rates were higher 1.86 and 1.85 percentage points respectively than the average of its subsector, with better profitability. Service Sector's FDI enterprises nearly 50% belonged to Wholesale Trade, the number of which amounting to 3,138, and its profit rate was higher 0.13 percentage points than the average of its subsector. In addition, the number of Financial Intermediation's FDI enterprises amounted to 321, in average each enterprise had 77.20 persons engaged, NT$18.607 billion of assets used in operation, and NT$495 million of total value of production respectively; although the average scale of Financial Intermediation was reckoned as the number one of top 10 subsectors, its profit rate was less 10.23 percentage points than the average of its subsector.

Table 25 Operating status of enterprise units of all industries with single foreign shareholder's shareholding of 10% (or more), by subsector

2011

	Year-end no. of Enterprise units		Year-end number of persons engaged		Year-end Assets used in operation		Annual total value of production		Profit rate	
	(enterprise)	Percentage accounted for the industry (%)	(person)	Percentage accounted for the industry (%)	(NT$ billion)	Percentage accounted for the industry (%)	(NT$ billion)	Percentage accounted for the industry (%)	(%)	Diff. with the industry (percentage points)
Grand Total (Overall average)	**8 073**	**0.68**	**533 748**	**6.66**	**12 240**	**8.92**	**3 469**	**11.79**	**7.02**	**0.65**
Industrial Sector	**1 692**	**0.68**	**245 198**	**7.29**	**2 845**	**9.06**	**2 210**	**11.48**	**7.38**	**2.50**
Top 10 subsectors, by the most number of enterprise										
Manufacture of Electronic Parts and Components	279	4.67	87 644	15.38	1 003	14.31	600	17.10	2.82	1.86
Manufacture of Machinery and Equipment	178	0.93	17 983	7.52	147	13.85	122	12.84	11.20	1.71
Manufacture of Computers, Electronic and Optical Products	148	4.14	20 447	9.32	150	3.10	166	11.34	5.37	1.85
Manufacture of Fabricated Metal Products	103	0.25	7 653	2.24	61	5.13	43	3.69	8.82	1.18
Specialized Construction Activities	100	0.15	3 415	1.03	45	6.56	23	3.00	13.11	1.33
Manufacture of Electrical Equipment	95	1.52	15 663	11.96	134	11.61	88	14.07	6.64	1.46
Manufacture of Chemical Products	94	4.02	6 766	13.85	91	26.89	76	28.71	9.50	1.22
Repair and Installation of Industrial Machinery and Equipment	87	1.29	4 892	10.49	46	30.89	39	30.01	7.64	-0.85
Manufacture of Chemical Material	64	4.14	8 223	9.66	277	10.06	288	13.04	5.39	-4.45
Manufacture of Plastics Products	61	0.55	6 864	5.33	42	8.46	34	7.71	12.85	6.14
Service Sector	**6 381**	**0.68**	**288 550**	**6.20**	**9 395**	**8.88**	**1 260**	**12.38**	**6.78**	**-1.29**
Top 10 subsectors, by the most number of enterprise										
Wholesale Trade	3 138	1.47	66 981	6.30	918	17.47	323	16.14	5.39	0.13
Retail Trade	482	0.17	51 556	6.08	410	11.41	147	14.65	5.43	-0.11
Financial Intermediation	321	2.91	24 780	12.17	5 973	9.23	159	10.99	19.26	-10.23
Activities of Head Offices; Management Consultancy Activities	253	4.41	4 783	16.10	13	13.45	12	20.15	9.22	-3.09
Computer Systems Design Services	243	4.44	10 714	17.49	42	18.29	36	22.89	7.38	-0.92
Business and Office Support Activities	191	5.49	1 525	10.24	6	12.60	3	10.83	3.24	-8.14
Architecture and Engineering Activities; Technical Testing and Analysis	153	2.16	6 572	11.97	32	17.06	19	14.16	7.76	-2.85
Support Activities for Transportation	136	1.79	9 226	11.57	45	4.26	64	21.89	5.97	-8.22
Securities, Futures and Other Financing	133	7.94	5 629	9.87	186	11.89	44	24.22	24.62	4.75
Real Estate Operation and Related Activities	132	1.09	741	0.99	51	5.53	5	2.81	33.95	12.59

(4) Professional technique transaction

▲**In 2011, all industries' professional techniques purchase and sale amount were NT$181 billion and NT$36 billion respectively.**

In 2011, all industries' professional techniques purchase amount was NT$181 billion, accounting for 0.35% of operating expenditures, and 93.64% of the amount purchased aboard. In addition, sale amount of professional techniques was NT$36 billion, accounting for 0.07% of operating revenues, and 46.24% of the amount sold abroad. For past five years, the purchase amount of professional techniques grew more than doubled, and the proportion of purchased abroad also increased 16.95 percentage points; the sale amount of professional techniques decreased by 3.40% for past five years, with a decreased proportion over operating revenues by 0.01 percentage points, and the sold-abroad proportion increased 11.16 percentage points, showing that Taiwan still belonged a professional and technical input-oriented economy, and the degree of reliance on foreign support gradually deepened for past five years, the capabilities to develop professional technology was needed to be upgraded.

▲**Industrial Sector's professional technique transactions were foreign-based; Service Sector's sale of professional techniques focused on domestic market.**

In 2011, purchase amount of professional techniques exceeded 93% from Industrial Sector, amounting to NT$168.4 billion, accounting for 0.60% of the Sector's operating expenditures, and were mainly purchased abroad, accounting for 96.25%, with an increase of 14.49 percentage points as against 2006. In all industries, Manufacturing was NT$167.2 billion, being the highest. In Manufacturing, Information and electronic industry due to the fact of high demand of professional technology resulted from intense industry competition and frequent change of product, and the fact of widespread international technical support resulted from highly global allocation, in 2011 the purchase amount of professional techniques was NT$135.7 billion, accounting for 1.04% of the Industry's operating expenditures, being the number one of all industries. As for Service Sector's purchase amount of professional techniques was NT$12.6 billion only, with a decrease of 2.78% as against 2006; the purchased-abroad proportion was 58.81%, although which was lower than that of Industrial Sector, it increased 12.46 percentage points for past five years. In Service Sector, Non-knowledge-intensive services' purchased amount was higher as NT$9.10 million.

