

2019

White Paper on Small and Medium Enterprises in Taiwan



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Foreword

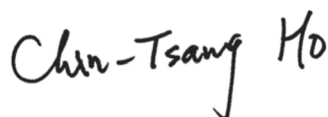
Taiwan's 2018 economic growth was 2.63 percent which was an outstanding performance overall. Although 2019's global economy has slowed down, Taiwan's exports are benefitting from Taiwanese enterprises' investment returns from China and order transfers. While Taiwan's performance exceeds expectations, its economic growth is estimated to lead the pack among Asia's Four Tigers.

The number of Taiwan's SMEs in 2018 reached the highest level in recent years at 1,466,209, which was a 1.99 percent increase compared to that of 2017 and accounted for 97.64 percent of all enterprises in Taiwan. In addition, the number of employed persons in Taiwan's SMEs rose to 8,965,000, a 0.69 percent increase — also the highest level in recent years — and accounted for 78.41 percent of all employed persons in Taiwan. The annual sales of SMEs in 2018 reached NT\$12,624.5 billion, up 3.99 percent from 2017. Domestic sales amounted to NT\$11,171.6 billion, 4.24 percent higher than in 2017. Export sales amounted to NT\$1,452.9 billion, representing a 2.15 percent increase and showing a change of the growth rate from negative to positive. The above statistics illustrate SMEs' important contribution to Taiwan's stability in economic growth, sustainable development, and employment opportunity.

2019 White Paper on Small and Medium Enterprises in Taiwan has two major parts - “Recent Development of SMEs” and “Government SME Policies and Prospects” - and an appendix. The first part outlines the structure, organizational profile, and characteristics of SMEs. The second part presents the significant policies and measures taken or planned to support the SMEs. The appendix contains laws and regulations as well as the statistical tables of SMEs.

Besides the recent development of SMEs analyzed in the first part, the policies and measures presented in the second part cover essential elements of running and operating a small or medium business such as financing and various subsidies including: startup, R&D, incubation and export expansion. These SME policies and measures are timely modified in response to economic changes both domestically and internationally. For example, while the trade war continues between China and the U.S, the “Action Plan for Accelerated Investment by SMEs” launched this year is designed to give Taiwanese businesses greater confidence to invest in Taiwan and support domestic SMEs upgrade.

In summary, the purpose of the *White Paper on Small and Medium Enterprises in Taiwan* is to give readers a comprehensive view of the SME development in Taiwan and initiate more international economic activities, thereby helping SMEs gain more assistance from all aspects. We thank all who have contributed to this issue. Any comments or suggestions are welcome for future improvement and we hope that this white paper meets the needs of those who are interested in Taiwan's SMEs.

A handwritten signature in black ink, reading "Chin-Tsang Ho". The signature is fluid and cursive, with the first name "Chin-Tsang" and the last name "Ho" clearly distinguishable.

Chin-Tsang Ho

Director-General

Small and Medium Enterprise Administration

Ministry of Economic Affairs

November 2019

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Summary

The 2019 White Paper on Small and Medium Enterprises in Taiwan comprises two parts. **Part One** presents an overview and discussion of the most recent operational results and developing trends of SMEs in Taiwan. **Part Two** reviews various government policy measures related to SMEs and examines their goals, implementation and results.

Part One consists of three chapters, covering SMEs' current state of development, finances, funding and human resources.

As for the performance of SMEs in 2018, the number of SMEs reached a record level of 1,466,209, up 1.99 percent from 2017, and accounted for 97.64 percent of all enterprises in Taiwan. In addition, the number of employed persons in SMEs increased to 8,965,000, up 0.69 percent from 2017, and represented 78.41 percent of all employed persons in Taiwan. The annual sales of SMEs in 2018 came to NT\$12,624.5 billion, up 3.99 percent from 2017, accounting for 29.59 percent of the total annual sales of all enterprises in Taiwan. Domestic sales amounted to NT\$11,171.6 billion, 4.24 percent higher than in 2017. Export sales amounted to NT\$1,452.9 billion, a 2.15 percent increase, changing the growth rate from negative to positive. In 2018, a total of 102,186 new SMEs were created.

With regard to the industrial structure in Taiwan, the number of SMEs is mostly concentrated in the service sector, with the proportion being 79.98 percent. 47.27 percent of SMEs are in wholesale and retail trade, followed by the accommodation and food services activities (11.16 percent), and manufacturing (9.81 percent). By the forms of organization, 53.07 percent of SMEs are sole proprietorships. By regional distribution, 46.5 percent of all SMEs were concentrated in northern Taiwan.

In terms of market entry and exit, SMEs often display more flexibility than large enterprises. That explains the concentration of the distribution of the years in existence for SMEs: the share of SMEs in existence below 10 years is 48.85 percent (vs. 21.37 percent of large enterprises). However, nearly 50 percent of SMEs had been in operation for 10 years or more by the end of 2018.

Six special municipalities combined represent 76.47 percent of sales and 73.28 percent of employed persons of SMEs, and have 1,058,877 SMEs, representing 72.22 percent of all SMEs in Taiwan.

Part Two consists of five chapters that review various government policy measures related to SMEs and examine their goals, implementation and results.

Many SMEs in Taiwan possess unique technology and innovative products, but lack the scale, capital, technology, and talents of many large businesses with which they regularly compete. Taiwan's government has been working actively to establish effective policy measures to facilitate the development of SMEs and resolve the hurdles facing SMEs. Multiple policy measures have been taken by relevant government departments to assist SMEs in funding and credit guarantees, marketing, talent cultivation, technology upgrading and transformation, start-up promotion, incubation and acceleration mechanisms, free-trade policy, and an improved legal and regulatory environment.

A large number of projects and ancillary measures have been implemented in order to help achieve these goals. Each year, the government revises its SME development strategy to reflect changes in the economic environment in Taiwan and the global economy as a whole, and carries out planning and implementation of related ancillary measures to boost the competitiveness of Taiwan's SMEs and contribute to their stable, continued development. New relevant guidance and measures have recently been instituted by the government.



Part One

Recent Development of SMEs

Chapter 1 Major Trends in the Development of SMEs

Chapter 2 Financial and Funding Analysis of SMEs

Chapter 3 SMEs: Human Resources

Small and medium-sized enterprises (SMEs) continue to make up the backbone and have been one of the main driving forces of Taiwan's economic development over the past half century: they were recognized as an export vanguard early on, key partners in supply chains and industrial clusters later, and recently the focal point of local economies, entrepreneurship, and industrial upgrading and transformation. Official data published by the central government of the R.O.C. are analyzed to facilitate a deep understanding of SMEs. First, four major indicators including the number of enterprises, total annual sales, domestic sales, and export sales are examined for observations in terms of scale, industries, and sectors. Second, SMEs' financial structure and source of financing as well as human resources utilization, working conditions, and talent development are analyzed.

In 2018, the number of enterprises, total annual sales, and the number of employed workers of Taiwan's SMEs all grew. As of 2018, there were a total of 1,466,209 SMEs in Taiwan, accounting for 97.64 percent of the total number of enterprises in Taiwan, 1.99 percent higher than in 2017; the number of employed workers in SMEs reached 8,965,000, accounting for 78.41 percent of the total number of employed workers in Taiwan, 0.69 percent higher than in 2017; both figures were record highs. SME's sales totaled NT\$12,624.5 billion, and the growth rate of SMEs' sales returned to positive and was 3.99 percent higher than that of 2017; domestic sales totaled NT\$11,171.6 billion and the growth of domestic sales was 4.24 percent higher than that of 2017. Export sales totaled 1,452.9 billion and the growth in export sales was 2.15 percent higher than that of 2017, halting three consecutive years of decline, and changing the growth rate from negative to positive.

CHAPTER 1

Major Trends in the Development of SMEs

As in the first half of 2018 the global economy was stable and the growth in the second half of 2018 slowed, Taiwan's SMEs are now facing greater challenges in avoiding risks, especially when they lack information, funding and human resources.

This chapter consists of four sections. Section I mainly discusses the general business performance of SMEs, including the number of enterprises, total annual sales, domestic sales, and export sales in terms of scale, industry, and sector, as well as a year-by-year comparison. Section II categorizes enterprises by the owner's gender, so as to investigate whether female entrepreneurs' way of operating companies differs. Section III covers the business performance of SMEs in the wholesale and retail trade industry based on the survey results of the Business Survey of Wholesale, Retail and Food Service Activities conducted by the Department of Statistics, Ministry of Economic Affairs. Section IV offers an overview of SMEs' R&D expenditure based on Indicators of Science and Technology Taiwan 2018 conducted by the Ministry of Science and Technology.

Statistics on the number of enterprises and total annual sales in this chapter are from Value-Added Business Tax (VAT) data of the Fiscal Information Agency, Ministry of Finance, while statistics on employed persons (not in tax data) come from the Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data.

I General Business Performance of SMEs

Three major indices —the number of enterprises, total annual sales, domestic sales, export sales, number of employed persons, and paid employees —are shown below.

As of 2018, there were a total of 1,466,209 small and medium-sized enterprises in Taiwan, a 1.99% increase compared with 2017, accounting for 97.64 percent of the total number of enterprises in Taiwan (1,501,642). SMEs are mostly concentrated in the service sector, with the proportion being 79.98 percent, of which wholesale and retail trade accounts for 47.27 percent. One of the major features of SMEs is that they are more flexible in market entry and exit than large enterprises. That explains the concentration of the distribution of the years in existence for SMEs: 48.85 percent of SMEs have been in existence for less than 10 years, while 47.88 percent of large enterprises have been in existence for at least 20 years. Newly established SMEs, defined as those that have been in existence for less than one year, account for 6.97 percent; 29.80 percent of SMEs have been in existence for less than 5 years. In 2018, SMEs' sales totaled NT\$12,624.5 billion, accounting for 29.59 percent of total sales of all enterprises; the domestic share of total SME sales was 88.49 (Table 1-1-1).

Table 1-1-1 Number of Enterprises, Annual Sales, Employed Persons and Paid Employees and Sales per Capita in Taiwan, 2017-2018

Unit: Enterprises; million NT\$; thousand persons; %

Enterprise size Indicator	All enterprises		SMEs		Large enterprises	
	2017	2018	2017	2018	2017	2018
No. of enterprises	1,471,433	1,501,642	1,437,616	1,466,209	33,817	35,433
Share of total	100.00	100.00	97.70	97.64	2.30	2.36
Annual growth rate	2.11	2.05	2.08	1.99	3.59	4.78
Total sales	40,169,099	42,663,539	12,139,513	12,624,472	28,029,586	30,039,067
Share of total	100.00	100.00	30.22	29.59	69.78	70.41
Annual growth rate	4.85	6.21	3.19	3.99	5.58	7.17
Domestic sales	30,172,981	32,043,842	10,717,138	11,171,567	19,455,843	20,872,275
Share of total	100.00	100.00	35.52	34.86	64.48	65.14
Annual growth rate	4.59	6.20	3.64	4.24	5.12	7.28
Export sales	9,996,119	10,619,697	1,422,375	1,452,905	8,573,744	9,166,792
Share of total	100.00	100.00	14.23	13.68	85.77	86.32
Annual growth rate	5.61	6.24	-0.10	2.15	6.63	6.92
No. of employed persons	11,352	11,434	8,904	8,965	1,425	1,450
Share of total	100.00	100.00	78.44	78.41	12.55	12.68
Annual growth rate	0.75	0.72	1.07	0.69	-0.49	1.75
No. of paid employees	9,006	9,083	6,560	6,616	1,423	1,448
Share of total	100.00	100.00	72.84	72.84	15.80	15.94
Annual growth rate	0.90	0.85	1.36	0.85	-0.42	1.76
Sales per capita	3.54	3.73	1.36	1.41	19.67	20.72
Annual growth rate	4.06	5.45	2.10	3.29	6.10	5.32

Note:

1. The annual growth rate is the current year rate of change compared to the previous year.
2. The figures (and percentages) given in the table for the number of employed persons and number of paid employees working in all enterprises include 1,019,000 government employees, accounting for 8.91 percent of all employed persons and 11.22 percent of all paid employees.
3. The term "SME" means an enterprise which has completed company registration or business registration in accordance with the requirements of the laws, and which conforms to the following standards: (1) the enterprise is an enterprise in the manufacturing, construction, mining or quarrying industry with paid-in capital of NT\$80 million or less; (2) the enterprise is an enterprise in an industry other than any of those mentioned above and had sales revenue of NT\$100 million or less in the previous year, according to the Standards for Identifying Small and Medium Enterprises.

Source:

1. Fiscal Information Agency, Ministry of Finance, Value-Added Business Tax (VAT) data (2017-2018).
2. Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data (2017-2018).

SMEs are heavily concentrated in northern Taiwan. In 2018, 46.50 percent (681.7 thousand) of all SMEs were concentrated in northern Taiwan; in terms of regions, Taiwan's six special municipalities (Taipei, New Taipei, Taoyuan, Taichung, Tainan, and Kaohsiung) are the top six, with largest number of SMEs: 1,058 thousand or 72.22 percent of total SMEs combined. Regarding employment, the number of employed persons in SMEs stands at 4,109,000 (45.84 percent) in northern Taiwan.

Here are further details of the performance and condition of Taiwan SMEs.

1. A Total of 1,466,209 SMEs in 2018 and Growing

The number of SMEs set records several times after the 2007-2009 global financial crisis. As of 2018, there were a total of 1,466,209 SMEs in Taiwan, accounting for 97.64 percent of the total number of enterprises in Taiwan. This figure represented an increase of 28,593 enterprises or 1.99 percent from 2017. The number of large enterprises was 35,433, up 4.78 percent from 2017, accounting for 2.36 percent of the total number of enterprises (Table 1-1-1).

2. The Number of Employed Persons in SMEs Reached 8,965,000 in 2018

In 2018, the number of employed persons in SMEs reached 8,965,000, of which 6,616,000 were paid employees. SMEs accounted for 78.41 percent of total employed persons and 72.84 percent of total paid employees (Table 1-1-1).

3. About 80 Percent of SMEs Were in the Service Sector

Regarding the sectors, in 2018, SMEs are mostly concentrated in the service sector, with the proportion being 79.98 percent, and the industrial sector accounts for 19.25 percent. As of 2018, there were a total of 1,172,653 SMEs in the service sector, representing an increase of 24,664 SMEs or 2.15 percent from 2017; there were a total of 282,268 SMEs in the industrial sector, representing growth at 1.63 percent, slightly slower than that in the service sector (Table 1-1-2).

Table 1-1-2 Shares of SMEs in Taiwan by Sector, 2014-2018

Unit: Enterprises; million NT\$; %

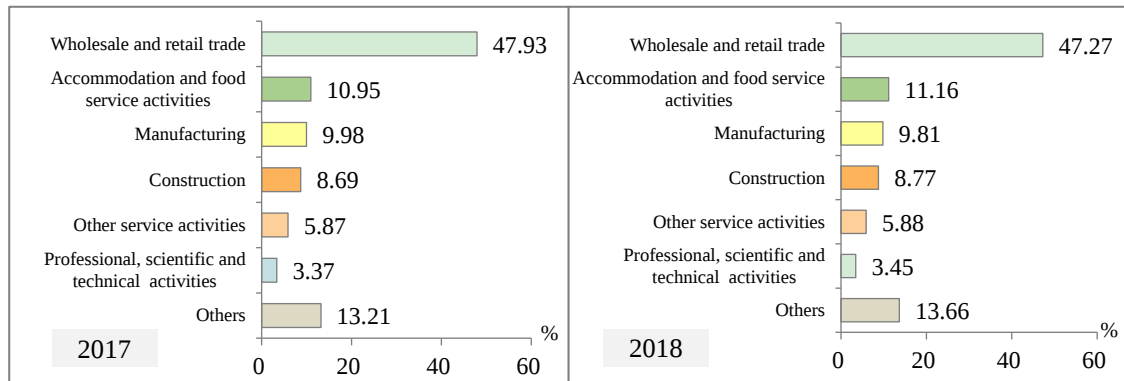
Sector \ Year	2014	2015	2016	2017	2018
All SMEs	1,353,049	1,383,981	1,408,313	1,437,616	1,466,209
Agricultural sector	0.85	0.84	0.81	0.83	0.77
Industrial sector	19.43	19.45	19.40	19.32	19.25
Service sector	79.72	79.72	79.79	79.85	79.98
Total sales	11,839,868	11,803,115	11,764,677	12,139,513	12,624,472
Agricultural sector	0.20	0.20	0.21	0.23	0.23
Industrial sector	49.27	48.23	47.41	47.69	48.22
Service sector	50.53	51.56	52.38	52.09	51.55
Domestic sales	10,345,095	10,325,260	10,340,886	10,717,138	11,171,567
Agricultural sector	0.20	0.20	0.20	0.22	0.23
Industrial sector	46.23	45.13	44.35	44.73	45.35
Service sector	53.58	54.68	55.45	55.05	54.42
Export sales	1,494,773	1,477,855	1,423,791	1,422,375	1,452,905
Agricultural sector	0.22	0.23	0.23	0.27	0.20
Industrial sector	70.36	69.94	69.66	69.96	70.34
Service sector	29.42	29.83	30.11	29.78	29.45

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2014-2018).

4. About 50 Percent of SMEs Were in Wholesale and Retail Trade

In terms of the industries, 47.27 percent of SMEs were in wholesale and retail trade, a total of 693,019 in 2018 (up 3,981 from 2017), followed by accommodation and food service activities with 11.16 percent of SMEs, a total of 163,617 (up 6,229). Third place was manufacturing, with 9.81 percent, a total of 143,853, followed by construction with 8.77 percent, other service activities with 5.88 percent, and professional, scientific and technical activities with 3.45 percent (Figure 1-1-1).

Figure 1-1-1 Distribution of SMEs by Industry, 2017-2018

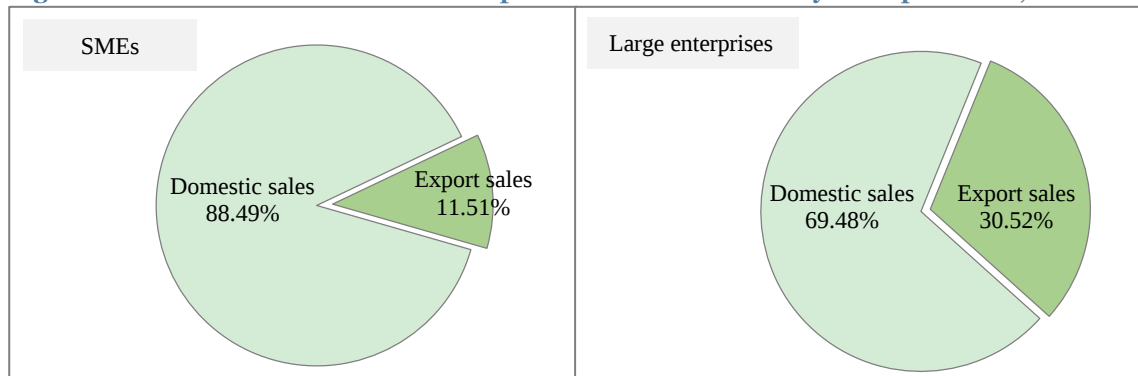


Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2017-2018.

5. Domestic Share of Total Sales of SMEs in 2018 Accounted for 88 Percent

In 2018, SMEs' sales totaled NT\$12,624.5 billion, accounting for 29.59 percent of total sales of all enterprises; SMEs' domestic sales accounted for 88.49 percent (NT\$11,171.6 billion) of total SME sales, with SMEs' domestic sales up 4.24 percent from 2017. Large enterprises' sales totaled NT\$30,390.7 billion; large enterprises' domestic sales accounted for 69.48 percent (NT\$20,872.3 billion) of their total sales, showing SMEs were more domestically oriented than large enterprises (Figure 1-1-2 and Table 1-1-1).