In 2011, Industrial Sector's sale amount of professional techniques was NT$19.9 billion, and over 70% of professional techniques were sold abroad. Among all industries, sale amount of Information and electronic industry in Manufacturing was ranked first by NT$8.7 billion; Service Sector's sale amount of professional techniques was NT$16.1 billion, and over 84% professional techniques were sold to domestic enterprises; in Service Sector, Knowledge-intensive services due to including professional technology-related services, had NT$11 billion of sale amount, accounting for 0.13% of the industry's operating revenues, higher than that of Non-knowledge-intensive services.

Table 26 Outline of professional technique transaction of all industries, by enterprise scale and industry

2011

	Purchase of professional techniques						Sale of professional techniques					
	Amount				Foreign ratio		Amount				Foreign ratio	
	(NT$ million)	Diff. with 2006 (%)	Accounted for operating expenditures (%)	Domestic ratio (%)	(%)	Diff. with 2006 (percent-age points)	(NT$ million)	Diff. with 2006 (%)	Accounted for operating revenues (%)	Domestic ratio (%)	(%)	Diff. with 2006 (percent-age points)
Grand Total (Overall average)	**180 971**	**100.16**	**0.35**	**6.36**	**93.64**	**16.95**	**35 963**	**-3.40**	**0.07**	**53.76**	**46.24**	**11.16**
By Sector & Enterprise Scale												
Large enterprises	168 692	120.22	0.51	5.16	94.84	15.01	25 180	27.98	0.07	49.35	50.65	11.17
SMEs	12 279	-11.10	0.07	22.83	77.17	17.87	10 783	-38.57	0.05	64.06	35.94	5.79
Micro enterprises	*317*	*-67.84*	*0.01*	*67.52*	*32.48*	*15.96*	*588*	*-61.15*	*0.01*	*83.60*	*16.40*	*-0.55*
Industrial Sector	**168 384**	**117.37**	**0.60**	**3.75**	**96.25**	**14.49**	**19 871**	**27.65**	**0.07**	**28.97**	**71.03**	**6.11**
Large enterprises	160 099	129.17	0.79	3.08	96.92	14.31	16 368	58.55	0.08	30.34	69.66	0.53
SMEs	8 285	8.92	0.10	16.70	83.30	9.32	3 503	-33.19	0.04	22.56	77.44	20.80
Micro enterprises	*105*	*-25.87*	*0.02*	*75.22*	*24.78*	*15.02*	*50*	*-56.93*	*0.01*	*48.89*	*51.11*	*33.04*
Service Sector	**12 587**	**-2.78**	**0.05**	**41.19**	**58.81**	**12.46**	**16 092**	**-25.71**	**0.06**	**84.37**	**15.63**	**1.99**
Large enterprises	8 593	27.47	0.07	43.81	56.19	5.20	8 812	-5.77	0.06	84.66	15.34	8.59
SMEs	3 994	-35.64	0.04	35.56	64.44	23.14	7 280	-40.86	0.06	84.03	15.97	-2.90
Micro enterprises	*211*	*-74.91*	*0.01*	*63.69*	*36.31*	*18.65*	*538*	*-61.50*	*0.01*	*86.81*	*13.19*	*-3.67*
By Industry												
Industrial Sector	**168 384**	**117.37**	**0.60**	**3.75**	**96.25**	**14.49**	**19 871**	**27.65**	**0.07**	**28.97**	**71.03**	**6.11**
Manufacturing	167 163	119.04	0.65	3.54	96.46	14.60	19 735	30.22	0.07	28.58	71.42	4.82
Consumer goods industry	20 918	1253.79	1.02	1.23	98.77	33.27	579	-41.06	0.03	34.74	65.26	26.97
Chemical industry	6 377	-0.93	0.13	9.80	90.20	-4.17	6 248	152.89	0.12	4.14	95.86	5.83
Metal and mechanical industry	4 153	-22.68	0.07	11.55	88.45	-1.60	4 178	51.86	0.07	56.42	43.58	12.52
Information and electronic industry	135 714	115.54	1.04	3.35	96.65	16.37	8 730	-2.47	0.07	32.34	67.66	-6.51
Construction	1 032	9.45	0.06	39.28	60.72	-9.49	134	-66.81	0.01	87.23	12.77	9.65
Others	189	-8.14	0.02	2.21	97.79	-0.34	2	-75.10	0.00	0.00	100.00	100.00
Service Sector	**12 587**	**-2.78**	**0.05**	**41.19**	**58.81**	**12.46**	**16 092**	**-25.71**	**0.06**	**84.37**	**15.63**	**1.99**
Knowledge-intensive	3 515	-15.91	0.05	40.15	59.85	7.28	11 023	-21.92	0.13	86.53	13.47	4.86
Non-knowledge-intensive	9 072	3.48	0.06	41.60	58.40	15.02	5 069	-32.80	0.03	79.67	20.33	-2.73

5. Regional development and Emerging Industries development

(1) Overview of the regional development of all industries

▲Northern Region's Industrial and Service Sectors showed balanced development; Central and Southern Regions focused on Industrial Sector's growth; Eastern Region and Kinmen-Matsu Area created more employment opportunities by Service Sector.

In terms of all industries' development in every region by 2011, it was found that both the number of persons engaged and total value of production of Northern Region exceeded 50% of whole nation, reaching 54.37% and 53.38% respectively; although which were less 0.78 and 3.46 percentage points as against 2006, where was still the development center of all industries. In Northern Region, Industrial Sector's and Service Sector's output accounted for 29.03%, and 24.35% respectively of whole nation's, with more balanced industrial development. The number of persons engaged and total value of production of Central Region accounted for 21.59% and 21.57% respectively of whole nation's. There was less difference between two Sectors in employment of manpower; however, Industrial Sector's total value of production accounted for 16.71% of whole nation's, far beyond Service Sector's 4.86%. As for Southern Region, its number of persons engaged and total value of production accounted for 22.54% and 24.15% respectively of whole nation's, and manpower employment and output were next to Northern Region only; total value of production was also most created by Industrial Sector, accounting for 18.58% of all industries, far beyond Service Sector's 5.57%, showing that Central and Southern Regions focused on Industrial Sector's development. As for Eastern Region and Kinmen-Matsu Area, confined by such factors as location, terrain and traffic, their Service Sector's persons engaged accounted for 1.13% of whole nation's, higher than Industrial Sector's 0.36%; however, the output created by Service Sector accounting for 0.44% of the nation's was slightly less than Industrial Sector's 0.45%.

▲The contribution of total value of production of Kaohsiung City and Taoyuan County to whole Industrial Sector exceeded 30%; total value of production of Taipei City's Service Sector accounted for over 46% of whole Service Sector.

In 2011, for the annual total value of production structure of all industries, Industrial Sector accounted for 64.78%, being higher than 35.22% of Service Sector. Kaohsiung

City, Taoyuan County, New Taipei City, Taichung City, and Tainan City, due to mature development of regional industrial clusters, their Industrial Sector's total value of production accounted for 10.18%, 9.66%, 7.37%, 7.01% and 6.46% respectively of all national industries, being the top five counties/cities of Industrial Sector. And Kaohsiung City's and Taoyuan County's total contribution exceeded 30% of whole Industrial Sector's total value of production, with significant clustering efficiency. As for Taipei City, due to convenient transportation and abundant resources, its Service Sector's persons engaged contributed to 18.01% of the nation's, and created 16.32% of total value of production; its Service Sector development was ranked number one of all counties/cities, accounting for over 46% of whole Service Sector's total value of production. Total value of production of Eastern Region and Kinmen-Matsu Area accounted for 0.89% only of all. In those regions, Industrial Sector was slightly higher as accounting for 0.45%, and Hualien County due to rich mineral driving cement and stone industries, and Kinmen County due to alcoholic products manufacturing, their Industrial Sector's total value of production was slightly higher than that of Service Sector.

Table 27 The operation status of establishment units of all industries, by county/city

2011

	Year-end number of persons engaged					Annual total value of production				
		Structure ratio					Structure ratio			
		Industrial Sector		Service Sector			Industrial Sector		Service Sector	
	(person)	(%)	Diff. with 2006 (percentage points)	(%)	Diff. with 2006 (percentage points)	(NT$ million)	(%)	Diff. with 2006 (percentage points)	(%)	Diff. with 2006 (percentage points)
Grand Total (Overall average)	**8 017 072**	**41.20**	**-1.00**	**58.80**	**1.00**	**29 422 674**	**64.78**	**0.79**	**35.22**	**-0.79**
Taiwan Area	**8 000 797**	**41.13**	**-1.01**	**58.66**	**0.96**	**29 381 261**	**64.69**	**0.79**	**35.17**	**-0.80**
Northern Region	**4 358 844**	**20.16**	**-0.92**	**34.21**	**0.14**	**15 706 880**	**29.03**	**-2.47**	**24.35**	**-0.99**
New Taipei City	1 193 287	6.84	-0.40	8.04	0.37	3 237 472	7.37	-0.74	3.64	-0.05
Taipei City	1 708 138	3.29	-0.32	18.01	-1.00	6 426 412	5.53	-1.78	16.32	-0.93
Keelung City	77 956	0.24	-0.02	0.73	-0.03	244 783	0.22	0.00	0.62	-0.02
Hsinchu City	246 187	1.83	0.03	1.24	0.06	1 165 201	3.34	-0.30	0.62	-0.02
Yilan County	104 479	0.51	0.00	0.80	0.06	242 208	0.52	0.04	0.30	-0.01
Taoyuan County	828 228	5.87	-0.14	4.46	0.51	3 557 438	9.66	0.48	2.43	-0.01
Hsinchu County	200 569	1.57	-0.08	0.93	0.18	833 366	2.40	-0.15	0.43	0.06
Central Region	**1 731 078**	**10.82**	**0.19**	**10.77**	**0.52**	**6 346 642**	**16.71**	**2.30**	**4.86**	**0.31**
Taichung City	1 007 705	5.94	0.20	6.63	0.41	3 015 850	7.01	1.05	3.24	0.35
Miaoli County	143 199	0.99	0.04	0.79	0.05	588 297	1.67	0.28	0.33	0.01
Changhua County	348 242	2.56	-0.03	1.78	0.02	1 029 086	2.80	0.11	0.70	-0.03
Nantou County	97 200	0.50	-0.06	0.71	0.01	228 898	0.52	-0.07	0.26	-0.02
Yunlin County	134 732	0.83	0.05	0.85	0.02	1 484 511	4.71	0.93	0.33	0.00
Southern Region	**1 807 401**	**9.86**	**-0.25**	**12.68**	**0.31**	**7 105 594**	**18.58**	**0.95**	**5.57**	**-0.08**
Tainan City	604 458	4.08	0.16	3.46	-0.08	2 313 367	6.46	0.41	1.40	-0.09
Kaohsiung City	874 939	4.37	-0.43	6.55	0.25	3 925 560	10.18	0.36	3.16	0.05
Chiayi City	72 573	0.18	0.00	0.73	0.00	203 401	0.39	0.07	0.30	-0.02
Chiayi County	96 846	0.63	0.00	0.58	0.05	323 092	0.88	0.07	0.21	0.01
Pingtung County	142 140	0.58	0.04	1.20	0.07	316 048	0.63	0.03	0.45	-0.02
Penghu County	16 445	0.04	0.01	0.17	0.03	24 126	0.03	0.00	0.05	0.00
Eastern Region	**103 474**	**0.29**	**-0.03**	**1.00**	**-0.01**	**222 145**	**0.36**	**-0.01**	**0.39**	**-0.04**
Taitung County	33 702	0.08	-0.01	0.34	-0.02	59 434	0.08	0.01	0.13	-0.02
Hualien County	69 772	0.21	-0.02	0.66	0.01	162 711	0.28	-0.02	0.27	-0.01
Kinmen-Matsu Area	**16 275**	**0.07**	**0.01**	**0.13**	**0.03**	**41 413**	**0.09**	**0.01**	**0.05**	**0.01**
Kinmen County	14 006	0.06	0.01	0.12	0.04	35 195	0.08	0.01	0.04	0.00
Lienchiang County	2 269	0.01	0.00	0.02	0.00	6 218	0.01	0.00	0.01	0.00

▲For the top five sectors ranked by total value of production, Kaohsiung City showed the highest proportion of Manufacturing; Taipei City was ranked number one by proportion of other four sectors, and Taichung City's proportion showed increase.