Figure 1-1-2 Shares of Domestic and Export Sales in Total Sales by Enterprise Size, 2018



Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2018.

6. Total Export Sales of SMEs Up 2.15 Percent in 2018

2018 SMEs' export propensity (SME export sales' share of the SMEs' total sales) was at 11.15 percent, down 0.21 percentage points from 2017; 2018 SMEs' export contribution (SME export sales' share of all enterprises' export sales) was at 13.68 percent, down 0.55 percentage points from 2017, which is lower than the historical records, suggesting that it is difficult for SMEs to develop foreign markets (Table 1-1-3).

Table 1-1-3 Number and Sales Performance of SMEs, 2014-2018

Unit: Enterprises; million NT\$; %

Indicator \ Year	2014	2015	2016	2017	2018
No. of SMEs	1,353,049	1,383,981	1,408,313	1,437,616	1,466,209
Ratio	97.61	97.69	97.73	97.70	97.64
Annual growth rate	1.64	2.29	1.76	2.08	1.99
SME total sales	11,839,868	11,803,115	11,764,677	12,139,513	12,624,472
Ratio	29.42	30.36	30.71	30.22	29.59
Annual growth rate	4.58	-0.31	-0.33	3.19	3.99
SME domestic sales	10,345,095	10,325,260	10,340,886	10,717,138	11,171,567
Ratio	34.46	35.41	35.85	35.52	34.86
Annual growth rate	4.52	-0.19	0.15	3.64	4.24
SME export sales	1,494,773	1,477,855	1,423,791	1,422,375	1,452,905
Ratio (Export contribution)	14.62	15.21	15.04	14.23	13.68
Export propensity	12.62	12.52	12.11	11.72	11.51
Annual growth rate	4.95	-1.13	-3.66	-0.10	2.15

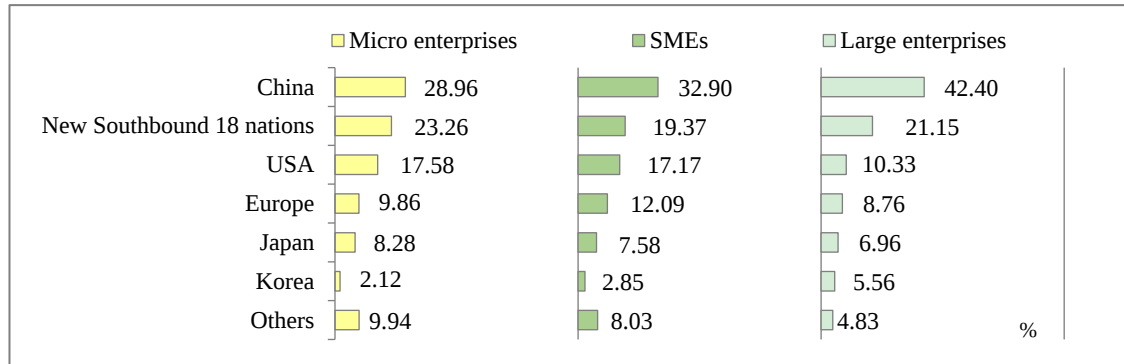
Note: 1. The ratio indicates SMEs' share in total enterprises.

2. Export contribution = (export sales value of SMEs / export sales value of all enterprises) × 100%.

3. Export propensity = (export sales value of SMEs / total sales value of SMEs) × 100%.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2014-2018).

In terms of the shares of regions in export sales, regardless of the size of enterprises, the sequence of shares of regions in export sales in 2018 was similar. Export revenue to China (including Hong Kong and Macau), 18 nations targeted by the ROC government's New Southbound Policy (hereafter New Southbound 18 nations; see note in Figure 1-1-3) and the USA made up approximately 70 percent of all export sales. Among them, large enterprises rely on the market in China (including Hong Kong and Macau) more heavily (42.40 percent) while micro enterprises and SMEs were lower (28.96 percent and 32.90 percent respectively). Micro enterprises have higher shares of export sales to the USA compared to both SMEs and large enterprises (Figure 1-1-3).

Figure 1-1-3 Shares of Regions in Export Sales by Enterprise Size, 2018

Note: 1. Micro enterprises are those with less than 5 employees.

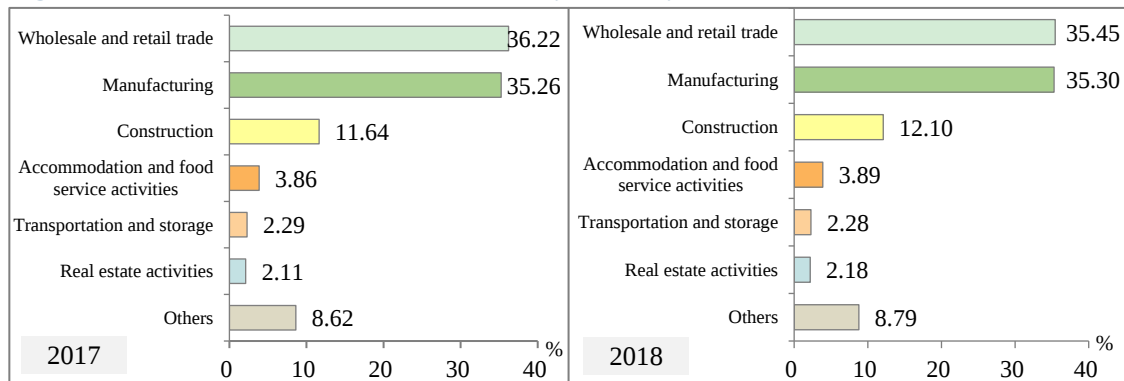
2. Regional Categories: (1) China includes Hong Kong and Macau; (2) New Southbound 18 nations include the Philippines, Indonesia, Malaysia, Singapore, Vietnam, Cambodia, Laos, Myanmar, Brunei, India, Pakistan, Bangladesh, Nepal, Sri Lanka, Bhutan, New Zealand and Australia;

(3) Others include nations other than the USA, Japan, Korea, China, New Southbound 18 nations and Europe.

Source: 2018 Customs Data, Bureau of Foreign Trade, Ministry of Economic Affairs

7. Wholesale and Retail Trade and Manufacturing Remained Top Contributors of Sales

In terms of shares of sales by industry, the top three industries in 2018 were wholesale and retail trade with a share of 35.45 percent (NT\$4,475.9 billion), followed by manufacturing at 35.30 percent (NT\$4,456.8 billion) and construction at 12.10 percent (NT\$1,527.8 billion). Sales of the top three industries combined accounted for 82.86 percent of total sales of SMEs (Figure 1-1-4).

Figure 1-1-4 Distribution of Sales in SMEs by Industry, 2017-2018

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2017-2018.

8. About 102 Thousand New Enterprises in 2018 Were SMEs; Most Sales Came from Domestic Market

Newly established enterprises are defined as those that have been in existence for less than one year. In 2018, there were 102,189 newly established SMEs in Taiwan, representing 99.84 percent of the total of 102,353 newly established enterprises. 94.38 percent of newly established SMEs' total sales came from the domestic market in 2018, higher than the 51.35 percent for newly established large enterprises (Table 1-1-4).

Table 1-1-4 Number and Sales Performance of Newly Established Enterprises, 2018

Unit: Enterprises; million NT\$; %

Enterprise size Indicator	Total (1)	No. of SMEs (2)	SMEs ratio (3) = (2)/(1)	Share of SMEs total	No. of large enterprises (4)	Large enterprises ratio (5) = (4)/(1)	Share of large enterprises total
No. of enterprises	102,353	102,189	99.84	-	164	0.16	-
Total sales	225,281	179,280	79.58	100.00	46,001	20.42	100.00
Domestic sales	192,834	169,211	87.75	94.38	23,623	12.25	51.35
Export sales	32,447	10,069	31.03	5.62	22,378	68.97	48.65

Note: “-”: not applicable.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

9. Service Sector Accounted for the Largest Number of Newly Established SMEs

Regarding the sectors, the service sector accounted for the largest number of newly established SMEs (86,695 or 84.84 percent of newly established SMEs) in 2018 and accounted for about 75.97 percent of sales, 76.89 percent of domestic sales, and 60.47 percent of exports of newly established SMEs (Table 1-1-5).

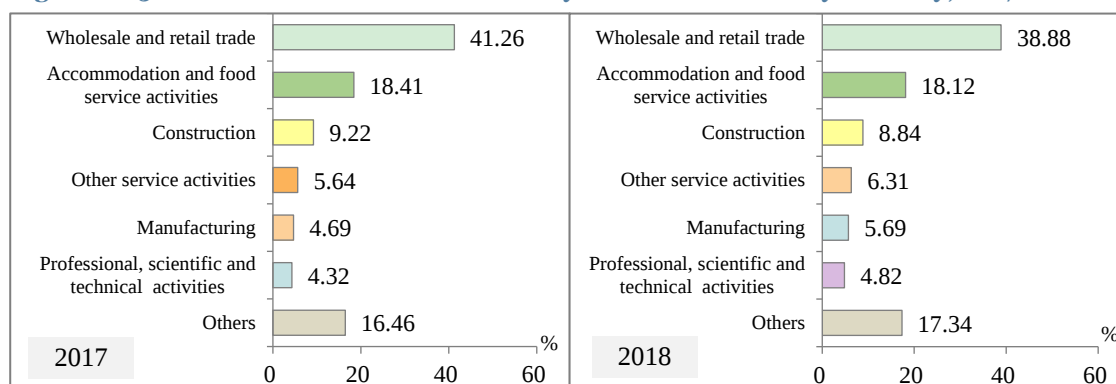
Table 1-1-5 Number and Sales Performance of Newly Established SMEs by Sector, 2018

Unit: Enterprises; million NT\$; %

Sector	Indicator		Total sales		Domestic sales		Export sales	
	No. of enterprises	Share of total	Total sales	Share of total	Domestic sales	Share of total	Export sales	Share of total
All sectors	102,189	100.00	179,280	100.00	169,211	100.00	10,069	100.00
Agricultural sector	746	0.73	445	0.25	432	0.26	13	0.13
Industrial sector	14,748	14.43	42,633	23.78	38,666	22.85	3,967	39.40
Service sector	86,695	84.84	136,202	75.97	130,113	76.89	6,089	60.47

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

Concerning the industries, 38.88 percent of newly established SMEs were in wholesale and retail trade, followed by accommodation and food service activities at 18.12 percent, and construction at 8.84 percent in 2018 (Figure 1-1-5).

Figure 1-1-5 Distribution of Number of Newly Established SMEs by Industry, 2017-2018

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2017-2018.

10. Newly Established SMEs in Mining and Quarrying Showed Good Growth and Performance in Sales

In 2018, the growth rate in number of newly established SMEs from 2017 in arts, entertainment and recreation (71.48 percent) was highlighted. In terms of sales, mining and quarrying grew significantly (136.04 percent) due to its lower base period. However, it only contributed 0.25 percent of all sales, thus the impact is limited. In comparison, sales in human health and social work activities decreased by a sensational 65.03 percent.

11. SMEs Are More Flexible in Entry & Exit than Large Enterprises

As of 2018, 6.97 percent of SMEs had been in existence for less than one year. 29.80 percent of SMEs had been operating for up to five years, and 48.85 percent for up to 10 years. On the other hand, large enterprises in existence for over 20 years constituted 47.88 percent of large firms. These figures show that, in terms of market entry and exit, SMEs display more flexibility than large enterprises (Table 1-1-6).

Table 1-1-6 Shares of SMEs by Particular Ages, 2018

Unit: Enterprises; %

Enterprise size Age	Total	SMEs		Large enterprises	
		Number of enterprises	Share of total	Number of enterprises	Share of total
Total	1,501,642	1,466,209	100.00	35,433	100.00
Less than 1 year	102,353	102,189	6.97	164	0.46
1 – 2 years	103,116	102,535	6.99	581	1.64
2 – 3 years	85,827	85,092	5.80	735	2.07
3 – 4 years	79,607	78,792	5.38	815	2.30
4 – 5 years	69,102	68,295	4.66	807	2.28
5 – 10 years	283,815	279,348	19.05	4,467	12.61
10 – 20 years	373,626	362,729	24.74	10,897	30.75
20 years or more	404,196	387,229	26.41	16,967	47.88

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

However, the share of SMEs in existence for 10 years or more was 51.15 percent, a rising figure over the years.

12. About 53 Percent of SMEs Were Sole Proprietorships

Sole proprietorships constituted the largest group of SMEs, with 778,068 firms or 53.07 percent of the total, followed by limited corporations, with 456,947 firms (31.16 percent of the total), and corporations limited, with 123,544 firms (8.43 percent). These three types accounted for a combined total of 92.66 percent of all SMEs in Taiwan. On the other hand, corporations limited constituted the largest group of larger enterprises, at 54.18 percent of the total, followed by limited corporations at 23.30 percent and subsidiaries of the domestic company at 11.02 percent. These three types accounted for a combined total of 88.50 percent of all larger enterprises in Taiwan (Table 1-1-7).

Table 1-1-7 Number and Share of Enterprises in Taiwan by Form of Organization, 2018

Unit: Enterprises; %

Enterprise size Organization	Total	SMEs		Large enterprises	
		Number of enterprises	Share of total	Number of enterprises	Share of total
Total	1,501,642	1,466,209	100.00	35,433	100.00
Corporation limited	142,740	123,544	8.43	19,196	54.18
Limited corporation	465,202	456,947	31.16	8,255	23.30
Unlimited corporation	96	95	0.01	1	0.00
Unlimited corporation with limited liability shareholders	20	20	0.00	0	0.00
Partnership	31,634	31,523	2.15	111	0.31
Sole proprietorship	778,197	778,068	53.07	129	0.36
Subsidiary of domestic company	37,378	33,473	2.28	3,905	11.02
Subsidiary of foreign company	5,686	4,776	0.33	910	2.57
Others	40,689	37,763	2.57	2,926	8.26

Note: 1. Others denotes business entities not in the form of any type of companies, partnership or sole proprietorship.

2. The majority of business entities in this group are offices, branches or retail shops of domestic companies, not counted as subsidiaries of those companies.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

II SMEs and the Regional Development

1. About 47 Percent SMEs Were Concentrated in Northern Taiwan

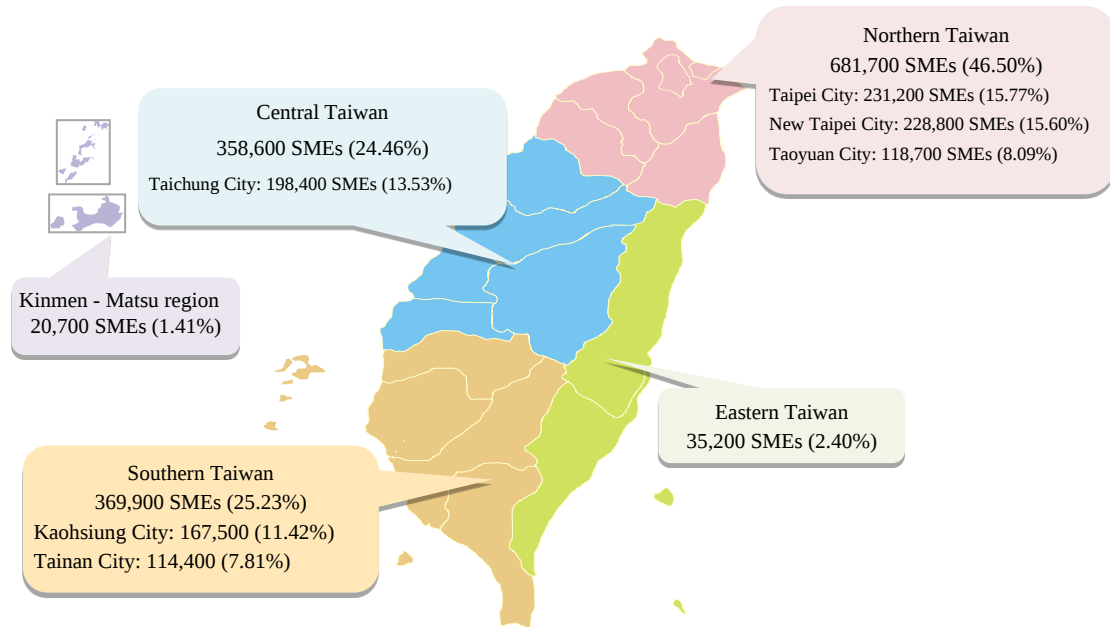
In regional terms, in 2018, 46.50 percent of SMEs (681.7 thousand) were concentrated in northern Taiwan; 24.46 percent (358.6 thousand) were located in central Taiwan and 25.23 percent (369.9 thousand) were in southern Taiwan (Figure 1-2-1).

Taiwan's six special municipalities are the top six with the largest number of SMEs: 1,058.9 thousand or 72.22 percent of total SMEs combined in 2018. As can be seen from the data presented in Table 1-2-1, of the six special municipalities, Taipei City had the largest number of SMEs: 231.2 thousand or 15.77 percent of all SMEs, followed by 228.8 thousand or 15.60 percent in 2nd-ranked New Taipei City. Compared to 2017, the six special municipalities reported rising numbers of SMEs. Taichung City and Taoyuan City showed the largest growth (2.98 percent and 2.41 percent respectively) in number of SMEs (Table 1-2-1).

Examination of the distribution of SMEs by sector in 2018 shows that Kaohsiung City had the largest share of agricultural SMEs at 28.88 percent, followed by Ilan County (8.68 percent), and Changhua County (7.73 percent). New Taipei City had the largest share of industrial SMEs, accounting for 25.43 percent, while Taipei City, the commercial and financial center of Taiwan, had the largest share of service SMEs, accounting for 90.95 percent. Moreover, Taipei City had the largest shares of all industries of service SMEs except for transportation and storage. The shares of SMEs of knowledge-based service industries including information and communication (45.66 percent), financial and insurance (41.31 percent), professional, scientific and technical activities

(35.54 percent), education (28.37 percent), and human health and social work activities (23.27 percent) were far larger than those of other cities and counties.

Figure 1-2-1 The Distribution of SMEs by Region in 2018



Note: Northern Taiwan includes Taipei City, New Taipei City, Keelung City, Ilan County, Taoyuan City, Hsinchu City, and Hsinchu County. Central Taiwan includes Miaoli County, Taichung City, Changhua County, Nantou County and Yunlin County. Southern Taiwan includes Chiayi City, Chiayi County, Tainan City, Kaohsiung City, Pingtung County and Penghu County. Eastern Taiwan includes Hualien County and Taitung County. The Kinmen-Matsu region includes Kinmen County and Lienchiang County.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2018.