In 2011, the top five sectors ranked by total value of production were Manufacturing, Wholesale and Retail Trade, Financial and Insurance Activities, Construction, and Transportation and Storage in turn. Every industry's total value of production exceeded NT$1 trillion, amounting to NT$24 trillion 864.2 billion in total or accounting for 84.50% of all industries. In terms of regional distribution, Northern Region accounted for the majority of production values for all top five sectors. Among the five sectors, Manufacturing, due to cluster area, was distributed throughout the nation; in addition, in recent years, the government actively established industry specific areas in every county/city, so that Central and Southern Regions accounted for 26.44% and 29.29% respectively, and Northern Region's proportion was less than 50%, declined 4.76 percentage points for past five years. The proportion of other four main sectors in Northern Region all exceeded 50%; however, the proportion showed decline for past five years, mainly because the industry development within the region was mature and growth momentum was lower.

In terms of the county/city distribution of top five sectors, all were concentrated in Five Special Municipalities and Taoyuan County. For Manufacturing, Kaohsiung City's 16.04% was the first, and Taoyuan County's 15.84% was the second; New Taipei City's, Taichung City's, and Tainan City's proportion all exceeded 10%. Although Taipei City was limited by regional characteristics and geographical conditions, being ranked the last by 6.70%, it was the domestic political and economic center, with frequently commercial and financial activities, and its proportion of other main four sectors was ranked the number one of the nation; its Financial and Insurance Activities proportion even exceeded 65%. In addition, Taichung City's prosperity and its great performance in industry clusters for past five years had created significant growth in all top five sectors, where the proportion of Financial and Insurance Activities ranked second in all counties/cities, only behind Taipei City.

Table 28 The distribution of top five sectors of all industries in total value of production, by county/city

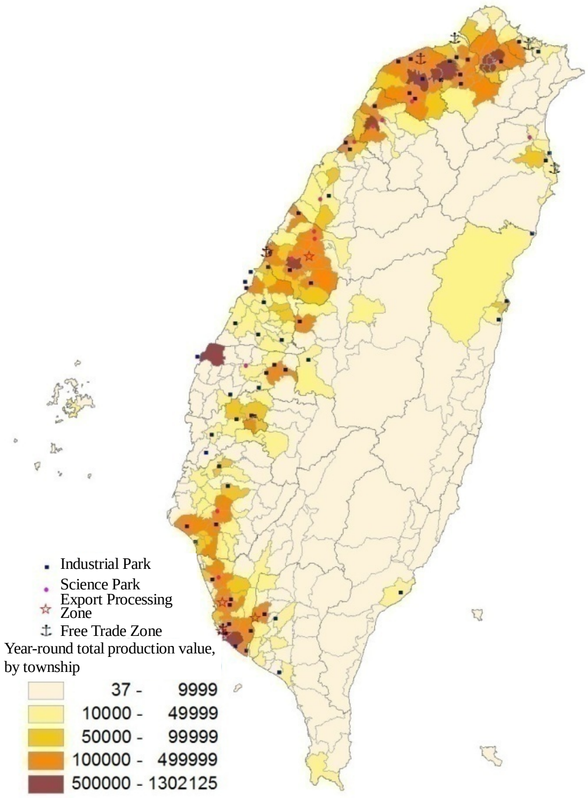
2011 Unit: NT$ million, %, percentage points

	Manufacturing	Diff. with 2006	Wholesale and Retail Trade	Diff. with 2006	Financial and Insurance Activities	Diff. with 2006	Construction	Diff. with 2006	Transportation and Storage	Diff. with 2006
Grand Total	**16 856 059**	**22.84**	**3 075 663**	**18.48**	**2 242 800**	**13.20**	**1 424 586**	**29.24**	**1 265 078**	**14.30**
Proportion to all enterprises	57.29	0.14	10.45	-0.36	7.62	-0.63	4.84	0.25	4.30	-0.31
Structure ratio	100.00		100.00		100.00		100.00		100.00	
Taiwan Area	**99.91**	**0.00**	**99.87**	**-0.02**	**99.95**	**0.02**	**99.63**	**-0.05**	**99.66**	**-0.12**
Northern Region	**43.89**	**-4.76**	**65.48**	**-0.85**	**77.20**	**-2.46**	**57.20**	**-0.45**	**75.14**	**-2.71**
New Taipei City	11.03	-1.51	14.54	-0.84	5.60	-0.25	16.22	0.71	5.52	0.29
Taipei City	6.70	-3.09	38.95	-0.10	65.08	-2.80	26.73	-0.76	42.28	-4.86
Keelung City	0.23	-0.01	0.65	-0.05	0.45	-0.03	0.80	-0.06	9.54	0.58
Hsinchu City	5.50	-0.56	2.03	0.13	1.45	-0.11	2.53	-0.19	0.63	-0.05
Yilan County	0.72	0.09	0.75	-0.19	0.65	0.05	1.62	-0.11	1.01	0.26
Taoyuan County	15.84	0.66	7.01	0.14	3.33	0.48	7.13	-0.03	15.28	0.71
Hsinchu County	3.88	-0.32	1.55	0.05	0.64	0.20	2.17	0.01	0.89	0.37
Central Region	**26.44**	**3.49**	**16.32**	**0.71**	**10.08**	**1.40**	**19.17**	**2.29**	**8.71**	**2.19**
Taichung City	10.73	1.52	11.33	1.43	6.45	1.17	12.70	2.04	5.67	1.26
Miaoli County	2.60	0.42	1.01	-0.07	0.65	0.01	1.49	0.13	0.64	0.17
Changhua County	4.54	0.12	2.38	-0.27	1.66	0.16	2.16	-0.06	1.10	0.29
Nantou County	0.73	-0.11	0.66	-0.22	0.55	-0.01	1.04	-0.16	0.45	0.11
Yunlin County	7.84	1.55	0.95	-0.15	0.76	0.06	1.78	0.35	0.86	0.36
Southern Region	**29.29**	**1.31**	**17.04**	**0.24**	**11.93**	**1.11**	**21.92**	**-1.74**	**14.63**	**0.24**
Tainan City	10.53	0.54	4.44	-0.53	3.50	0.41	4.60	-0.57	2.03	0.31
Kaohsiung City	16.04	0.59	9.62	0.90	6.29	0.63	13.40	-1.73	11.01	-0.43
Chiayi City	0.55	0.10	0.86	-0.04	0.76	0.03	0.81	0.04	0.41	0.05
Chiayi County	1.35	0.09	0.63	-0.06	0.34	0.05	1.21	0.20	0.46	0.22
Pingtung County	0.81	-0.01	1.35	-0.02	0.97	0.02	1.71	0.33	0.49	0.05
Penghu County	0.00	-0.01	0.14	-0.01	0.07	-0.02	0.21	0.01	0.24	0.05
Eastern Region	**0.28**	**-0.06**	**1.02**	**-0.13**	**0.75**	**-0.03**	**1.34**	**-0.15**	**1.18**	**0.16**
Taitung County	0.05	0.00	0.35	-0.08	0.25	-0.06	0.52	0.02	0.28	0.01
Hualien County	0.23	-0.05	0.67	-0.05	0.50	0.03	0.81	-0.18	0.90	0.15
Kinmen-Matsu Area	**0.09**	**0.00**	**0.13**	**0.02**	**0.05**	**-0.02**	**0.37**	**0.05**	**0.34**	**0.12**
Kinmen County	0.09	0.01	0.12	0.03	0.05	-0.01	0.27	0.01	0.27	0.09
Lienchiang County	0.00	-0.01	0.01	-0.01	0.01	0.00	0.10	0.04	0.07	0.03

(2) Development status of industry-specific areas

▲Science Parks, Industrial Parks, Export Processing Zones, and Free Trade Zones contributed to a quarter of total value of production.

Chart 3 Regional distribution of industry-specific area



Such industry specific areas planned and established by government, as Science Parks, Industrial Parks, Export Processing Zones, and Free Trade Zones made outstanding contribution to activate regional economy and promote local prosperity. In 2011, they attracted 16,772 establishment units stationed, creating 896,921 employment opportunities, and contributed to NT$7 trillion 867.8 billion total value of production, accounting for 1.35%, 11.19%, and 26.74% of all industries' establishment units, number of persons engaged, and total value of production. Within the areas, the labor productivity amounting to NT$8 million 770 thousand, was 2.39 times of all industries, perfectly showing its great efficiency. Among those areas, the Industrial Parks with a more than 60-year history, still kept on following the domestic economic policies in various stages, and being established in all counties/cities; till the end of 2011, there were 60 Industrial Parks creating employment opportunities for 585,395 persons and total value of production of NT$5 trillion 533.8 billion, playing essential role for economic development of regional industry. Science Parks was ranked the second by 232,474 persons engaged, NT$1 trillion 975.2 billion of total value of production. Although Export Processing Zones established for the primary purpose to expand foreign trade were concentrated in Taichung City, Kaohsiung City and Pingtung County, their persons engaged and total value of production were 73,097 persons and NT$327.8 billion respectively. As for Free Trade Zones set latest, although was ranked last by 5,955 persons engaged and NT$31 billion of total value of production, with the "front-shop-back-workshop" concept and "Free Economic

Pilot Zones" policy, it still continued expanding, even with development potential.

▲**All industry-specific areas of Yunlin County, Hsinchu City and Hsinchu County contributing to their output exceeded 50%.**

For the contribution of total value of production of industry-specific areas to every region, Central Region was 37.69%, being the highest; in the region, the formation of petrochemical industry clusters of Yunlin County contributed nearly 85% of its total value of production, where Manufacture of Petroleum and Coal Products and Manufacture of Chemical Material accounted for 41.85% and 23.93% respectively of the two industries in Taiwan, both being ranked number one of all counties/cities; In addition, Nantou County's industry-specific areas also contributed nearly 40% output to the county. Southern Region was ranked second by 35.66%, where Kaohsiung City due to having Science Parks, Industrial Parks, Export Processing Zones, and Free Trade Zones, its Industry-specific areas output contributed to 39.45% of its total value of production, and Manufacture of Basic Metals accounted for 29.93% of the industry in Taiwan, being the number one in Taiwan; as for Tainan City's industry-specific areas output also reached 36.96%, with Manufacture of Electronic Parts and Components as the main industry, accounting for 14.63% of the industry in Taiwan. As for Northern Region, due to balanced development of Industrial and Service Sectors, and larger scale of output, its industry-specific areas output accounted for 18.48%; among the region, Hsinchu City and Hsinchu County due to mature industrial clusters, their total value of production of industrial clusters accounted for 71.57% and 50.19% respectively, and their employment opportunities of industrial clusters accounted for 43.03% and 36.04% respectively, with significant contribution to labor market and output; their industry development focused on Manufacture of Electronic Parts and Components, and Hsinchu City accounted for 20.40% of the industry in Taiwan, being the number one of all counties/cities.