Table 1-2-1 Number and Total Sales of SMEs in Taiwan's Six Special Municipalities by Size of Enterprise, 2018

Unit: Enterprises; million NT\$; %

Major cities Enterprise size	Total	Combined total for the six special municipalities	Taipei City	New Taipei City	Taoyuan City	Taichung City	Tainan City	Kaohsiung City
Number of enterprises								
All enterprises	1,501,642	1,088,281	242,143	234,196	121,807	202,461	116,546	171,128
SMEs	1,466,209	1,058,877	231,161	228,774	118,654	198,364	114,443	167,481
Share of total	100.00	72.22	15.77	15.60	8.09	13.53	7.81	11.42
Annual growth rate	1.99	2.09	1.77	1.47	2.41	2.98	2.21	2.03
Large enterprise	35,433	29,404	10,982	5,422	3,153	4,097	2,103	3,647
Total sales								
All enterprises	42,663,539	33,257,497	12,821,191	4,973,789	3,735,735	4,577,910	2,385,473	4,763,399
SMEs	12,624,472	9,654,392	1,957,743	2,046,750	1,331,453	1,895,585	949,246	1,473,615
Share of total	100.00	76.47	15.51	16.21	10.55	15.02	7.52	11.67
Annual growth rate	3.99	3.49	1.56	3.55	3.00	5.24	1.95	5.27
Large enterprise	30,039,067	23,603,105	10,863,448	2,927,039	2,404,282	2,682,325	1,436,227	3,289,784

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

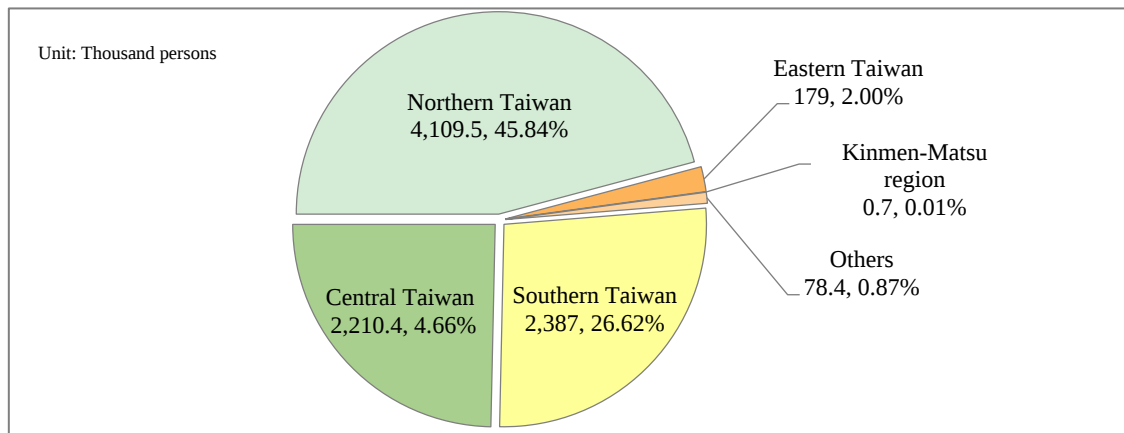
2. SME Sales by City: 77 Percent from Six Special Municipalities

Examination of SME sales in 2018 by city shows that about 76.47 percent of all SME sales came from the six special municipalities. The largest share of overall SME sales was in New Taipei City with 16.21 percent of total SME sales, followed by Taipei City with 15.51 percent, Taichung City (15.02 percent), Kaohsiung City (11.67 percent), Taoyuan City (10.55 percent), and Tainan City (7.52 percent).

3. Northern Region Had about 46 Percent of SME Employees

As can be seen from the 2018 data presented in Figure 1-2-2, of the four regions, northern Taiwan had the largest number of SME employees (4,109 thousand or 45.84 percent), followed by Southern Taiwan (26.63 percent), and Central Taiwan (24.66 percent).

Figure 1-2-2 Distribution of SME Employment by Region, 2018



Notes: Others denotes employed persons with a domicile record in Taiwan but who work for SMEs overseas in 2018.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2018).

III Female-owned SMEs

Based on data from the Fiscal Information Agency, Ministry of Finance, the gender of a person is identified by the first digit of her (his) identity card number. Therefore, enterprises where the owner is a juridical person or foreigner have to be excluded from the calculations. It follows that the total number of SMEs in Section I may not match the sum of female-owned SMEs and male-owned SMEs.

1. Female-owned Enterprises Accounted for over 36 Percent of All Enterprises; about 99 Percent of Female-owned Enterprises Were SMEs

In 2018, there were 1,484,548 enterprises in Taiwan for which the sex of the business owner could be identified. Of these, 540,864 (36.43 percent of the total) were owned by women. Female-owned enterprises increased by 10,834 or 2.04 percent from 2017. Of female-owned enterprises, 98.67

percent (533,659) were SMEs (Table 1-3-1).

Table 1-3-1 Number and Sales Performance of Enterprises by Sex of Business Owner, 2018

Unit: Enterprises; million NT\$; %

Enterprise size Indicator	All enterprises	SMEs	Large enterprises
No. of enterprises	1,484,548	1,451,597	32,951
Female-owned enterprises	540,864	533,659	7,205
Share of total ^a	100.00	98.67	1.33
Share of total ^b	36.43	36.76	21.87
Male-owned enterprises	943,684	917,938	25,746
Total sales	37,473,690	12,200,298	25,273,392
Female-owned enterprises	6,282,462	3,107,165	3,175,297
Share of total ^a	100.00	49.46	50.54
Share of total ^b	16.76	25.47	12.56
Male-owned enterprises	31,191,228	9,093,133	22,098,095
Domestic sales	29,010,218	10,901,349	18,108,869
Female-owned enterprises	5,395,543	2,845,135	2,550,408
Share of total ^a	100.00	52.73	47.27
Share of total ^b	18.60	26.10	14.08
Male-owned enterprises	23,614,675	8,056,214	15,558,461
Export sales	8,463,472	1,298,949	7,164,523
Female-owned enterprises	886,919	262,030	624,889
Share of total ^a	100.00	29.54	70.46
Share of total ^b	10.48	20.17	8.72
Male-owned enterprises	7,576,553	1,036,918	6,539,634

Note:

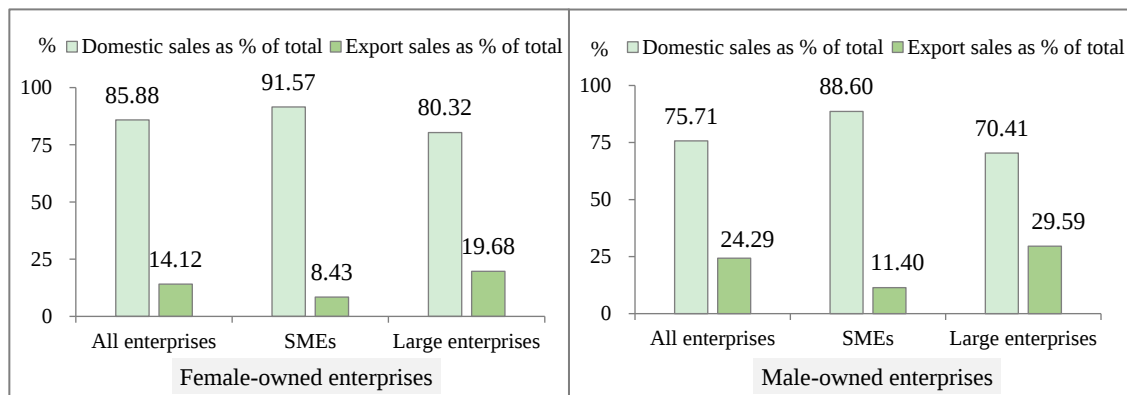
- Whether an enterprise should be classified as male-owned or female-owned was determined using the registered identity of the business owner.
- The totals for all enterprises given in this table do not conform to those given in Table 1-1-1 because some enterprises are registered as being owned by other enterprises or by foreigners; these enterprises were excluded from the data used in this table.
- Share of total ^a in the table represents the percentages of SMEs (large enterprises) in all female-owned enterprises; share of total ^b represents the percentage of female-owned enterprises in all enterprises.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

2. Female-owned Enterprises Were More Oriented toward Domestic Market, Female-owned SMEs in Particular

In 2018, domestic sales accounted for a dominant 91.57 percent of the total sales of female-owned SMEs, with export sales accounting for only 8.43 percent (a disparity of 83.14 percentage points). For male-owned SMEs, export sales accounted for 11.40 percent, and domestic sales accounted for 88.60 percent, a disparity of 77.20 percentage points (Figure 1-3-1).

Figure 1-3-1 Shares of Domestic Sales and Export Sales by Sex of Business Owner, 2018



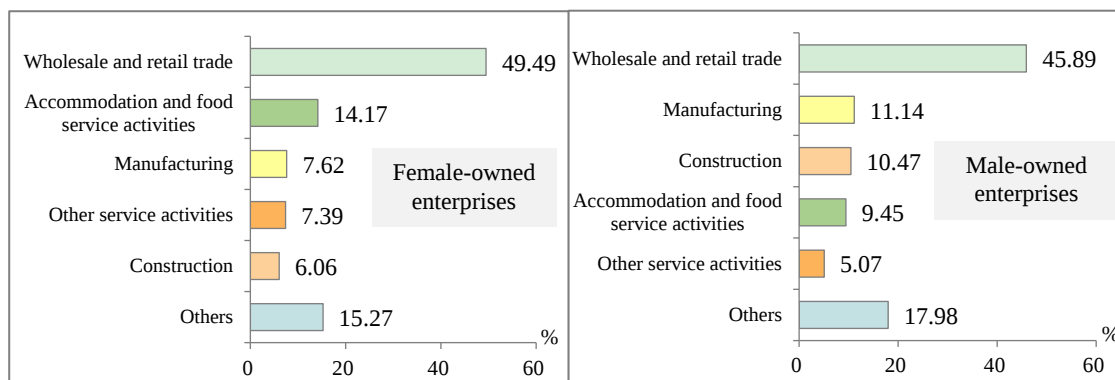
Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

3. Female-owned SMEs Were Heavily Concentrated in the Wholesale and Retail Trade

The service sector accounted for the largest share of the total number of female-owned enterprises at 85 percent, compared to a 77 percent share of male-owned enterprises. The wholesale and retail trade industry accounted for the largest share of the total number of female-owned SMEs, and also for the largest share of female-owned SMEs in total sales, domestic sales and export sales, at 49.49 percent, 42.09 percent, 41.68 percent and 46.55 percent in 2018.

The same top five industries accounted for the largest share of the total number of both male and female-owned SMEs but with slightly different order. For female-owned SMEs in 2018, the order was wholesale and retail trade at 49.49 percent, followed by accommodation and food service activities at 14.17 percent, manufacturing at 7.62 percent, other service activities at 7.39 percent, and construction at 6.06 percent. For male-owned SMEs, the order was wholesale and retail trade at 45.89 percent, followed by manufacturing at 11.14 percent, construction at 10.47 percent, accommodation and food service activities at 9.45 percent, and other service activities at 5.07 percent (Figure 1-3-2).

Figure 1-3-2 Industry Distribution of SMEs by Sex of Business Owner, 2018



Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

4. 60 Percent of Female-owned Enterprises Are Sole Proprietorships

Sole proprietorships were the most common form of organization for both female-owned enterprises (59.98 percent) and male-owned enterprises (49.82 percent), followed by limited corporations at 28.83 percent and 32.36 percent, and corporation limited at 6.02 percent and 9.66 percent respectively (Table 1-3-2).

Table 1-3-2 Number of Different Forms of Enterprises by Sex of Business Owner, 2018

Unit: Enterprises; %

Indicator \ Sex of owner	Total men and women	Female-owned enterprises		Male-owned enterprises	
		No. of enterprises	Share of total	No. of enterprises	Share of total
Total	1,451,597	533,659	100.00	917,938	100.00
Corporation limited	120,805	32,138	6.02	88,667	9.66
Limited corporation	450,942	153,869	28.83	297,073	32.36
Unlimited corporation	91	39	0.01	52	0.01
Unlimited corporation with limited liability shareholders	20	6	0.00	14	0.00
Partnership	31,497	11,471	2.15	20,026	2.18
Sole proprietorship	777,349	320,070	59.98	457,279	49.82
Subsidiary of domestic company	32,270	6,180	1.16	26,090	2.84
Subsidiary of foreign company	2,728	1,000	0.19	1,728	0.19
Others	35,895	8,886	1.66	27,009	2.94

Note: Others denotes business entities not in the form of any type of company, partnership or sole proprietorship. The majority of business entities in this group are the offices, branches or retail shops of domestic companies, not counted as subsidiaries of those companies.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

5. Sales Comparison between Male-owned and Female-owned SMEs

Observation of sales in newly established SMEs showed that in 2018, newly established SMEs' sales were 166.35 billion, which accounted for 1.36 percent of all SMEs' sales. The sales numbers of male-owned and female-owned newly established SMEs were 109.8 billion and 56.55 billion respectively, accounting for 1.21 percent and 1.82 percent of male-owned and female-owned SMEs. Female-owned newly established SMEs accounted for over 34 percent of sales in newly established SMEs, approximately half the amount of male-owned newly established SMEs (66 percent) (Table 1-3-3).

In terms of domestic sales and export sales, both male-owned and female-owned SMEs' sales were at least 88 percent domestic, and for both male-owned and female-owned newly established SMEs, domestic sales accounted for more than 90 percent of their sales (96.27 percent and 95.47 percent respectively). This shows that in the early stage of newly established enterprises, they relied mainly on the domestic market.

Table 1-3-3 Number and Sales of Newly Established SMEs by Sex of Business Owner, 2018

Unit: Enterprises; million NT\$; %

Indicator \ Item	Male and female combined (1)	Female-owned enterprise size (2)	Female-owned enterprise ratio (3)=(2)/(1)	Female-owned enterprise structural ratio	Male-owned enterprise size (4)	Male-owned enterprise ratio (5)=(4)/(1)	Male-owned enterprise structural ratio
Number	100,142	38,017	37.96	-	62,125	62.04	-
Sales	166,355	56,555	34.00	100.00	109,800	66.00	100.00
Domestic sales	159,269	54,443	34.18	96.27	104,826	65.82	95.47
Export sales	7,086	2,112	29.81	3.73	4,974	70.19	4.53

Note:

1. - means that it does not apply.

2. Due to rounding, sales and the sum of domestic sales and export sales may not be the same.

3. The difference between the sum of all indicators and the sum listed in Table 1-1-4 is because representatives of some enterprises were legal persons or foreigners and thus their gender could not be distinguished.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

IV Business Performance of SMEs

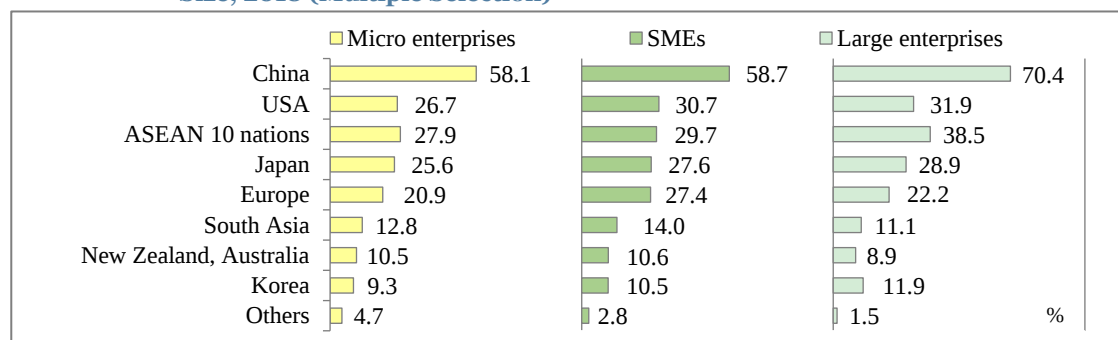
To provide a clear picture of the current state of Taiwanese SMEs in the wholesale, retail and food service activities industries, this section presents business performance of SMEs in the wholesale and retail industry based on the results of Business Survey of Wholesale, Retail and Food Service Activities addressed in October 2018 by the Department of Statistics, Ministry of Economic Affairs. In this survey, SME is defined as a business entity with fewer than 100 regular employees, and a large enterprise is defined as a business entity with 100 or more regular employees).

1. SMEs in Wholesale: Business Performance

(1) Wholesale: Future Top Priority in Foreign Markets was China

Regardless of the scale size, in terms of 2018 wholesale enterprises' future top priority in foreign markets, China had the highest proportion among all enterprises. Large enterprises predominantly focused on the Chinese market (70.4 percent), while micro enterprises and SMEs did so to a lesser extent (58.1 percent and 58.7 percent respectively) (Figure 1-4-1).

Figure 1-4-1 Overseas Markets for Future Expansion in Wholesale Industry by Enterprise Size, 2018 (Multiple Selection)

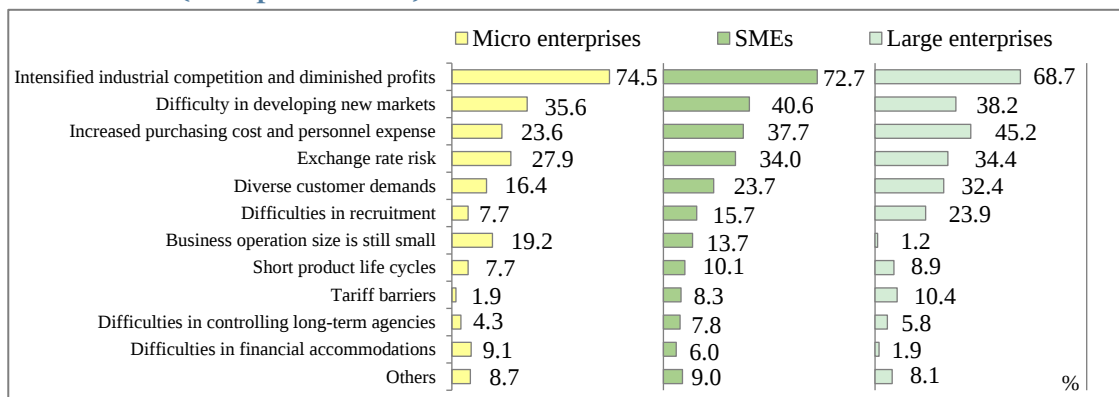


Source: Trade and Food Services Operations Surveys, Department of Statistics, Ministry of Economic Affairs, (October 2018).

(2) Wholesale: Business Predicaments, Mainly “Intensified Industrial Competition and Diminished Profits”

The main business predicaments facing wholesale in both SMEs and large enterprises were “intensified industrial competition and diminished profits.” Over 70% of micro enterprises and SMEs named this as an obstacle in their operations. The second to fourth difficulties in both SMEs and large enterprises were “difficulty in developing new markets,” “increased purchasing cost and personnel expense,” and “exchange rate risk,” but the ranking in SMEs and large enterprises was somewhat different (Figure 1-4-2).

Figure 1-4-2 Obstacles in Operations for Wholesale Industry by Enterprise Size, 2018 (Multiple Selection)

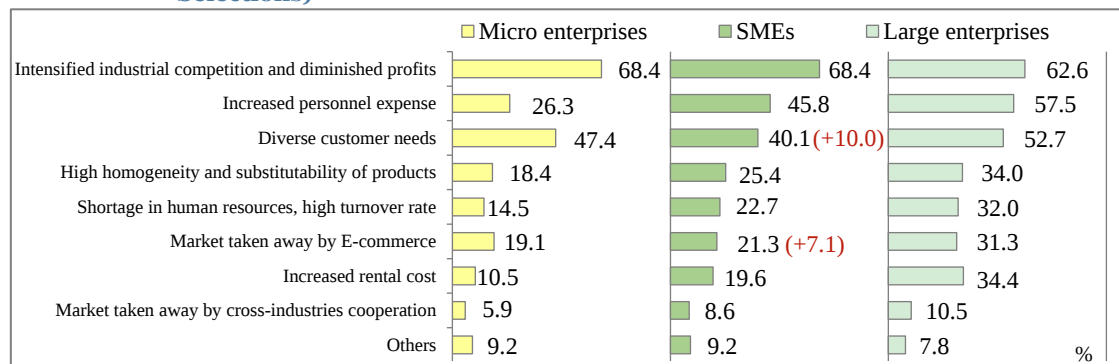


Source: *Trade and Food Services Operations Surveys*, Department of Statistics, Ministry of Economic Affairs, (October 2018).