▲**In industry-specific areas, Manufacture of Electronic Parts and Components, Manufacture of Chemical Material were the major industries, with total value of production accounted for 64.26% and 57.53% respectively of the industries in Taiwan.**

In 2011, for the development focus of industry-specific areas, Manufacture of Electronic Parts and Components was the number one, with total value of production accounted for 64.26% of the industry in Taiwan; and mainly distributed in Northern Region, accounting for 33.96% of whole nation; among counties/cities, Hsinchu City and Hsinchu County, where Hsinchu Science Park located, accounted for 26.57% in total of the industry in Taiwan. In addition, because Northern Region was the essentially located area of Science Parks, so that the output of Manufacture of Computers, Electronic and Optical Products, which also belonged to Information and electronic industry, was significant as well, contributing 41.82% of total value of production to the industry in Taiwan; Taoyuan County's output ranked the first of Manufacture of Computers, Electronic and Optical Products accounted for 23.56% of the industry in Taiwan. In addition, the production value of Manufacture of Chemical Material ranked second in industry-specific areas, accounted for 57.53% of that industry in Taiwan, Central Region was the key role of production value creation, with 27.18% of the industry in Taiwan, which was mainly distributed in Yunlin County. As for other industries with more characteristics within industry-specific areas, Manufacture of Basic Metals more concentrated in Southern Region as Kaohsiung City and Tainan City, total accounting for 36.64% of output of the industry in Taiwan.

Chart 4 Proportions, by industry-specific area, of engaged person numbers to county/city aggregates

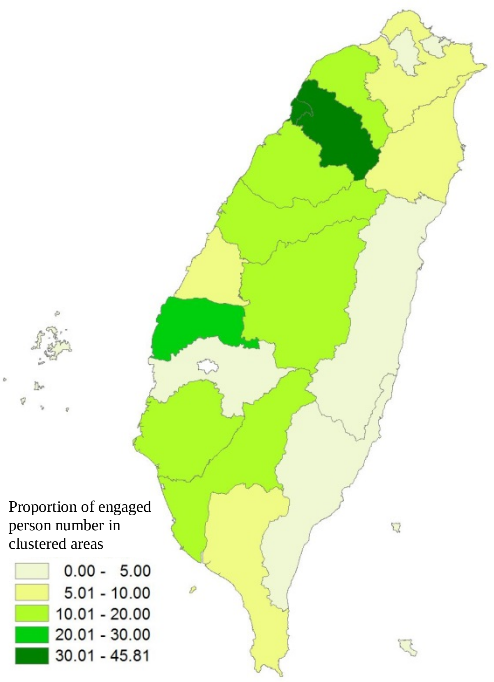


Chart 5 Proportions, by industry-specific area, of total production value to county/city aggregates

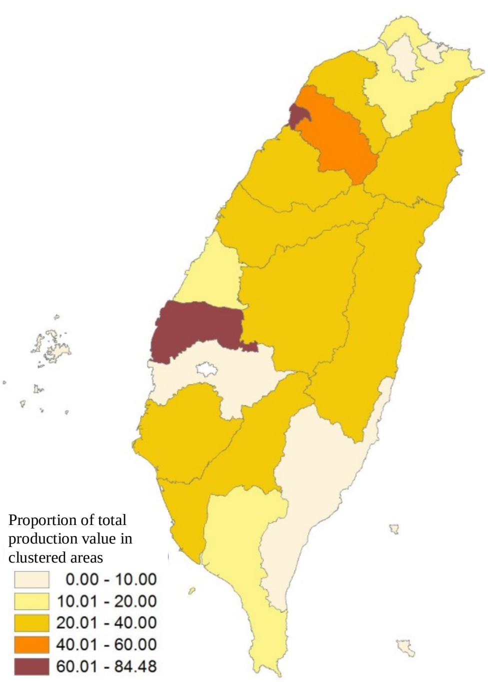


Table 29 Industry-specific areas of all industries, by county/city

2011

	Science Parks			Export Processing Zones			Free Trade Zones		
	Year-end no. of establishment units (establishment)	Year-end number of persons engaged (person)	Annual total value of production (NT$ million)	Year-end no. of establishment units (establishment)	Year-end number of persons engaged (person)	Annual total value of production (NT$ Million)	Year-end no. of establishment units (establishment)	Year-end number of persons engaged (person)	Annual total value of production (NT$ million)
Grand Total	**963**	**232 474**	**1 975 198**	**540**	**73 097**	**327 810**	**166**	**5 955**	**31 017**
Taiwan Area	**963**	**232 474**	**1 975 198**	**540**	**73 097**	**327 810**	**166**	**5 955**	**31 017**
Northern Region	**583**	**132 552**	**992 456**	**-**	**-**	**-**	**87**	**3 067**	**11 607**
New Taipei City	-	-	-	-	-	-	5	296	723
Taipei City	-	-	-	-	-	-	-	-	-
Keelung City	-	-	-	-	-	-	15	738	3 810
Hsinchu City	454	105 938	833 899	-	-	-	-	-	-
Yilan County	-	-	-	-	-	-	2	106	565
Taoyuan County	10	2 909	17 348	-	-	-	65	1 927	6 510
Hsinchu County	119	23 705	141 209	-	-	-	-	-	-
Central Region	**203**	**38 144**	**392 495**	**127**	**20 663**	**128 517**	**29**	**1 184**	**5 504**
Taichung City	152	26 014	280 365	127	20 663	128 517	29	1 184	5 504
Miaoli County	46	11 102	105 293	-	-	-	-	-	-
Changhua County	-	-	-	-	-	-	-	-	-
Nantou County	-	-	-	-	-	-	-	-	-
Yunlin County	5	1 028	6 837	-	-	-	-	-	-
Southern Region	**177**	**61 778**	**590 248**	**413**	**52 434**	**199 292**	**50**	**1 704**	**13 905**
Tainan City	122	58 768	572 633	-	-	-	-	-	-
Kaohsiung City	55	3 010	17 615	383	49 879	189 739	50	1 704	13 905
Chiayi City	-	-	-	-	-	-	-	-	-
Chiayi County	-	-	-	-	-	-	-	-	-
Pingtung County	-	-	-	30	2 555	9 553	-	-	-
Penghu County	-	-	-	-	-	-	-	-	-
Eastern Region	-	-	-	-	-	-	-	-	-
Taitung County	-	-	-	-	-	-	-	-	-
Hualien County	-	-	-	-	-	-	-	-	-
Kinmen-Matsu Area	-	-	-	-	-	-	-	-	-

Note: The data of "Year-end no. of establishment units", "Year-end number of persons engaged", and "Annual total value of production" in the Table were by using Geographic Information Systems to divide each specific areas, and making statistics of establishment units within the areas; related method is detailed as shown in Appendix 3(18); in addition, every ports of Free Trade Zones are divided basing on geographical boundaries of the whole port area.

Table 29 Industry-specific areas of all industries, by county/city (continued)

2011

	Industrial Parks			Total proportions of every specific area			Industry focus within specific areas			
	Year-end no. of establish-ment units (establish-ment)	Year-end number of persons engaged (person)	Annual total value of production (NT$ Million)	The proportion of Year-end no. of establishment units to the county (city) of that area (%)	The proportion of Year-end number of persons engaged to the county (city) of that area (%)	The proportion of Annual total value of production to the county (city) of that area (%)	The First Subsector, by total value of production	accounting for the industry of Taiwan (%)	The Second Subsector, by total value of production	accounting for the industry of Taiwan (%)
Grand Total (Overall average)	**15 103**	**585 395**	**5 533 809**	**1.35**	**11.19**	**26.74**	**Manufacture of Electronic Parts and Components**	**64.26**	**Manufacture of Chemical Material**	**57.53**
Taiwan Area	**15 103**	**585 395**	**5 533 809**	**1.35**	**11.21**	**26.78**	**Manufacture of Electronic Parts and Components**	**64.26**	**Manufacture of Chemical Material**	**57.53**
Northern Region	**7 041**	**297 020**	**1 898 029**	**1.34**	**9.93**	**18.48**	**Manufacture of Electronic Parts and Components**	**33.96**	**Manufacture of Computers, Electronic and Optical Products**	**41.82**
New Taipei City	2 878	79 166	393 350	1.50	6.66	12.17	Manufacture of Computers, Electronic and Optical Products	10.72	Manufacture of Electronic Parts and Components	1.10
Taipei City	532	23 215	110 654	0.27	1.36	1.72	Wholesale Trade	1.00	Telecommunications	4.94
Keelung City	81	2 087	6 655	0.52	3.62	4.28	Support Activities for Transportation	1.04	Manufacture of Food Products	0.44
Hsinchu City	-	-	-	1.93	43.03	71.57	Manufacture of Electronic Parts and Components	20.40	Manufacture of Computers, Electronic and Optical Products	4.65
Yilan County	362	9 320	53 105	1.56	9.02	22.16	Manufacture of Basic Metals	0.67	Manufacture of Chemical Material	0.46
Taoyuan County	2 130	134 645	1 057 228	2.28	16.84	30.39	Manufacture of Computers, Electronic and Optical Products	23.56	Manufacture of Electronic Parts and Components	5.94
Hsinchu County	1 058	48 587	277 037	5.10	36.04	50.19	Manufacture of Electronic Parts and Components	6.17	Manufacture of Chemical Material	1.86
Central Region	**4 015**	**148 588**	**1 865 647**	**1.43**	**12.05**	**37.69**	**Manufacture of Chemical Material**	**27.18**	**Manufacture of Petroleum and Coal Products**	**42.43**
Taichung City	2 056	61 500	288 157	1.41	10.85	23.30	Manufacture of Electronic Parts and Components	7.40	Manufacture of Other Non-metallic Mineral Products	17.21
Miaoli County	173	6 633	45 323	0.93	12.38	25.60	Manufacture of Electronic Parts and Components	2.82	Manufacture of Chemical Material	1.06
Changhua County	729	34 071	193 062	1.13	9.78	18.76	Manufacture of Basic Metals	2.64	Manufacture of Chemical Material	1.16
Nantou County	711	19 017	89 505	3.16	19.56	39.10	Manufacture of Basic Metals	0.93	Manufacture of Food Products	1.73
Yunlin County	346	27 367	1 249 600	1.25	21.08	84.64	Manufacture of Petroleum and Coal Products	41.85	Manufacture of Chemical Material	23.93
Southern Region	**3 698**	**135 643**	**1 730 488**	**1.30**	**13.92**	**35.66**	**Manufacture of Electronic Parts and Components**	**19.69**	**Manufacture of Basic Metals**	**37.08**
Tainan City	1 428	47 000	282 491	1.53	17.50	36.96	Manufacture of Electronic Parts and Components	14.63	Manufacture of Basic Metals	6.71
Kaohsiung City	1 525	66 166	1 327 568	1.33	13.80	39.45	Manufacture of Chemical Material	21.02	Manufacture of Basic Metals	29.93
Chiayi City	-	-	-	-	-	-	-	-	-	-
Chiayi County	486	14 676	74 376	2.41	15.15	23.02	Manufacture of Food Products	2.14	Manufacture of Machinery and Equipment	0.78
Pingtung County	259	7 801	46 053	0.79	7.29	17.59	Manufacture of Food Products	2.51	Manufacture of Chemical Material	0.38
Penghu County	-	-	-	-	-	-	-	-	-	-
Eastern Region	**349**	**4 144**	**39 644**	**1.28**	**4.00**	**17.85**	**Electricity and Gas Supply**	**3.21**	**Manufacture of Other Non-metallic Mineral Products**	**2.21**
Taitung County	108	697	1 189	1.07	2.07	2.00	Retail Trade	0.02	Maintenance and Repair of Personal and Household Goods	0.16
Hualien County	241	3 447	38 455	1.39	4.94	23.63	Electricity and Gas Supply	3.21	Manufacture of Other Non-metallic Mineral Products	2.20
Kinmen-Matsu Area	-	-	-	-	-	-	-	-	-	-

Note: 1. The data of "Year-end no. of establishment units", "Year-end number of persons engaged", and "Annual total value of production" in the Table were using Geographic Information Systems to divide each specific areas, and making statistics of establishment units within the areas; related method is detailed as shown in Appendix 3(18); in addition, every ports of Free Trade Zones are divided basing on geographical boundaries of the whole port area.