(3) Retail: Business Predicaments, Mainly “Intensified Industrial Competition and Diminished Profits”

The main business predicaments facing retail in both SMEs and large enterprises were “intensified industrial competition and diminished profits,” with over 60 percent of both naming this as a difficulty. The second and third difficulties in both SMEs and large enterprises were “increased personnel expense,” and “diverse customer needs” (Figure 1-4-3).

Figure 1-4-3 Obstacles in Operations for Retail Industry by Enterprise Size, 2018 (Multiple Selections)



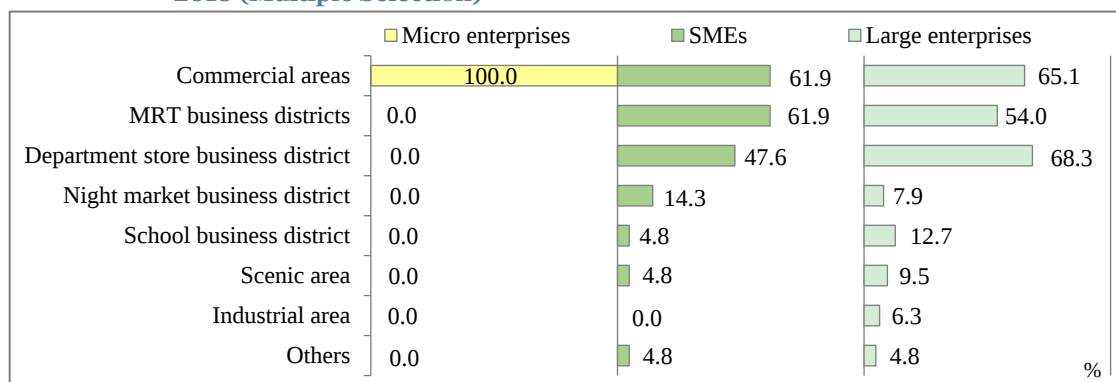
Source: *Trade and Food Services Operations Surveys*, Department of Statistics, Ministry of Economic Affairs, (October 2018).

2. SMEs in Food and Beverage Service Activities: Business Performance

(1) Fewer Micro and SMEs Had Expansion Plans than Large Enterprises; SMEs' Location Priorities Were Commercial Areas and MRT Business District

Only 7.1 percent of micros and 13.2 percent of SMEs had future expansion plans, far below large enterprises' 61.8 percent. As for location priorities, micro enterprises unanimously preferred commercial areas, SMEs preferred commercial areas and MRT business districts, while the department store business district is their second choice. For large enterprises, their preference was as follows: department store business district, commercial area and MRT business district (Figure 1-4-4).

Figure 1-4-4 Location Priorities in Future Expansion for Food Industry by Enterprise Size, 2018 (Multiple Selection)



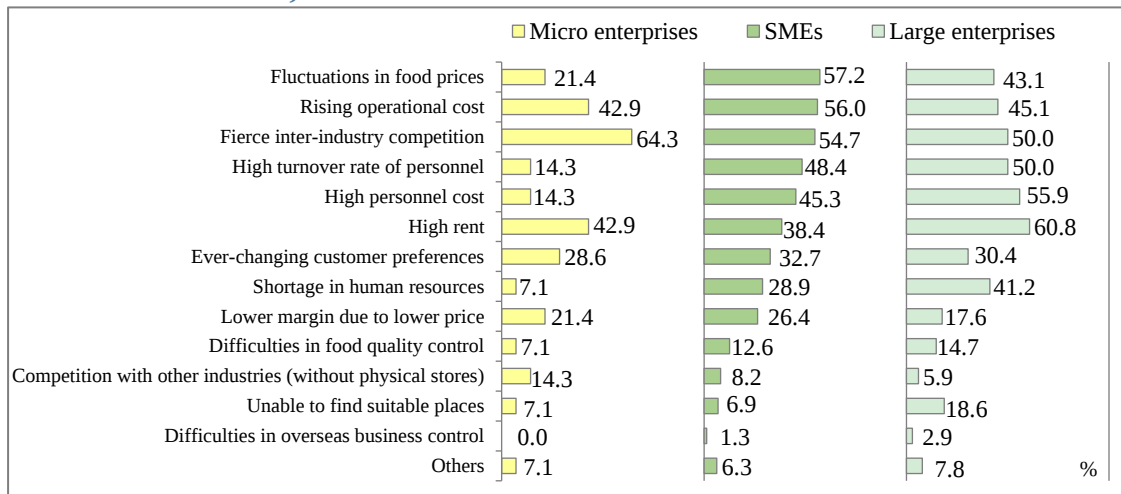
Source: Trade and Food Services Operations Surveys, Department of Statistics, Ministry of Economic Affairs, (October 2018).

(2) Micro Enterprises' Primary Setback Was "Fierce Inter-Industry Competition," while SMEs' Primary Setback Was "Fluctuations in Food Prices"

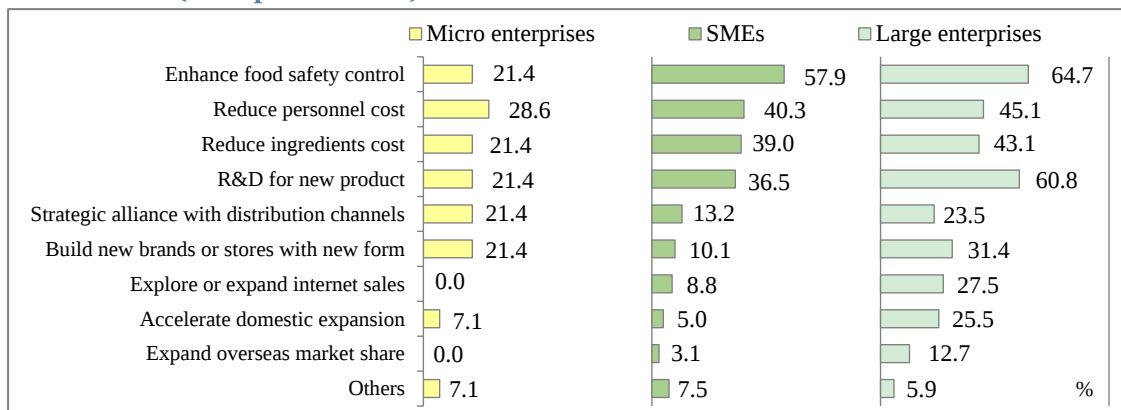
The main business predicament facing food service activities in micro enterprises was "fierce inter-industry competition" in SMEs it was "fluctuations in food prices," cited by 57.2 percent, followed by "rising operational cost" and "fierce inter-industry competition;" for large enterprises, the main difficulty facing food service activities was "high rent," named by 60.8 percent, followed by "high personnel cost," while both "fierce inter-industry competition" and "high turnover rate of personnel" came in third (Figure 1-4-5).

(3) Micro Enterprises' Primary Development Plan Was "Reduce Personnel Cost," while SMEs' and Large Enterprises' Primary Development Plan Was "Enhance Food Safety Control"

The main development plan for micro enterprises was "reduce personnel cost" as for SMEs and large enterprises it was "enhance food safety control," which was 57.9 percent and 64.7 percent respectively due to the rising customer concern about food safety (Figure 1-4-6).

Figure 1-4-5 Obstacles in Operations for Food Industry by Enterprise Size, 2018 (Multiple Selection)

Source: Trade and Food Services Operations Surveys, Department of Statistics, Ministry of Economic Affairs, (October 2018).

Figure 1-4-6 Operational Development Plan for Food Industry by Enterprise Size, 2018 (Multiple Selection)

Source: Trade and Food Services Operations Surveys, Department of Statistics, Ministry of Economic Affairs, (October 2018).

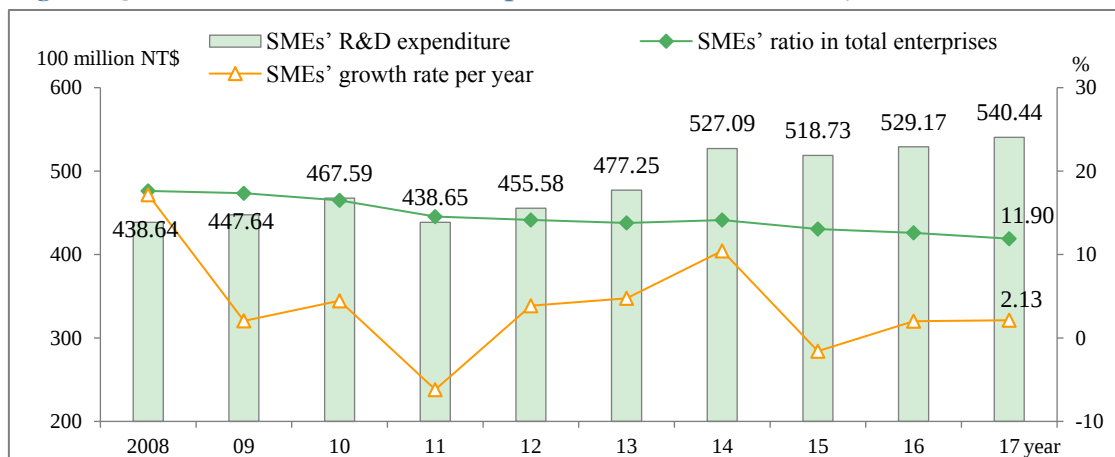
V Overview of SMEs' Expenditure on R&D

Expenditure on R&D is significant for enterprises' upgrading and transformation, to remain competitive and profitable. To measure enterprises' innovation, the most commonly used indicator is firms' R&D expenditure. This section will explore the R&D spending of the nation as a whole and the corporate sector. At the same time, to gain a clear understanding of the R&D strategies of SMEs, we will also analyze the original data from *the Science and Technology Statistics 2018 Edition Highlights* published by the Ministry of Science and Technology.

1. R&D Expenditure of SMEs Grew

In terms of size, total R&D expenditure by SMEs (defined as enterprises with fewer than 200 employees) had been rising in recent years, then declined in 2015, rebounded in 2016 and hit a growth rate of 2.13 percent in 2017. Total R&D expenditure by large enterprises had also risen from 2008 to 2017 and rose 8.99 percent in 2017 (Figure 1-5-1).

Figure 1-5-1 Overview of SMEs' R&D Expenditure from 2008 to 2017



Note: SMEs here are those with less than 200 employees

Source: *Science and Technology Statistics 2018 Edition Highlights*, Ministry of Science and Technology, (December 2018).

CHAPTER 2

Financial and Funding Analysis of SMEs

Financial analysis plays a vital role in the understanding of the current state of Taiwan's SMEs and the outlook for their future development. The first two sections of this chapter present an overview of the financial status of Taiwan's SMEs as well as ratio analysis, using the Business Income Tax Return dataset for 2017 provided by the Fiscal Information Agency of the Ministry of Finance; there is thus a one-year time lag as compared with the data presented in the other chapters of this White Paper. The third section examines the interaction between SMEs and the banking sector, using survey data from the Central Bank of the Republic of China (Taiwan) or statistics collected by the Financial Supervisory Commission.

I SMEs: Consolidated Financial Analysis

In this section, consolidated balance sheet and income statement data (where the figures for each account are converted into percentages of total assets for the balance sheet and percentages of net operating revenue for the income statement) are used to examine the fund utilization, asset allocation and operating performance of SMEs, so as to gain an overall understanding of SMEs' financial and business condition.

1. Asset Allocation Analysis

(1) Both Current Assets and Current Liabilities Were Down

As can be seen from Table 2-1-1, for SMEs in 2017, the share of total assets accounted for by current assets was down 2.61 percentage points, mainly caused by decreased shares of inventories (down 1.00 percentage points), and other current assets (down 0.65 percentage points), while the share of accounts receivable decreased 0.85 percentage points. The share of liabilities was down by 3.03 percentage points. Moreover, the share of current liabilities was down 2.33 percentage points.

In terms of cash ratio, 2017 saw an increased share of cash in half of the 18 industries, showing short-term liquidity in 2017 similar to that in 2016. These industries were agriculture, forestry, fishery and animal husbandry, mining and quarrying, manufacturing, construction, finance and insurance, real estate, support services, education and art, recreation and entertainment (Table 2-1-2).

Table 2-1-1 Consolidated Balance Sheet for Taiwanese Enterprises, 2016-2017

Unit: %

Enterprise size / year Item	SMEs		Large enterprises	
	2016	2017	2016	2017
Current assets	52.51	49.90	43.99	43.39
Cash	18.23	17.89	14.81	14.06
Accounts receivable	13.80	12.95	15.13	15.32
Inventories	16.46	15.46	11.00	11.22
Advance payments	1.59	1.82	1.09	1.20
Other current assets	2.43	1.78	1.96	1.59
Non-current assets	47.49	50.10	56.01	56.61
Long-term investment	19.59	23.72	23.20	24.48
Fixed asset	22.78	21.01	24.18	23.28
Land and buildings	14.89	14.14	11.84	11.96
Machinery	6.62	5.67	9.47	8.55
Other fixed assets	1.28	1.19	2.87	2.77
Intangible and other assets	7.89	5.37	12.34	8.85
Total assets = Liabilities + Net worth	100.00	100.00	100.00	100.00
Liabilities	60.42	57.39	52.24	50.95
Current liabilities	50.56	48.23	35.28	34.99
Short-term loans	15.49	14.38	12.10	12.41
Accounts payable	13.65	13.14	15.00	14.93
Income received in advance	4.10	4.45	3.25	3.71
Other current liabilities	17.32	16.27	4.93	3.94
Non-current liabilities	9.86	9.15	16.96	15.96
Net worth	39.58	42.61	47.76	49.05

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2016-2017.

(2) Long-term Investment Increased

Funds and long-term investments are investments undertaken by an enterprise for financial or operational reasons, where the investments are held over the long term in the forms of stocks, bonds, and so on, that the enterprise does not intend to convert into cash within one year. As can be seen from Table 2-1-1, 2017 saw the long-term investments share of total assets increase for both SMEs and large enterprises, indicating that the macro economic performance has improved compared to 2016.

(3) Fixed Assets Share of Total Decreased Slightly

Fixed assets as a percentage of total assets declined slightly in 2017 for both SMEs and large enterprises, impelled by a decrease in machinery, land and buildings and other fixed assets (Table 2-1-1).

Table 2-1-2 Consolidated Balance Sheet for Taiwanese SMEs by Industry, 2017

Unit: %

Item \ Industry	Agriculture, forestry, fishing and animal husbandry	Mining and quarrying	Manufacturing	Electricity and gas supply	Water supply and remediation activities	Construction	Wholesale and retail trade	Transportation and storage	Accommodation and food service activities
Current assets	37.90	50.71	57.40	20.87	37.24	83.57	62.97	44.48	26.29
Cash	15.87	19.07	19.46	11.57	18.25	20.42	22.57	23.07	13.14
Accounts receivable	8.66	11.94	18.96	4.30	11.51	19.49	16.91	15.68	5.16
Inventories	5.43	13.99	15.57	0.96	3.72	39.74	19.62	0.73	3.96
Advance payments	6.45	3.82	2.23	3.11	1.88	2.39	2.30	2.86	2.60
Other current assets	1.49	1.88	1.18	0.93	1.88	1.54	1.57	2.13	1.44
Non-current assets	62.10	49.29	42.6	79.13	62.76	16.43	37.03	55.52	73.71
Long-term investment	5.81	1.02	1.77	9.08	19.53	1.14	13.37	10.32	3.89
Fixed asset	46.78	36.92	37.73	61.47	33.61	11.08	18.91	38.6	60.47
Land and buildings	13.64	20.16	24.35	4.92	16.98	5.09	13.32	11.42	45.39
Machinery	26.27	14.71	11.68	47.77	14.92	5.27	4.44	25.15	8.34
Other fixed assets	6.88	2.06	1.71	8.78	1.71	0.72	1.15	2.03	6.74
Intangible and other assets	9.51	11.35	3.10	8.58	9.62	4.21	4.75	6.6	9.35
Total assets = Liabilities + Net worth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities	72.75	61.7	67.07	61.66	46.38	68.7	63.34	45.31	72.79
Current liabilities	55.96	55.21	57.59	36.67	38.15	64.91	55.79	36.57	46.16
Short-term loans	19.48	14.37	17.63	11.02	7.94	8.85	14.02	9.29	14.08
Accounts payable	10.15	15.57	20.03	17.47	11.63	14.41	18.49	13.90	9.70
Income received in advance	0.56	0.91	3.65	0.93	4.78	31.24	1.07	0.50	1.18
Other current liabilities	25.77	24.36	16.27	7.25	13.81	10.42	22.21	12.88	21.2
Non-current liabilities	16.79	6.49	9.48	24.99	8.23	3.79	7.55	8.74	26.63
Net worth	27.25	38.30	32.93	38.34	53.62	31.30	36.66	54.69	27.21

Table 2-1-2 Consolidated Balance Sheet for Taiwan SMEs by Industry, 2017 (Continued)

Unit: %

Item \ Industry	Information and communication	Financial and insurance activities	Real estate activities	Professional, scientific and technical activities	Support service activities	Education	Human health and social work activities	Arts, entertainment and recreation	Other service activities
Current assets	55.31	25.35	54.43	40.23	51.78	46.19	42.84	27.21	40.54
Cash	27.13	14.68	9.74	21.55	26.61	31.45	19.82	14.64	20.07
Accounts receivable	17.17	6.92	4.85	9.41	20.15	9.98	17.37	6.93	7.24
Inventories	4.71	1.19	35.12	5.88	0.84	0.78	0.91	1.68	10
Advance payments	3.44	0.25	2.44	1.65	2.05	2.45	2.16	2.61	1.58
Other current assets	2.86	2.31	2.28	1.74	2.12	1.54	2.58	1.36	1.64
Non-current assets	44.69	74.65	45.57	59.77	48.22	53.81	57.16	72.79	59.46
Long-term investment	16.48	69.13	5.77	41.44	20.03	13.63	4.48	10.16	35.54
Fixed asset	16.22	3.22	23.85	13.5	19.87	29.55	47.97	52.23	20.65
Land and buildings	10.44	2.96	21.77	9.49	8.08	15.31	32.72	40.13	15.66

Item \ Industry	Information and communication	Financial and insurance activities	Real estate activities	Professional, scientific and technical activities	Support service activities	Education	Human health and social work activities	Arts, entertainment and recreation	Other service activities
Machinery	3.88	0.22	1.1	3.13	8.32	9.5	9.98	10.11	3.77
Other fixed assets	1.9	0.04	0.98	0.88	3.47	4.73	5.26	1.99	1.22
Intangible and other assets	11.99	2.3	15.95	4.83	8.32	10.63	4.71	10.4	3.27
Total assets = Liabilities + Net worth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities	64.56	32.48	78.88	39.41	48.76	78.47	51.05	74.11	43.36
Current liabilities	56.73	27.72	57.96	33.33	37.88	63.69	43.28	51.64	37.06
Short-term loans	7.71	14.03	18.96	5.86	9.36	16.53	3.04	12.95	4.72
Accounts payable	19.99	4.67	9.98	8.77	12.33	9.35	25.5	11.5	9.57
Income received in advance	3.41	0.06	2.61	4.82	0.86	10.73	3.35	2.21	5.21
Other current liabilities	25.62	8.96	26.42	13.87	15.34	27.08	11.39	24.97	17.55
Non-current liabilities	7.83	4.76	20.92	6.08	10.88	14.78	7.77	22.47	6.3
Net worth	35.44	67.52	21.12	60.59	51.24	21.53	48.95	25.89	56.64

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2017.

2. Analysis of SME Financial Structure

Looking at the SMEs' debt structure with the above examination of the asset allocation of SMEs can give a more comprehensive picture of the SMEs' overall financial status.