2. Total proportions of every specific area: Refer to after summing up the data of Science Parks, Industrial Parks; Export Processing Zones, and Free Trade Zones, then calculated the proportion to county (city) of the area.

(3) Development status of Emerging industries and International logistics industry

▲**Emerging industries and International logistics industry provided 1,150,899 employment opportunities in total, creating total value of production of NT$3 trillion 193.7 billion.**

In 2011, Emerging industries (excluding “quality agriculture”) and International logistics industry input 1,150,899 persons engaged in total, and created total value of production of NT$3 trillion 193.7 billion. Among those industries, Health and nursing care industry provided 408,009 employment opportunities, being the top one, and created total value of production of NT$781.3 billion, also being the highest; International logistics industry’s total value of production was NT$755.3 billion, being the second, and input 164,448 persons engaged, being ranked the fourth. In addition, Cultural creativity industry to promote Taiwan’s economic soft power created total value of production of NT$709.3 billion, and input 212,656 persons engaged, both being the third. Tourism industry which continued adopting open-door policy created total value of production of NT$530.7 billion, being the fourth, and provided 276,799 employment opportunities, next to Health and nursing care industry, being the second. As for Green energy industry and Biotechnology industry, because the technical level and the barriers to entry were high, and some products were still in R&D or implementation stage, they input 70,863 and 64,824 persons engaged respectively, creating NT$360.4 billion and NT$197 billion of total value of production, with relatively lower employment and output.

▲**For the part of emerging products or services of Emerging industries, they were at introduction stage, but showed potential of development.**

Health and nursing care industry primarily focused on Healthcare service industry, the output of which accounted for 78.93% of the industry, and provided over 80% of employment opportunities. International logistics industry focused on Freight transport and its support industry, the output of which accounted for over 95% of the Industry, providing 91.86% of employment opportunities. As for Cultural creativity industry involved a wider dimension, with Digital contents, Advertising and Radio and television industries as major, contributing nearly two-thirds total value of production, and over 50% of employment opportunities of Cultural creativity industry. Tourism-related consumption took traffic and accommodation as major, so that Air transport, Food service and Accommodation service industries' production value accounted for nearly 70% of entire Tourism industry, and provided employment opportunities also over 60%. In addition, for the continuously developing Green energy and Biotechnology industries, the former represented by Photovoltaic and LED lighting industries, created 93.12% of total value of production in total, and providing 90.96% of employment opportunities; the later took Pharmaceutical and Medical device industry as major, both output and employment contribution exceeded 60%; moreover, the output and persons engaged of such industries as Electric vehicle, Wind power, Food biotechnology, Biotechnology pharmaceutical and Biotech services, belonging to the emerging products, were still lower relatively. As a whole, although Green energy and biotechnology industries' employment and output were lower relatively, Green energy industry's labor productivity was ranked number one of all industries by NT$ 5.09 million, also higher than NT$3.67 million of all industries; for the part of "Emerging biotechnology" belonging to Biotechnology industry (such as Food biotechnology industry), its labor productivity was also higher than all industries, with profound potential of future development.

Table 30 Development of Emerging industries and International logistics industry, by industry

2011

	Year-end No. of enterprise units (enterprise)	Year-end No. of establishment units (establishment)	No. of input employees (person)	Annual total value of production (NT$ Million)	Labor productivity (NT$1,000)
Grand Total (Overall average)			**1 150 899**	**3 193 694**	**2 775**
Health and nursing care industry	**26 969**	**27 076**	**408 009**	**781 267**	**1 915**
Healthcare service industry	23 635	23 661	326 943	616 677	1 886
Pharmaceutical industry	439	475	19 823	64 466	3 252
Medical device industry	1 482	1 511	23 993	53 819	2 243
International logistics industry	**14 277**	**16 899**	**164 448**	**755 304**	**4 593**
Freight transport industry	8 175	10 344	89 439	482 119	5 390
Freight transport support ind.	6 246	6 988	61 621	240 795	3 908
Storage industry	1 154	1 532	13 388	32 390	2 419
Cultural creativity industry	**45 168**	**46 270**	**212 656**	**709 269**	**3 335**
Digital content industry	7 104	7 610	43 657	212 860	4 876
Advertising industry	12 063	12 136	40 661	143 212	3 522
Radio and television industry	1 538	1 952	25 239	112 258	4 448
Tourism industry			**276 799**	**530 674**	**1 917**
Air passenger transport Ind.			11 738	151 524	12 908
Food service industry			112 231	140 788	1 254
Accommodation service ind.			47 641	74 163	1 557
Green energy industry	**1 687**	**1 722**	**70 863**	**360 414**	**5 086**
Photovoltaic industry	358	370	23 616	186 816	7 911
LED lighting industry	1 017	1 034	40 838	148 814	3 644
Electric vehicle industry	254	261	4 481	10 922	2 437
Biotechnology industry	**3 515**	**3 700**	**64 824**	**196 966**	**3 038**
Pharmaceutical industry	439	475	19 823	64 466	3 252
Medical device industry	1 482	1 511	23 993	53 819	2 243
Food biotechnology ind.	502	606	7 873	29 694	3 772

Note: 1. The scope of each Industry is detailed in Appendix 2(4).

2. Because enterprise units or establishment units may not operate one industry as a side of the table, and each industry's sub-industries repeated, so the sum of every industry is larger than grand total, and the sum of every sub-industry also may be larger than the grand total of that industry.

3. The Tourism Industry shown in this table was estimated by "Tourism Proportion of Tourism Production value" of "Taiwan Tourism Satellite Accounts" from Ministry of Transportation and Communications; relevant statistics were marked by shadow.