(1) Share of Current Liabilities Declined

As can be seen from Table 2-1-1, the share of current liabilities decreased in 2017 for both SMEs and large enterprises, showing stable short-term debt servicing capability.

(2) Declining Non-current Liabilities

Non-current liabilities include long-term liabilities and other non-current liabilities. From 2016 to 2017, non-current liabilities in SMEs and large enterprises have both declined.

3. Analysis of SMEs' Profit and Loss

(1) Gross Margin Improved as Operating Costs Declined for SMEs

Regarding operating costs' share of net revenue, operating costs of large enterprises increased slightly while operating costs of SMEs declined slightly from 2016 to 2017. As a result, SMEs' gross margin (referring to "gross operating profit" item in Table 2-1-3) increased modestly compared to that of 2016. In 2017, SMEs' potential profitability has increased.

(2) Operating Expense Rose Slightly

The term "operating expenses" is used to refer to expenditure derived from an enterprise's selling, general and administrative (SG&A) activities, including sales, management, and R&D expenses, and so on. Regardless of size, firms need to continually think of ways to cut costs and reduce operating

expenses.

In 2017, SMEs' operating expenses rose slightly to 20.54 percent, and continued to be higher than that of large enterprises.

(3) Decrease in Operating Cost Was Higher than Increase in Operating Expenses, SMEs Profitability Improved

In 2017, SMEs' net operating profit increased marginally to 2.66 percent, with a decrease in operating costs higher than the increase in operating expenses.

Table 2-1-3 Profit and Loss of Taiwanese Enterprises, 2016-2017

Unit: %

Enterprise size / year Item	SMEs		Large enterprises	
	2016	2017	2016	2017
Net operating revenue	100.00	100.00	100.00	100.00
Minus: Operating costs	77.17	76.80	83.05	83.17
Gross operating profit	22.83	23.20	16.95	16.83
Minus: Operating expenses	20.33	20.54	11.8	10.99
Net operating profit	2.50	2.66	5.15	5.83
Plus: Non-operating revenue	1.58	1.54	3.19	2.69
Minus: Interest expenses	0.59	0.56	0.47	0.46
Minus: Other non-operating expenses	0.73	0.62	2.20	1.32
Current term profit (before tax)	2.76	3.01	5.67	6.74

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2016-2017.

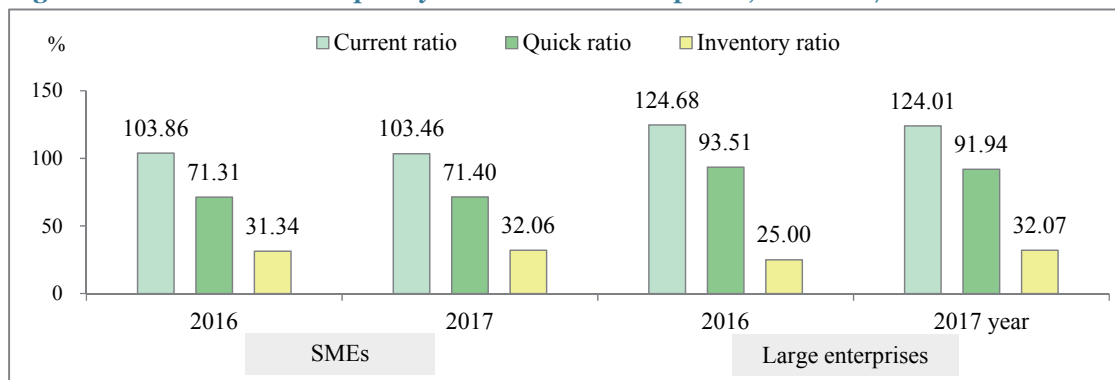
II Analysis of SMEs' Financial Ratios

1. SMEs' Short-term Debt Servicing Ability Increased Slightly

The current ratio is a measure of enterprises' short-term repayment ability. Ideally, a company that is in good financial health should have a current ratio of around 200 percent, indicating that the enterprise has NT\$2 of current assets available to repay every NT\$1 in current liabilities (exception: companies with superior cash generation capability and/or fast turnover ratios could maintain a much lower current ratio, hence superior financial efficiency). The reference value for the quick ratio is 100 percent, indicating that the enterprise has NT\$1 of current assets that can be quickly converted to cash at close to their book values to repay every NT\$1 in current liabilities.

In 2017, the current ratio declined slightly from 103.86 percent in 2016 to 103.46 percent in 2017. However, the quick ratio and the inventory ratio of SMEs grew slightly, showing strengthening short-term debt servicing capability and improving inventory management. For large enterprises, the current ratio and the quick ratio decreased slightly while the inventory ratio rose.

Figure 2-2-1 Short-term Liquidity of Taiwanese Enterprises, 2016-2017



Note:

1. Current ratio = current assets ÷ current liabilities × 100% (reference value = 200; ideally, the ratio should be higher than the reference value).

2. Quick ratio = (current assets – inventories) ÷ current liabilities × 100% (reference value = 100; ideally, the ratio should be higher than the reference value).

3. Inventory ratio = inventories ÷ current liabilities × 100% (reference value = 100; ideally, the ratio should be higher than the reference value).

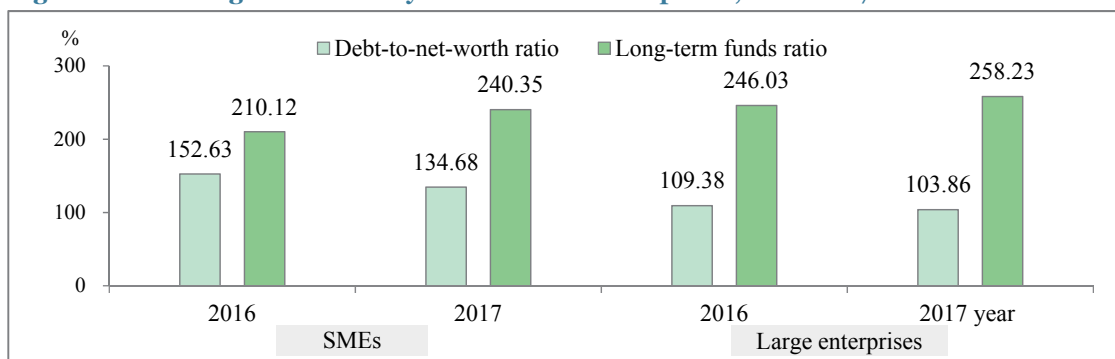
Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2016-2017.

2. SMEs: Declining Debt-to-Net-Worth Ratio and Rising Long-term Funds Ratio

For the debt-to-net-worth ratio, a reference value of 100 percent is normally used, indicating that the enterprise has NT\$1 of capital available for every NT\$1 of debt. The higher the debt-to-net-worth ratio, the more heavily leveraged the enterprise is.

In 2017, the average debt-to-net-worth ratio of SMEs was 134.68 percent; for large enterprises, the debt-to-net-worth ratio in 2017 was 103.86 percent; indicating SMEs' higher usage of financial leverage (Figure 2-2-2).

Figure 2-2-2 Long-term Stability of Taiwanese Enterprises, 2016-2017



Note: 1. Debt-to-net-worth ratio = debt ÷ net worth × 100% (reference value = 100; ideally, the ratio should be below the reference value). 2. Long-term funds ratio = (equity + long-term debt) ÷ fixed assets × 100% (reference value = 100; ideally, the ratio should be above the reference value).

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2016-2017.

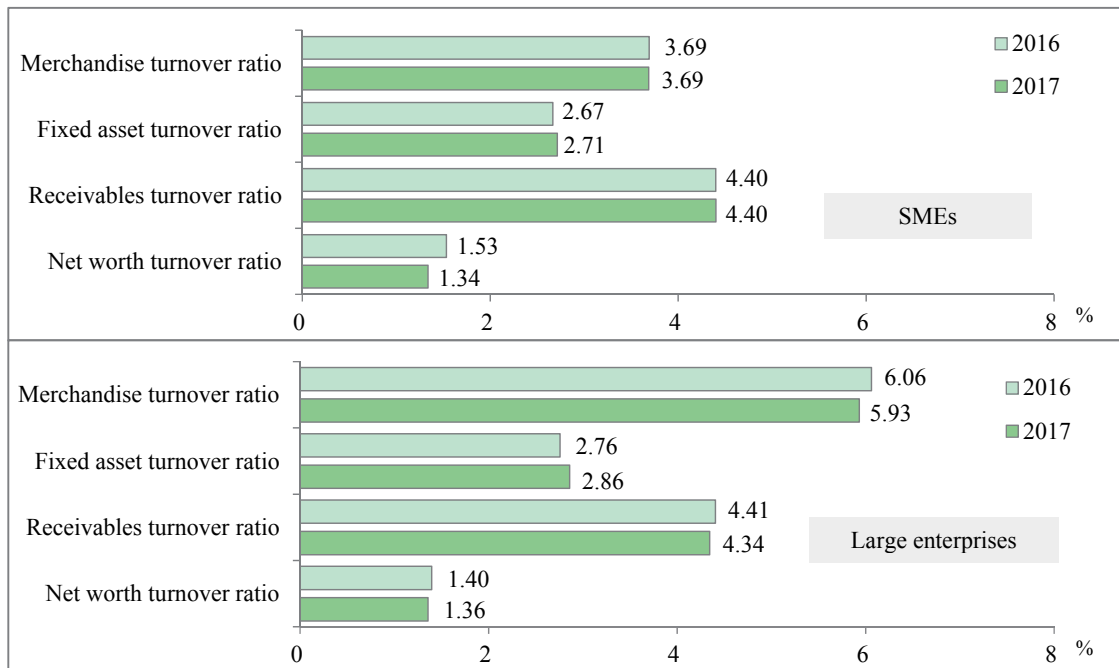
The long-term funds ratio is mainly used to gauge whether a firm's long-term funding operations are appropriate. Ideally, enterprises should rely mainly on long-term funds for their funding of fixed asset purchases. The fact that both SMEs and large enterprises hit over 100 percent in long-term

funds ratio illustrated that their stability in long-term funds allocation was above average and better than that of 2016.

3. SMEs' Operational Efficiency up Modestly

An enterprise's operational efficiency can be gauged by examining its efficient utilization of merchandise, fixed assets, and capital, as well as the efficiency of collections. Merchandise turnover is an indicator that can be used to determine whether an enterprise is managing to achieve a reasonable balance between inventory and sales; fixed asset turnover is used to measure the efficiency of utilization of a firm's buildings, machinery, land, and other fixed assets; receivables turnover measures the efficiency of a company's collection activities. Net worth turnover denotes the ratio of net sales to net worth; if this figure is too high, it could imply that the enterprise has insufficient capital and is too aggressive; if it is too low, it may indicate that the firm has too much capital, or that its sales revenue is too low. Other things being equal, a company with a high net worth turnover rate is earning a higher rate of income on its net worth than a company with a low turnover rate.

Figure 2-2-3 Operating Capability of Taiwanese Enterprises, 2016-2017



Note: 1. Net worth turnover ratio = net sales / net worth. 2. Receivables turnover ratio = net sales / receivables.

3. Fixed asset turnover ratio = net sales / fixed assets. 4. Merchandise turnover ratio = net sales / inventories

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2016-2017.

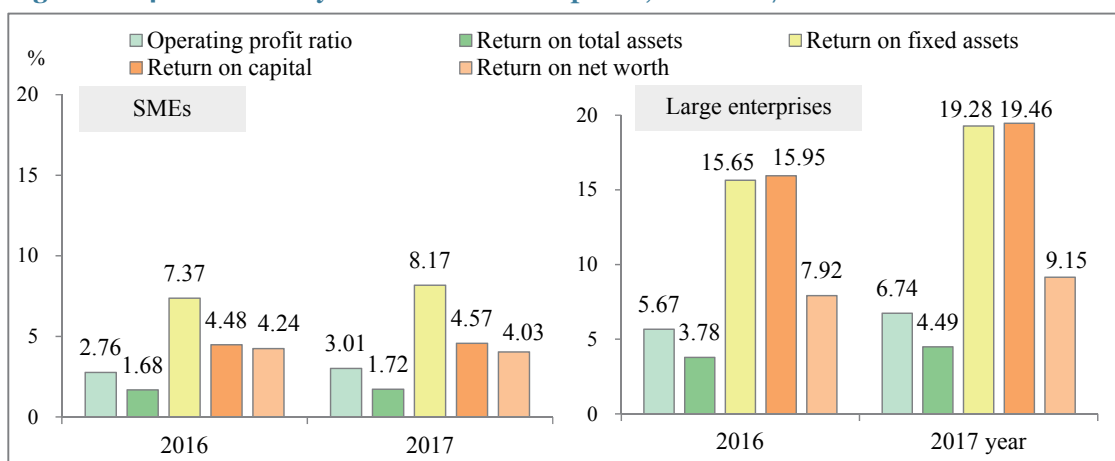
Examination of the data in 2017 shows that receivables turnover for SMEs increased slightly to 4.402 percent in 2017, and merchandise turnover went down modestly to 3.686 percent. In the meantime, receivables turnover for large enterprises was 4.34 percent in 2017, and merchandise turnover was 5.93 percent, suggesting that the SMEs' merchandise efficiency was up modestly.

Examination of the net worth turnover and fixed asset turnover indicators shows that, for SMEs, fixed asset turnover rose to 2.71 percent, while net worth turnover declined to 1.34 percent. For large enterprises, fixed asset turnover was 2.86, and net worth turnover declined to 1.36 percent.

4. SMEs' Profitability Went Up

2017 saw all five indicators increasing in SMEs except for return on net worth. Operating profit ratio increased to 3.01, return on total assets rose to 1.72, return on fixed assets rose to 8.17, and return on capital increased to 4.57, while return on net worth declined to 4.03. Overall, SMEs' profitability went up (Figure 2-2-4).

Figure 2-2-4 Profitability of Taiwanese Enterprises, 2016-2017



Note: 1. Operating profit ratio = current profit ÷ net operating income × 100%. 2. Return on total assets = current profit ÷ total assets × 100%.

3. Return on fixed assets = current profit ÷ fixed assets × 100%. 4. Return on capital = current profit ÷ net worth × 100%.

5. Return on net worth = current profit ÷ net worth × 100%.

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2016-2017.

III SME Funding and Financing

Funding is the lifeline of an enterprise, and this is particularly true for SMEs, which typically lack adequate funds. Ready access to funds and efficient fund management are among the keys to the successful operation of SMEs.

The sources of SME financing are from internal organic growth and/or external funding such as private lending, commercial loans, bond or equity financing, and government programs; the channels of financing are directly through financial markets (stock and bond) and indirectly through financial intermediaries, such as banks and finance companies. SMEs are typically heavily reliant on indirect financing as compared to their larger counterparts.

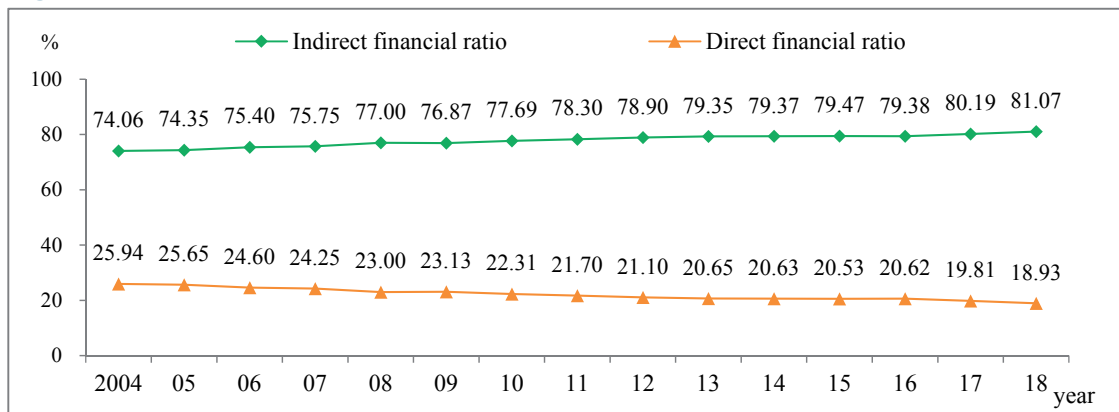
1. Indirect Financing Remains Main Funding Source

The trend towards diversification in financial services has been accompanied by a similar broadening of the funding channels available to business enterprises. However, SMEs and their owners tend to

have insufficient knowledge of the range of financing tools that are now available, and in many cases, they are unable to provide the comprehensive financial statements needed to secure direct financing. As a result, indirect financing has been growing for SMEs with help from government policy measures, while direct financing currently accounts for only a very small percentage of overall SME financing.

According to the report *Direct Financial and Indirect Financial Stock Analysis*, compiled by the Central Bank of the Republic of China (Taiwan), since 2004, the proportion of indirect financing continued to show steady growth, while the proportion of direct financing has been declining, but the growth of indirect financing has slowed in recent years. In 2018, the proportion of indirect financing accounted for 81.07 percent of financing while the remaining 18.93 percent was direct financing (Figure 2-3-1).

Figure 2-3-1 Direct and Indirect Financial Ratios, 2004-2018



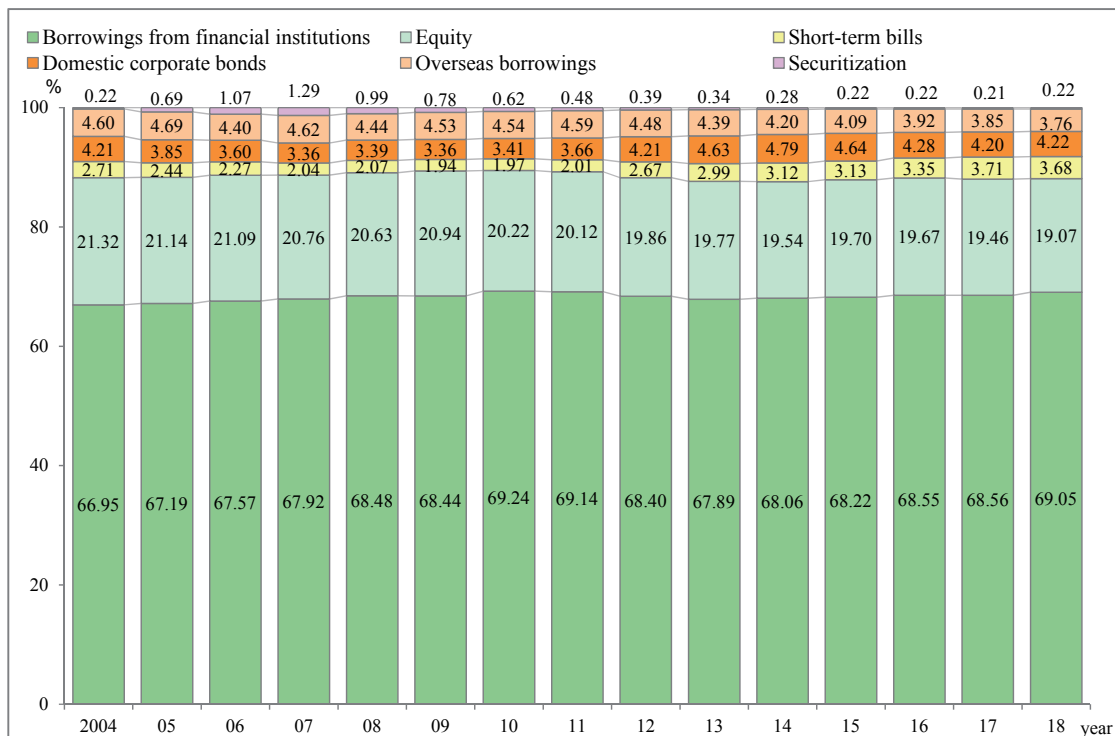
Source: Central Bank of the Republic of China, *Direct Financial and Indirect Financial Stock Analysis*, June 2018.

Regarding the structure of their liabilities, large, medium- and small-sized enterprises in Taiwan are all heavily reliant on borrowings from financial institutions and accounted for nearly 70 percent of the total debt in 2018 for all enterprises (69.05 percent). Direct financing through equity accounted for 19.07 percent in 2018. Direct financing through other means such as domestic corporate bonds, overseas borrowings, short-term bills and asset securitization all accounted for below 5 percent in 2018 (Figure 2-3-2).

2. Borrowing Cost Has Been Down for Five Consecutive Years

In 2018, the average interest rate on new loans fell modestly to 1.37 percent from 1.41 percent in 2017 (Figure 2-3-3).

Figure 2-3-2 Comparison of Enterprise Financing Channels, 2004-2018



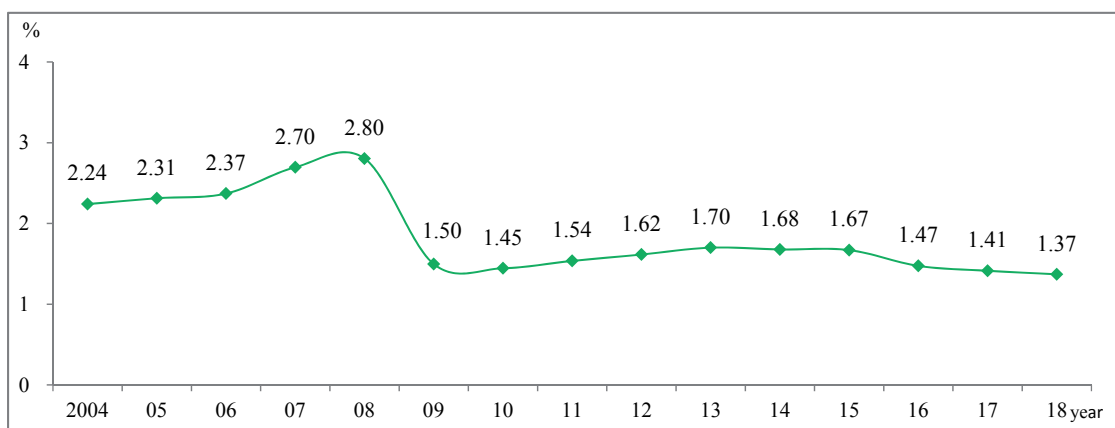
Note: 1. Financial institutions include Central Bank, other monetary institutes and life insurance companies.

2. Financial institution loans include collection and bad debt write-off.

3. Enterprise financing channels do not include financial institution investments and government bonds.

Source: Central Bank of the Republic of China, *Direct Financial and Indirect Financial Stock Analysis*, June 2018.

Figure 2-3-3 Average Interest Rate on New Loans by Taiwan's Five Largest Banks, 2004-2018



Note: 1. The interest rates given in the figure are weighted averages for the month of December in each year.

2. Up until October 2008, the five largest banks in Taiwan were the Bank of Taiwan, Taiwan Cooperative Bank, First Commercial Bank, Hua Nan Commercial Bank and Chang Hwa Commercial Bank; from November 2008 onwards the five largest banks were the Bank of Taiwan, Taiwan Cooperative Bank, First Commercial Bank, Hua Nan Commercial Bank and Land Bank of Taiwan.

Source: Central Bank of the Republic of China, Statistical database, accessed June 2018.

3. SMEs: Primary Funding Source Was Financial Institutions

SMEs and their owners tend to have insufficient knowledge of the range of financing tools that are now available, and in many cases, they are unable to provide the comprehensive financial statements needed to secure direct financing. As a result, small-sized enterprises' funding sources were mostly limited to borrowings from financial institutions (64.25 percent) and commercial credit (35.15 percent). Medium-sized enterprises' funding sources were also mostly limited to borrowings from financial institutions (53.49 percent) and commercial credit (45.27 percent). Large enterprises' funding sources were not as heavily reliant on indirect financing as SMEs, but were still highly dependent on borrowings from financial institutions (38.64 percent) and commercial credit (49.51 percent) (Table 2-3-1).

Table 2-3-1 Corporate Liability Structure as of the End of 2017

Unit: 100 million NT\$, %

Item	Large enterprises		Medium-sized enterprises		Small-sized enterprises	
	Amount	Share	Amount	Share	Amount	Share
Total liabilities	229,406.84	100.00	50,965.75	100.00	10,055.90	100.00
Borrowings from financial institutions	88,637.08	38.64	27,261.04	53.49	6,460.92	64.25
Government loans	48.36	0.02	5.85	0.01	0.07	0.00
Borrowings from firms and individuals	2,681.63	1.16	346.38	0.68	48.49	0.48
Overseas borrowings	1,371.12	0.60	16.87	0.03	0.49	0.00
Transactions with repurchase clause	-	-	-	-	-	-
Short-term bills	6,530.04	2.85	33.10	0.06	-	-
Domestic corporate bonds	10,336.93	4.51	-	-	-	-
Overseas securities	631.51	0.28	-	-	-	-
Commercial credit (Trading liabilities)	113,584.39	49.51	23,069.67	45.27	3,534.33	35.15
Provisions and other liabilities	5,585.77	2.43	232.84	0.46	11.59	0.12

Note: 1. “-” denotes no data available or data uncertain; “0” is used to denote any figure of less than NT\$500.

2. Data may not sum to total due to rounding.

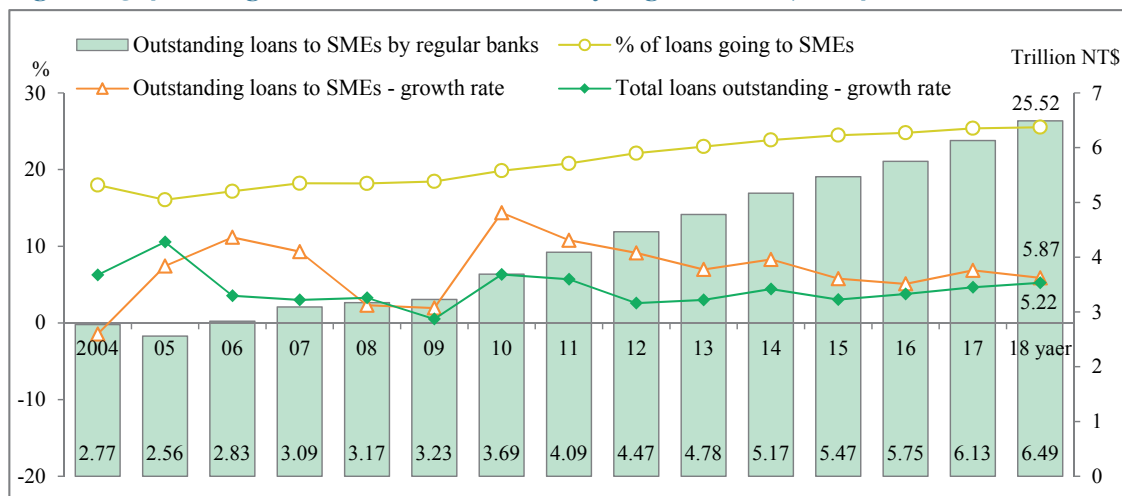
3. An enterprise with total assets of NT\$300 million or more is classified as a large enterprise; a medium-sized enterprise: between NT\$25 million and NT\$300 million; a small enterprise: less than NT\$25 million.

Source: Central Bank of the Republic of China, *Survey Report of the Financial Conditions of Private and Public Enterprises* (December 2018).

4. Continuous Increase in Total Bank Loans to SMEs in 2018

At the end of 2018, the total outstanding loans of SMEs from ordinary commercial banks in Taiwan (including the Taiwan branches of foreign banks, but excluding overseas loans) came to NT\$6.49 trillion, a record high.

Figure 2-3-4 Changes in Bank Loans to SMEs by Regular Banks, 2004-2018



Note: Total loans outstanding= (regular banks' outstanding loans to SMEs, overdue loans included) ÷ (loans to SMEs as a percentage of total loans).

Source: Banking Bureau, Financial Supervisory Commission, *Statistics of Banking Business*, consecutive years.

5. Share of Top 10 and Top 8 Banks Was Down

Half of the top 10 banks with loans outstanding to SMEs are state-run banks, with the market share rising to 69.60 percent in 2018, of which 61.01 percent came from the top 8 state-run banks. The market concentration as measured by the share of the top 10 and top 8 banks was down slightly from the previous year (Table 2-3-2).

Table 2-3-2 Top 10 Banks by Amount of Loans to SMEs in 2018

Unit: 100 million NT\$, %

Bank	Loans outstanding	Market share	Loans to SMEs as percent of total loans
Total	45,161.87	69.60	-
First Commercial Bank	6,723.43	10.36	49.05
Taiwan Cooperative Bank	6,240.96	9.62	33.90
Hua Nan Commercial Bank	4,990.40	7.69	50.50
Taiwan Business Bank	4,900.05	7.55	34.70
Mega International Commercial Bank	4,746.71	7.32	37.34
Chang Hwa Commercial Bank	4,455.82	6.87	38.36
Bank of Taiwan	4,006.69	6.18	21.77
Land Bank of Taiwan	3,514.81	5.42	14.73
E. Sun Commercial Bank	3,473.39	5.35	30.93
The Shanghai Commercial & Savings Bank	2,109.61	3.25	15.93

Note: "-": not applicable.

Source: Banking Bureau, Financial Supervisory Commission, *Statistics of Banking Business* (2018).

6. Private Banks Active in Lending to SMEs

With the introduction of various government measures of providing preferential loans to SMEs, private banks' SME loans increased substantially in 2017 and 2018 as shown in Financial Supervisory Commission data. In terms of the annual growth rate from 2017 to 2018, the top 10 private banks saw SME loans grow between 3.08 percent and 22.50 percent, with loan balances between NT\$129 billion and NT\$347 billion (Table 2-3-3).

Table 2-3-3 Top 10 Private Banks by Amount of Loans to SMEs in 2018

Unit: 100 million NT\$, %

Bank	Loans outstanding by the end of 2017	Loans outstanding by the end of 2018	Annual growth rate
E. Sun Commercial Bank	3,283.76	3,473.39	5.77
Shanghai Commercial & Savings Bank	2,002.09	2,063.66	3.08
CTBC Bank	1,842.85	2,109.61	14.48
Taichung Commercial Bank	1,768.78	1,841.36	4.10
Cathay United Bank	1,519.19	1,780.92	17.23
Bank SinoPac	1,459.69	1,653.19	13.26
Taishin International Bank	1,313.51	1,383.28	5.31
Taipei Fubon Bank	1,313.25	1,504.43	14.56
Yuanta Bank	1,121.99	1,374.43	22.50
Sunny Bank	1,177.05	1,297.82	10.26

Source: Banking Bureau, Financial Supervisory Commission, *Statistics of Banking Business* (2018).

CHAPTER 3

SMEs: Human Resources

In 2018, human resources in Taiwan also showed steady growth. According to the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan, the number of employed persons increased by about 79,000 people (0.67 percent) to 11,874,000, with a modestly improved participation rate at 58.99, 0.16 percent higher than that of last year. The number of unemployed was 440,000 people, 3000 fewer than in 2017, and it averaged 3.71 percent over the course of the year, 0.05 percent lower than that in 2017.

This chapter is divided into two sections. Section I examines SME human resources utilization (in terms of scale, industries, and characteristics of employed and unemployed persons such as age, sex, and education); Section II discusses working conditions (including average working hours and salary by industry).

An SME is defined as an enterprise with fewer than 200 regular employees in mining and quarrying, manufacturing, and construction industries, or an enterprise with fewer than 100 regular employees in other industries.

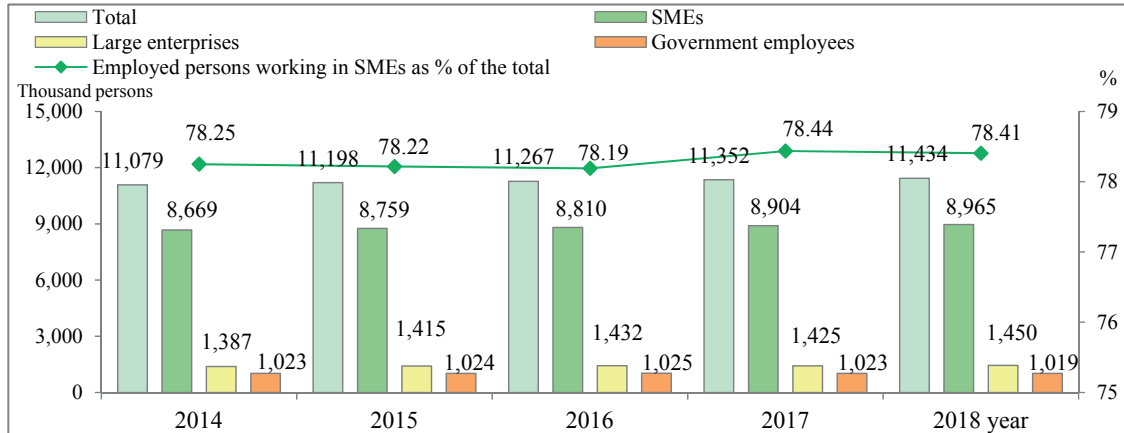
I Labor Utilization by SMEs

1. SMEs Provided Labor Market Stability

In 2018, employed persons (including employers, own-account workers, paid employees and unpaid family workers) in Taiwan totaled 11,434,000 people. The number of employed persons working in SMEs in Taiwan totaled 8,965,000, accounting for 78.41 percent of all employed persons in Taiwan. Large enterprises employed 1,450,000 persons and accounted for 12.68 percent; the government employed 1,019,000 persons and accounted for 8.91 percent.

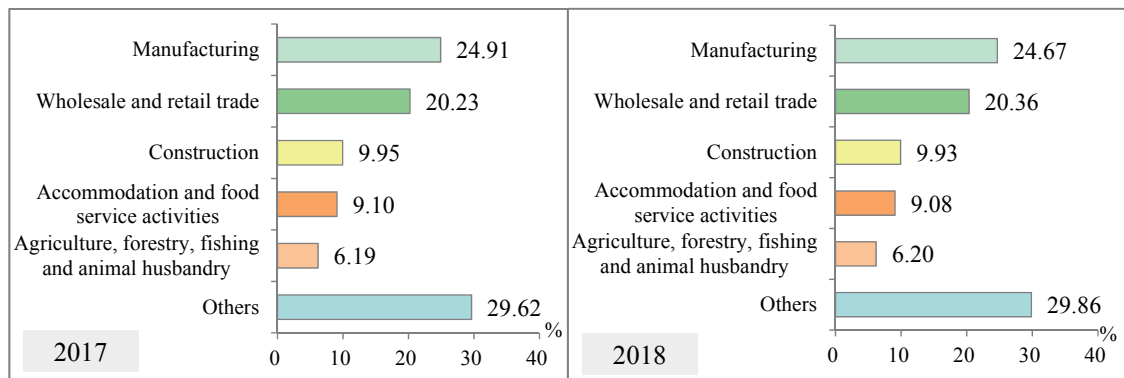
Compared to large enterprises, SMEs have functioned as a more stabilizing force in the labor market through many business and economic cycles. The total number of employed persons in SMEs has been rising slightly every year by between 0.59 percent to 1.78 percent and has been mostly above 78 percent in the share of employed persons (Figure 3-1-1).

In terms of industries, the number of employed persons working in SMEs in the manufacturing industry in 2018 stood at 2,212,000, accounting for 24.67 percent of all SME-employed persons. The wholesale and retail trade industry had the second largest number of employed persons working in SMEs, or 1,825,000 (20.36 percent), followed by the construction industry, with 890,000 employees (9.93 percent). 2018 saw employment growth in all sectors with stable distribution (Appendix C Table C-5, Figure 3-1-2).

Figure 3-1-1 Number of Employed Persons in Taiwan, 2014-2018

Note: An SME is defined as an enterprise with fewer than 200 paid employees in Mining and Quarrying, Manufacturing, and Construction industries, or an enterprise with fewer than 100 paid employees in other industries.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2014-2018.

Figure 3-1-2 Breakdown of SME Employees by Industry, 2017-2018

Note: An SME is defined as an enterprise with under 200 paid employees in mining and quarrying, manufacturing, and construction industries, or an enterprise with fewer than 100 paid employees in other industries.

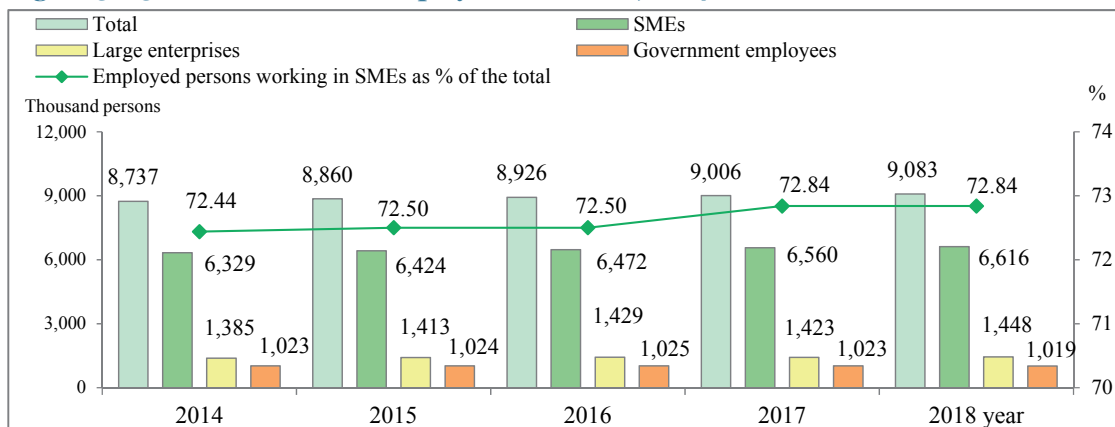
Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2017-2018.

In terms of shares of employed persons by sector, there has been a clear trend of a decreased share of the industrial sector, from 35.83 percent in 2014 to 35.06 percent in 2018, and increased share of the service sector in the same period, from 57.95 percent to 58.74 percent.

2. Over 70 Percent of Paid Employees Worked for SMEs in 2018

The total number of paid employees in Taiwan averaged 9,083,000 in 2018 (including government employees and private company employees), representing an increase of 77 thousand people from 2017; the number of paid employees working in SMEs was 6,616,000 or 72.84 percent, up 0.85 percent year on year; paid employees working in large enterprises rose by 25,000 (1.76 percent), and paid employees working in government fell by 4000 or 0.38 percent. The number of paid employees working in SMEs as well as in large enterprises has increased consistently since the global financial crisis of 2009. The share of paid employees working in SMEs rose consistently since 2011 as well (Figure 3-1-3).

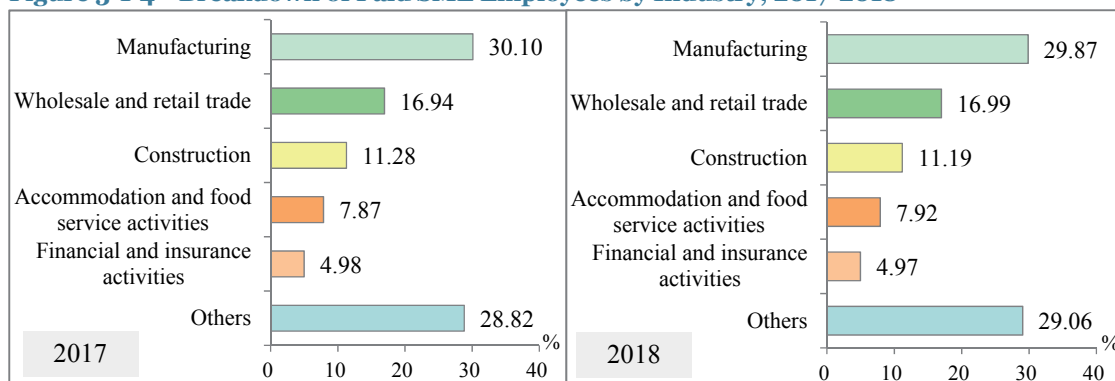
Figure 3-1-3 Number of Paid Employees in Taiwan, 2014-2018



Note and source: See Figure 3-1-1.

In terms of industry distribution, the number of paid employees working in SMEs in the manufacturing industry in 2018 stood at 1,976,000, accounting for 29.87 percent of all SME paid employees. The wholesale and retail trade industry had the second largest number of paid employees working in SMEs, or 1,124,000 (16.99 percent), followed by the construction industry, with 740,000 employees (11.19 percent) (Appendix C Table C-6, Figure 3-1-4).

Figure 3-1-4 Breakdown of Paid SME Employees by Industry, 2017-2018



Note and source: See Figure 3-1-2.

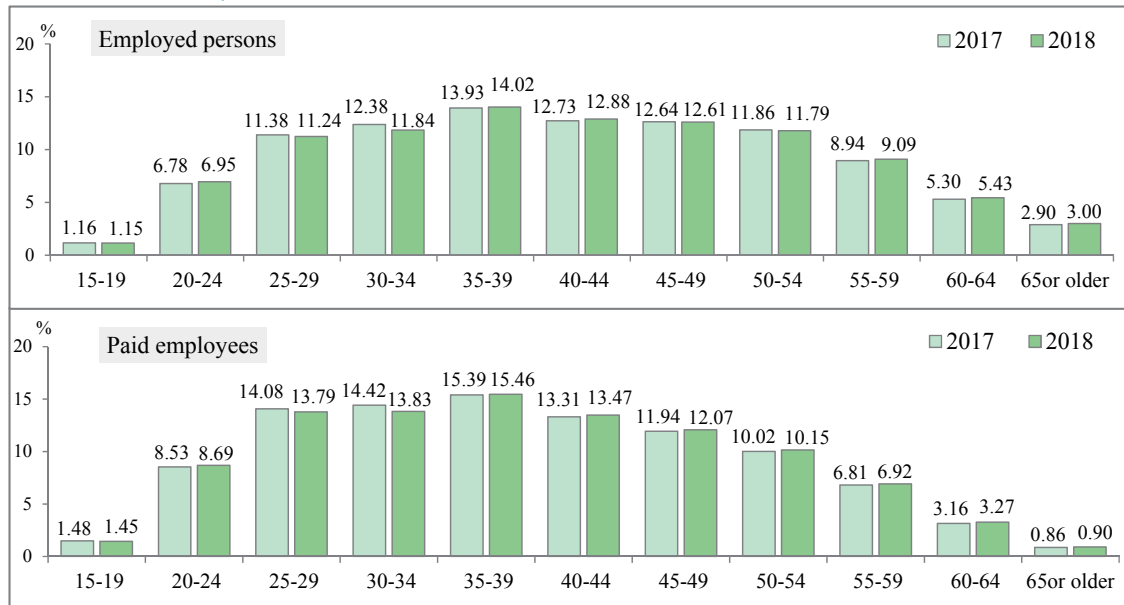
In terms of shares of paid employees by sector, there has been a clear trend of a decreased share of the industrial sector, from 43.02 percent in 2014 to 41.57 percent in 2018, and an increased share of the service sector in the same period, from 55.68 percent to 57.22 percent.

3. The Share of SMEs' Manpower with College Education Increased Gradually

In 2018, the highest proportion by age of employed persons working in SMEs was between the ages of 35 and 39 at 14.02 percent, followed by those between 40 and 44 at 12.88 percent and those between 45 and 49 at 12.61 percent; the proportion of paid employees working in SMEs was also highest between the ages of 35 and 39 at 15.46 percent, followed by those between 30 and 34 at 13.83

percent and those between 25 and 29 at 13.79 percent (Figure 3-1-5).

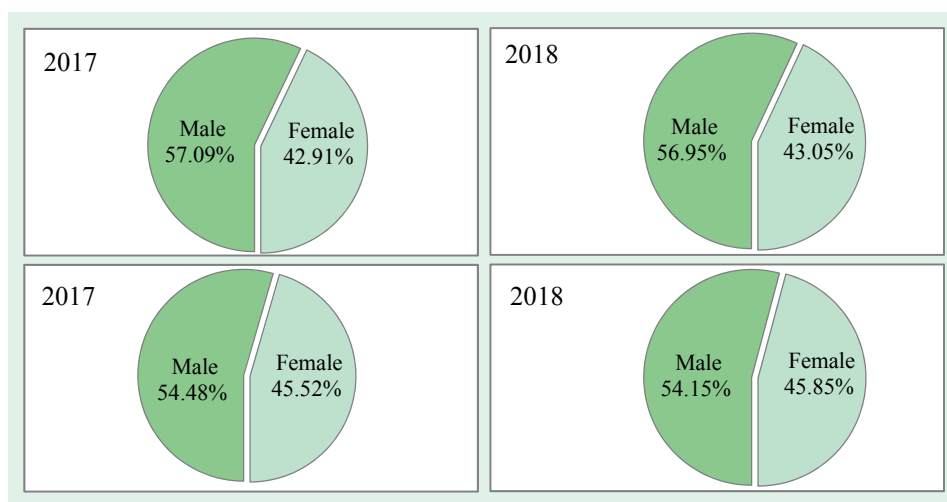
Figure 3-1-5 Age Structure of Employed Persons and Paid Employees Working in SMEs, 2017-2018



Note and source: See Figure 3-1-2.

The male / female ratios of employed persons (56.95 percent / 43.05 percent) and paid employees (54.15 percent / 45.85 percent) in SMEs were both higher than one in 2018. However, in both indicators, the number of females has increased in 2018 year on year (Figure 3-1-6).

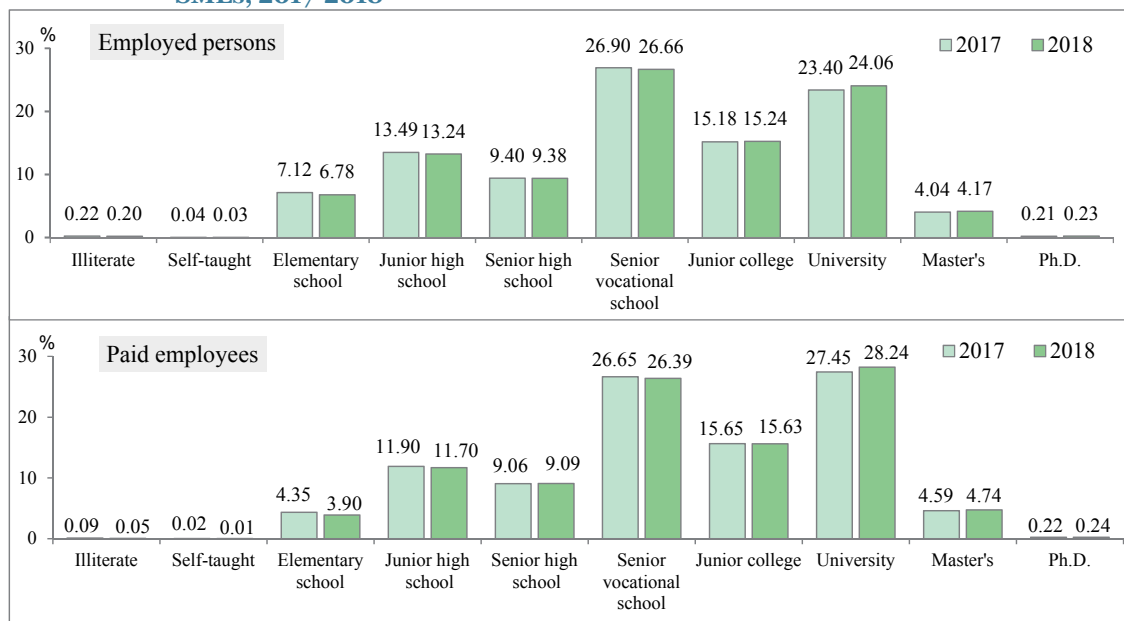
Figure 3-1-6 Male / Female Ratio of Employed Persons and Paid Employees Working in SMEs, 2017-2018



Note and source: See Figure 3-1-2.

As can be seen from the educational structure, the highest proportion of employed persons working in SMEs consisted of those with vocational education in 2017 at 26.66 percent, followed by those with university education (24.06 percent) and by those with junior college education (15.24 percent). The highest proportion of paid employees working in SMEs consisted of those with university education at 28.24 percent, followed by those with vocational education (26.39 percent) and by those with junior college education (15.63 percent). Moreover, the increase in the share of employed persons and paid employees with university education and higher education showed that the education levels of employed persons and paid employees in SMEs both rose in recent years. That was consistent with Taiwan's higher education expansion policy (Figures 3-1-7).

Figure 3-1-7 Educational Structure of Employed Persons and Paid Employees Working in SMEs, 2017-2018



Note and source: See Figure 3-1-2.

4. Regional Distribution of SMEs' Employees and Paid Employees

Observation of regional distribution of SMEs' employed persons and paid employed persons in 2018 indicated that employed persons in SMEs among the six major cities mostly worked in New Taipei City and Taipei City (1,444,000 persons or 16.11 percent and 1,352,000 persons or 15.08 percent respectively). As for employed persons in large enterprises among the six major cities, most worked in Taipei City and Taoyuan City (290,000 persons or 19.99 percent and 251,000 persons and 17.30 percent respectively) (Table 3-1-1).

For paid employed persons in 2018, paid employed persons in SMEs among the six major cities mostly worked in New Taipei City and Taipei City (1,164,000 persons or 17.59 percent, and 1,147,000 persons or 17.33 percent respectively). As for paid employed persons in large enterprises among the six major cities, most worked in Taipei City and Taoyuan City (289,000 persons or 19.97 percent, and 251,000 persons and 17.31 percent respectively) (Table 3-1-2).

Table 3-1-1 Number of Employed Persons by Region, 2018

Unit: Thousand persons; %

City or Country	Size	Total	SMEs		Large enterprises		Government employment	
			Share		Share		Share	
Total		11,434	8,965	78.41	1,450	12.68	1,019	8.91
Taipei City		1,885	1,352	15.08	290	19.99	243	23.89
New Taipei City		1,679	1,444	16.11	127	8.75	108	10.57
Taoyuan City		1,063	742	8.28	251	17.30	71	6.92
Taichung City		1,444	1,216	13.57	127	8.74	101	9.95
Tainan City		956	767	8.56	123	8.51	65	6.38
Kaohsiung City		1,331	1,047	11.68	165	11.37	119	11.69
6 cities combined		8,359	6,569	73.28	1,082	74.65	707	69.41
Other cities combined		3,075	2,396	26.72	368	25.35	312	30.59

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2018).**Table 3-1-2 Number of Paid Employed Persons by Region, 2018**

Unit: Thousand persons; %

City or Country	Size	Total	SMEs		Large enterprises		Government employment	
			Share		Share		Share	
Total		9,083	6,616	72.84	1,448	15.94	1,019	11.22
Taipei City		1,679	1,147	17.33	289	19.97	243	23.89
New Taipei City		1,398	1,164	17.59	127	8.75	108	10.57
Taoyuan City		925	604	9.13	251	17.31	71	6.92
Taichung City		1,135	907	13.71	127	8.74	101	9.95
Tainan City		713	525	7.93	123	8.52	65	6.38
Kaohsiung City		1,059	776	11.73	164	11.34	119	11.69
6 cities combined		6,910	5,122	77.42	1,081	74.64	707	69.41
Other cities combined		2,173	1,494	22.58	367	25.36	312	30.59

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2018).

5. The Number of SME Employers Increased Slightly in 2018

There were around 444,000 SME employers, a mere 520 persons or 0.12 percent increase compared to 2017. As for large enterprises, there were approximately 1,840 employers in 2018. The number of large enterprise employers rose by about 300 or 18.71 percent from 2017. The age structure of SME employers shows that they were younger than large enterprise employers, and the educational structure distribution was broader (Table 3-1-3).

6. Number of Self-Employed Persons Rose Slightly; Share of Self-Employed with University and Higher Education Increased in 2018

The self-employed either work alone or as part of a partnership, but they do not have any paid employees. Self-employed persons can thus all be classified as SMEs. The number of self-employed persons in Taiwan had fell consistently for years in a row from 2008 to 2014 and turned to increase in 2015. The number of self-employed persons in Taiwan reached 1,326,000 in 2018, a 4,000-person increase compared to that of 2017.

As can be seen from the age structure, the share of self-employed in the 50-54 age group was the highest at about 16.87 percent in 2018, followed by the 55-59 age group (15.96 percent), and the 45-49 age group (13.99 percent). Compared to that of 2017, the self-employed in 2018 were younger, with those aged below 40 accounting for 18.44 percent. In terms of education, the share of self-employed with senior vocational education was the highest at 26.70 percent, followed by those with junior high school education at 20.27 percent, and by those with elementary school education at 18.72 percent. Compared to 2017, the shares of self-employed with a university or higher education degree increased slightly from 10.70 percent in 2017 to 11.15 percent in 2018 (Table 3-1-4).

Table 3-1-3 Characteristics of Employers, 2017-2018

Unit: Thousand persons; %

Item \ Year	2017		2018	
	SMEs	Large enterprises	SMEs	Large enterprises
No. of employers	443.47	1.55	443.99	1.84
Share of total	99.65	0.35	99.59	0.41
Age	100.00	100.00	100.00	100.00
15 – 19	-	-	0.01	-
20 – 24	0.29	1.04	0.48	-
25 – 29	1.96	-	2.07	0.67
30 – 34	5.54	-	4.52	0.58
35 – 39	9.51	-	9.63	1.50
40 – 44	12.77	9.78	12.87	5.45
45 – 49	16.47	5.18	16.69	5.42
50 – 54	19.02	16.64	19.15	15.35
55 – 59	17.39	34.18	17.38	27.33
60 – 64	11.18	10.07	11.49	26.98
65 or older	5.86	23.11	5.71	16.71
Sex	100.00	100.00	100.00	100.00
Male	79.22	80.09	79.81	74.95
Female	20.78	19.91	20.19	25.05
Education	100.00	100.00	100.00	100.00
Illiterate	0.02	-	0.03	-
Self-taught	0.00	-	0.00	-
Elementary school	5.94	2.43	6.70	7.76
Junior high school	13.33	8.74	12.59	3.98
Senior high school	9.37	12.81	9.72	12.13
Senior vocational school	25.48	17.10	25.40	8.64
Junior college	20.38	9.68	20.58	14.36
University	19.14	17.58	18.47	24.59
Master's	5.82	17.68	5.91	14.04
Ph.D.	0.51	13.99	0.59	14.51

Note: “-” denotes no available data.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2017-2018).

Table 3-1-4 Characteristics of Self-employed Persons, 2017-2018

Unit: Thousand persons; %

Item \ Year	2017	2018
No. of self-employed persons	1,322	1,326
Age	100.00	100.00
15 – 19	0.06	0.05
20 – 24	0.84	1.01
25 – 29	2.56	2.81
30 – 34	5.79	5.54
35 – 39	9.04	9.03
40 – 44	10.43	10.82
45 – 49	14.63	13.99
50 – 54	17.61	16.87
55 – 59	15.67	15.96
60 – 64	12.55	12.88
65 or older	10.82	11.04
Sex	100.00	100.00
Male	74.29	74.57
Female	25.71	25.43
Education	100.00	100.00
Illiterate	0.69	0.66
Self-taught	0.11	0.07
Elementary school	18.79	18.72
Junior high school	20.46	20.27
Senior high school	10.29	9.83
Senior vocational school	26.83	26.70
Junior college	12.13	12.60
University	8.72	8.98
Master's	1.88	2.05
Ph.D.	0.10	0.12

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2017-2018).

7. Number of Unemployed Persons Previously Working for SMEs Increased by 1,000 in 2018

In 2018, the number of unemployed persons in Taiwan declined by approximately 3,000 (or 0.70 percent), and the unemployment rate declined 0.05 percent to 3.71 percent. Apart from first-time job-seekers, the number of unemployed persons who had previously been working for SMEs increased marginally by 0.45 percent to 292,000 in 2018 from 291,000 in 2017; the number of unemployed who had previously been working for large enterprises declined by 6.63 percent to 31,000 in 2018 from 33,000 in 2017; the number of unemployed who had previously been working for the government declined 4.68 percent to 13,800 in 2018 from 14,000 in 2017; and the number of unemployed who were first-time job-seekers declined by 1.75 percent to 103,000 in 2018 from

104,000 in 2017 (Table 3-1-5).

Table 3-1-5 Characteristics of the Unemployed, 2017-2018

Unit: Thousand persons; %

Item \ Year	2017				2018			
	SMEs	Large enterprises	Government	First time job-seekers	SMEs	Large enterprises	Government	First time job-seekers
No. of the unemployed	291.17	33.35	14.44	104.43	292.49	31.14	13.76	102.60
Share of total	65.67	7.52	3.26	23.55	66.48	7.08	3.13	23.32
Age	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
15 – 19	1.36	0.21	-	6.37	1.38	0.46	-	6.28
20 – 24	11.60	11.41	4.69	60.82	11.31	9.29	4.13	64.14
25 – 29	19.64	17.65	26.61	24.97	19.31	26.31	29.27	24.23
30 – 34	13.38	21.41	21.07	5.05	14.17	17.24	21.13	2.68
35 – 39	15.97	17.53	13.04	1.50	16.99	15.10	19.36	1.93
40 – 44	10.92	16.84	16.30	0.87	11.96	14.09	4.37	0.20
45 – 49	10.13	8.28	6.78	0.32	10.22	7.04	4.77	-
50 – 54	8.72	2.63	6.65	-	7.14	6.84	10.79	0.24
55 – 59	5.20	2.19	2.23	-	4.44	3.03	2.62	-
60 – 64	2.97	1.86	2.62	0.11	2.99	0.54	3.51	0.30
65 or older	0.11	-	0.02	-	0.09	0.06	0.04	-
Sex	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Male	62.94	54.81	48.69	52.14	60.38	55.43	34.63	52.59
Female	37.06	45.19	51.31	47.86	39.62	44.57	65.37	47.41
Education	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Illiterate	0.02	-	-	-	-	0.00	-	-
Self-taught	0.01	-	0.36	-	-	0.00	-	-
Elementary school	4.97	0.80	3.83	-	4.31	0.78	2.73	-
Junior high school	13.31	5.22	4.83	1.82	10.94	6.58	1.51	2.38
Senior high school	10.33	6.67	3.19	5.27	10.93	6.82	1.13	4.54
Senior vocational school	28.36	24.64	8.43	12.62	27.28	26.00	4.96	11.40
Junior college	13.18	19.06	11.19	4.92	13.96	13.38	12.14	5.67
University	26.67	34.81	49.64	64.41	28.44	37.50	60.66	65.41
Master's	3.14	8.69	18.08	10.81	4.12	8.76	16.50	10.56
Ph.D.	0.01	0.11	0.48	0.16	0.01	0.17	0.36	0.04

Note: 1. “-” denotes no available data. 2. The enterprise size in the table is the size of the last company where the unemployed worked.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2017-2018).

In terms of age distribution of unemployed persons, those who had previously been working for SMEs, large enterprises or government were mostly (19.31 percent, 26.31 percent and 29.27 percent, respectively) in the 25-29 age group. For first-time job-seekers, most unemployed were in the 20-24 age group, accounting for 64.14 percent in 2018, showing a serious youth unemployment problem (Table 3-1-5).

Regarding sex distribution of unemployed persons, those who had previously been working for the government were mostly women, while those who had previously been working for large enterprises or SMEs were mostly men (Table 3-1-5).

In terms of education distribution of unemployed persons, those who had previously been working for SMEs were mostly people with university education (28.44 percent), followed by people

with vocational education (27.28 percent); those who had previously been working for large enterprises or government, or were first-time job-seekers, mostly had university education (37.50 percent, 60.66 percent, and 65.41 percent, respectively). The number of unemployed youths was higher among those with vocational education and university education (Table 3-1-5).

In terms of the reasons for leaving the previous jobs, “dissatisfaction with previous jobs” was the No. 1 reason for leaving SMEs (52.91 percent) or large enterprises (66.50 percent). However, the No. 1 reason for leaving government was “end of seasonal or temporary jobs” (57.26 percent) (Table 3-1-6).

Table 3-1-6 Reasons for Leaving the Previous Jobs, 2017-2018

Unit: Thousand persons; %

Item \ Year	2017			2018		
	SMEs	Large enterprises	Government	SMEs	Large enterprises	Government
No. of persons	291.17	33.35	14.44	267.33	31.14	13.76
Downsizing or out of business	35.57	25.61	10.49	32.15	22.10	6.87
Dissatisfaction with previous jobs	47.93	60.49	24.91	52.91	66.50	29.08
Poor health	1.89	3.68	1.37	1.69	3.79	0.62
End of seasonal or temporary jobs	12.26	5.03	57.10	10.03	5.07	57.26
Women: marriage or giving birth	0.70	0.98	-	0.84	-	1.78
Retired	0.02	1.46	3.39	0.17	0.34	0.61
Housework too busy	0.60	1.04	0.36	0.93	0.54	1.66
Others	1.02	1.72	2.40	1.29	1.66	2.11

Note: 1. “-” denotes no available data.

2. The enterprise size in the table is the size of the last company where the employee worked.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2017-2018).

8. Nearly 60 Percent of Foreign Employees Worked in SMEs

2018 saw a continuous increase in the number of foreign laborers working in the manufacturing and construction industries in Taiwan, to 436,118, up 22,433 from 2017 (Table 3-1-7).

Table 3-1-7 Number of Foreign Workers by Enterprise Size, 2014-2018

Unit: Persons; %

Year \ Size	Total	SMEs	Large enterprises
2014	321,269	187,159 (58.26)	134,110 (41.74)
2015	353,686	200,714 (56.75)	152,972 (43.25)
2016	376,605	215,145 (57.13)	161,460 (42.87)
2017	413,685	233,480 (56.44)	180,205 (43.56)
2018	436,118	250,155 (57.36)	185,963 (42.64)

Note: Figures only include foreign workers in both the manufacturing and construction industries. Hence, an SME here is defined as an enterprise with less than 200 regular employees in mining and quarrying, manufacturing, and construction industries. Figures in parentheses denote share of total by enterprise size.

Source: Figures provided by Workforce Development Agency, Ministry of Labor.

Regardless of the size of enterprises that employ foreign laborers, both the number of applications to employ foreign laborers and the number of foreign laborers working in Taiwan rose in 2018. The number of foreign laborers working for SMEs rose by 16,675 (up 7.14 percent) in 2018, while the number of foreign laborers working for large enterprises rose by 5,758 (up 3.20 percent).

9. Part-time Workers Increased in SMEs

According to the data presented in the 2018 Manpower Utilization Survey, the part-time workers in SMEs rose by 17,000 to 380,000, while in large enterprises the part-time manpower rose by 19,000. There was a decrease of 27,000 full-time workers in SMEs and an increase of 102,000 in large enterprises, while for government the numbers remained stable in 2018. The utilization of part-time workers is most common in the SMEs in the service sector, especially in the accommodation and food service activities and the wholesale and retail trade industry (Table 3-1-8).

Table 3-1-8 Full-time and Part-time Manpower Utilization by Industry and Enterprise Size, 2017-2018

Unit: Thousand persons

Industry \ Year / size	2017						2018					
	SMEs		Large enterprises		Government		SMEs		Large enterprises		Government	
	Full - time	Part - time	Full - time	Part - time	Full - time	Part - time	Full - time	Part - time	Full - time	Part - time	Full - time	Part - time
Total	8,555	363	1,363	28	996	26	8,528	380	1,465	19	996	23
Agriculture, forestry, fishing and animal husbandry	536	13	2	-	4	-	541	13	2	-	3	-
Mining and quarrying	3	0	-	-	0	-	3	0	-	-	1	-
Manufacturing	2,188	43	779	10	19	-	2,147	46	843	4	20	-
Electricity and gas supply	3	-	5	-	22	-	4	-	2	-	25	-
Water supply and remediation activities	31	1	1	-	49	1	31	-	2	-	48	-
Construction	859	27	9	-	5	-	855	31	10	-	5	-
Wholesale and retail trade	1,721	67	67	10	5	1	1,733	80	69	1	8	5
Transportation and storage	313	12	75	1	41	1	306	8	72	5	54	1
Accommodation and food service activities	721	85	24	1	0	-	723	89	25	1	0	-
Information and communication	183	10	57	-	2	-	183	6	68	1	1	-
Financial and insurance activities	334	3	74	0	16	-	330	6	82	-	16	-
Real estate activities	98	3	1	-	1	-	100	2	3	-	0	-
Professional, scientific and technical activities	299	8	41	0	20	-	294	4	50	-	24	1
Supporting service activities	246	22	22	-	1	-	250	21	24	-	1	-
Public administration and defense; compulsory social security	0	-	-	-	371	1	1	-	-	-	364	1
Education	208	26	59	5	339	18	212	27	61	7	331	15
Human health and social work activities	215	10	138	1	81	4	212	15	146	1	81	-

Industry \ Year / size	2017						2018					
	SMEs		Large enterprises		Government		SMEs		Large enterprises		Government	
	Full - time	Part - time	Full - time	Part - time	Full - time	Part - time	Full - time	Part - time	Full - time	Part - time	Full - time	Part - time
Arts, entertainment and recreation	76	5	5	-	18	1	84	7	5	-	14	0
Other service activities	517	27	5	-	1	-	520	27	3	-	1	0

Note: “-” denotes no available data; “0” denotes a figure is less than one unit (one unit=1000 persons).

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Utilization Survey* data (2017-2018).

10. A Significant Increase in the Number of SME Employees

Changing Jobs; The Number Changing to Large Enterprises Increased

In 2018, a total of 510,000 SME employees changed jobs; this figure was up about 40,000 from 2017. The rate of those taking up a position with another SME remained high at 88.43 percent, while only 8.43 percent took a job in large enterprises and 3.14 percent did so in the government. It is worth noticing that an increase of 12,000 persons changed jobs to large enterprises from SMEs compared to the number in 2017 (Table 3-1-9).

Table 3-1-9 Choice of New Employer by Former SME Employees, 2014-2018

Unit: Thousand persons; %

Year	Total	Going to work for another SME		Going to work for a large enterprise		Going to work for a government agency	
		No. of persons	Share of total	No. of persons	Share of total	No. of persons	Share of total
2014	514	460	89.49	43	8.37	11	2.14
2015	571	505	88.44	49	8.58	17	2.98
2016	533	472	88.56	48	9.01	13	2.44
2017	470	425	90.43	31	6.60	14	2.98
2018	510	451	88.43	43	8.43	16	3.14

Note: An SME is defined here as an enterprise with less than 200 regular employees in mining and quarrying, manufacturing, and construction industries, or an enterprise with less than 100 regular employees in other industries.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Utilization Survey* data (2014-2018).

II Labor Conditions in SMEs

1. SMEs in Real Estate Had the Longest Average Working Hours

In 2018, for SMEs, real estate activities had the longest average working hours at 43.58 hours per week (and employed 102,000 workers, accounting for 1.15 percent of all employed workers in SMEs), followed by the transportation and storage industry at 43.45 hours per week, which accounted for 3.52 percent of all employed workers in SMEs, and other service activities at 43.40 hours per week, accounting for 6.14 percent of all employed workers in SMEs. Education had the shortest average working hours at 38.25 hours per week, and accounted for 2.68 percent of all employed workers in SMEs (Table 3-2-1).

Table 3-2-1 Working Hours per Week and Number of Employed Workers by Enterprise Size and Industry, 2018

Unit: Thousand persons; hours / per week

Item Industry	No. of employed workers				Weekly working hours		
	SMEs	Share	Large enterprises	Government employees	SMEs	Large enterprises	Government employees
Agriculture, forestry, fishing and animal husbandry	552.13	6.22	1.75	2.56	39.94	43.67	40.00
Mining and quarrying	2.90	0.03	-	0.81	42.04	-	40.00
Manufacturing	2,188.58	24.65	843.48	19.72	40.92	42.39	40.17
Electricity and gas supply	3.69	0.04	1.56	24.81	39.79	43.49	40.56
Water supply and remediation activities	30.96	0.35	2.15	47.38	41.69	40.00	40.69
Construction	878.22	9.89	9.52	5.40	40.40	44.21	42.44
Wholesale and retail trade	1,808.39	20.37	69.98	13.09	42.80	41.96	33.83
Transportation and storage	312.77	3.52	76.64	54.06	43.45	41.97	41.49
Accommodation and food service activities	808.98	9.11	25.26	0.09	42.25	41.55	40.00
Information and communication	188.30	2.12	68.80	0.51	41.20	42.28	40.00
Financial and insurance activities	334.88	3.77	81.48	15.81	41.10	42.01	41.75
Real estate activities	102.15	1.15	2.58	0.15	43.58	40.00	40.00
Professional, scientific and technical activities	295.88	3.33	49.74	24.90	41.23	42.09	40.25
Supporting service activities	270.10	3.04	23.63	1.01	41.64	45.29	40.00
Public administration and defense; compulsory social security	0.64	0.01	-	363.74	40.00	-	42.15
Education	237.90	2.68	68.00	345.66	38.25	37.53	39.25
Human health and social work activities	226.63	2.55	147.24	80.60	40.81	42.44	42.61
Arts, entertainment and recreation	90.48	1.02	4.96	13.85	42.04	38.71	40.07
Other service activities	544.70	6.14	2.86	1.28	43.40	44.39	37.54

Note: 1. Employed persons with non-zero main working hours are classified as employed workers. Hence the figure of the sum of employed workers in each industry is different from the number of employed persons by enterprise size as noted in Figure 3-1-1.

2. “-” denotes no available data.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2018).

2. Highest Average Salary Level for SME Employees Was in Public Administration, Defense, and Compulsory Social Security

In 2018, the highest average salary level for SME employees was in the public administration, defense, and compulsory social security industries at over NT\$62,000 per month (with fewer than 1,000 persons in these industries), followed by the electricity and gas supply industry group at about NT\$49,000 per month (0.04 percent of all SMEs’ paid employed persons), and the financial and insurance activities industry group at about NT\$46,000 per month (4.03 percent of all SMEs’ paid employed persons). The lowest average salary level for SME employees was in the agriculture, forestry, fishing and animal husbandry industry group at about NT\$28,000 per month (5.06 percent of all SMEs’ paid employed persons) (Table 3-2-2).

Table 3-2-2 Number of Paid Employed Persons and Average Wage of Main Work by Enterprise Size and Industry, 2018

Unit: Thousand persons; thousand NT\$/ per month

Industry	No. of paid employed persons		Average wage of main work					
	SMEs	Share	Large enterprises	Government employees	Total	SMEs	Large enterprises	Government employees
Agriculture, forestry, fishing and animal husbandry	421.18	5.06	1.75	2.56	28.38	28.29	37.45	37.26
Mining and quarrying	2.90	0.03	0.00	0.81	40.22	38.75	-	45.48
Manufacturing	2,126.93	25.54	846.89	19.72	38.91	36.91	43.60	54.11
Electricity and gas supply	3.35	0.04	1.56	24.81	57.24	48.99	38.70	59.51
Water supply and remediation activities	29.56	0.35	2.15	48.21	38.04	36.74	44.52	38.54
Construction	856.91	10.29	9.52	5.40	39.15	38.96	57.59	36.87
Wholesale and retail trade	1,629.09	19.56	69.98	13.09	36.47	36.41	39.38	28.81
Transportation and storage	305.87	3.67	76.83	54.36	42.55	39.75	50.34	47.31
Accommodation and food service activities	712.86	8.56	25.26	0.09	31.79	31.67	35.20	29.00
Information and communication	187.15	2.25	68.80	0.51	47.76	43.97	57.95	65.48
Financial and insurance activities	335.47	4.03	81.97	15.81	48.58	46.08	57.39	55.93
Real estate activities	99.05	1.19	2.58	0.15	41.46	40.87	65.21	26.10
Professional, scientific and technical activities	291.23	3.50	49.74	24.90	48.23	44.40	64.26	61.09
Supporting service activities	267.71	3.21	23.63	1.01	31.51	31.26	34.29	33.00
Public administration and defense; compulsory social security	0.64	0.01	0.00	365.35	49.43	61.60	-	49.41
Education	232.36	2.79	68.13	346.09	46.64	36.87	52.12	52.12
Human health and social work activities	221.07	2.65	146.83	80.97	46.70	42.20	49.20	54.45
Arts, entertainment and recreation	88.23	1.06	4.96	13.85	35.07	34.28	32.66	40.98
Other service activities	516.39	6.20	2.86	1.28	33.76	33.73	37.25	36.50

Note: 1. Employed persons with working hours of 15 or more are classified as paid employed persons here. Hence the figure of the sum of paid employed persons in each industry is different from the number of employed persons by enterprise size as noted in Figure 3-1-1.

2. "-" denotes no available data.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2018).

The average monthly salary level for SME employees rose in most industries in 2018 from 2017 except for in electricity and gas supply, water supply and redemption activities, financial and insurance activities, and professional scientific and technical activities. The average monthly salary level for SME employees rose most at around NT\$2,020 in mining and quarrying, followed by education at NT\$1,920 and real estate activities at NT\$1,800.

Generally, compared to 2017, in 2018 the average monthly salary level for SME employees rose around NT\$550 and the average working hours declined by 0.01 hours per week.

3. Manpower Demand Expected to Rise

According to the results from the *2019 Manpower Requirements Survey (Second Round)* conducted in April, net manpower demand was expected to rise by around 19,700 jobs in the industrial sector

and 22,700 in the service sector from the end of April to the end of June 2019. For the same period, it was anticipated that 68.27 percent of enterprises would keep the same level of manpower; 23.0 percent of enterprises would add net manpower; 5.37 percent of enterprises would choose “unpredictable,” and only 3.37 percent of enterprises would reduce net manpower (Table 3-2-3).

Table 3-2-3 Anticipated Changes in the Number of Personnel Employed by Business Enterprises during the Period from April 31 to June 31, 2019

Unit: Persons

Industry	Item	Net increase in no. of employees	Change in manpower demand		Top 4 occupational categories			
			New positions	Positions eliminated	Craftsmen, machinery operators and assembly line workers	Technicians and assistant specialists	Service and sales personnel	Professional specialists
Total		42,450	48,539	6,089	12,827	9,697	8,416	5,351
Manufacturing		18,002	21,153	3,151	10,493	3,078	78	1,883
Construction		1,700	1,962	262	433	1,138	-	10
Wholesale and retail trade		4,879	5,685	806	636	1,347	1,604	159
Transportation and storage		1,456	1,519	63	946	129	80	13
Accommodation and food service activities		4,430	4,791	361	-18	7	4,432	-
Information and communication		2,962	3,002	40	-	2,074	247	484
Financial and insurance activities		900	909	9	-	482	108	99
Real estate activities		817	817	-	-	758	8	2
Professional, scientific and technical activities		1,009	1,035	26	-	577	32	204
Support service activities		2,052	3,203	1,151	33	159	821	59
Human health and social work activities		2,750	2,970	220	-	-165	358	2,428
Arts, entertainment and recreation		1,000	1,000	-	34	30	518	-
Other service activities		493	493	-	270	83	130	10

Source: Ministry of Labor, *2019 Report of Manpower Requirements Survey* (April 2019).

The greatest increase in demand will be in manufacturing, with a net increase of about 18,000, followed by about 4,900 in wholesale and retail trade, and about 4,400 in accommodation and food service activities (about 9,095).

Part Two

Government SME Policies and Prospects

- Chapter 4** Improving Financial and Funding Services and Strengthening Investment in SMEs
- Chapter 5** Enhancing R&D and Promoting Upgrading and Transformation for SMEs
- Chapter 6** Strengthening Start-ups and Incubation & Acceleration Mechanisms
- Chapter 7** Revitalizing Local Industries by In-depth Development, Marketing and Expansion
- Chapter 8** Other Government Measures to Support SMEs

To provide small and medium enterprises with support for their businesses, the Ministry of Economic Affairs established the “Small and Medium Enterprise Counseling System” in accordance with Article 12 of the “Act for Development of Small and Medium Enterprises” and Article 2 of the “Regulations for the Establishment of the Small and Medium Enterprise Counseling System and Counseling Services” to provide counseling for all aspects of the development of small and medium enterprises. This paper summarizes the policies and measures implemented for small and medium enterprises by related authorities each year. The specific measures and results are collected and presented for all sectors and owners of small and medium enterprises to learn more about channels of the government’s diverse counseling resources.

The government makes timely adjustments to its small and medium enterprise (SME) development strategy in response to changes in the domestic and foreign economic situation. In addition to guidance and support measures, the government actively implements numerous new programs, including programs to enhance the competitive advantages of industries and to expand exports in response to the digital transformation and execution of innovative international marketing plans for small and medium enterprises. Startup Terrace was established to strengthen startup incubation and industrial innovation and development for the execution of the International Startup Campus Program.

CHAPTER 4

Improving Financial and Funding Services and Strengthening Investment in SMEs

The government actively implements financing counseling and related support measures to help small and medium enterprises effectively respond to changes in the internal and external environment, facilitate their stable growth, and provide small and medium enterprises with comprehensive financing support.

This chapter is divided into three sections. Section I discusses measures to improve financial and funding services. Section II focuses on SME credit guarantees. Section III covers government measures to strengthen investment in SMEs.

I Improving Financial and Funding Services

1. Providing SME Financing Counseling and Value Added Service

(1) SME Financing Service Windows: SME Instant Solution Service Center

The Small and Medium Enterprise Administration (SMEA) has established the SME Instant Solution Service Center to provide SMEs with consulting services in line with their individual needs. It provide quick and effective assistance in a wide range of areas, including financing diagnosis and consulting, financing and loan-related referral, guidance, refinancing, extensions, lines of credit, and so on for both borrowers and creditors to enhance SMEs' financing capacity and risk management (plan site: <https://friap.moeasmea.gov.tw/>).

(2) SME Financing Diagnostic Service Plan

The SMEA of the MOEA has implemented the “SMEs Financing Diagnosis Services Program” since 2008 to strengthen the financial structure of small and medium enterprises, enhance the quality of business operations, and help them adopt suitable financial and accounting systems to obtain funding for business development and effectively improve their competitiveness. The Program was integrated with the Instant Solution Center into the “Small and Medium Enterprises Operations and Financing Assistance Program” in 2018. The Plan's two main work items are: (1) professional consulting service: consulting service for real-time business issues, and (2) in-depth diagnosis and counseling that include general financing, corporate field visits, and debt restructuring and/or refinancing. The consultation contact window is the Instant Solution Center.

(3) SMEs' Value and Innovation Application Plan

The SMEA began implementing the “Small and Medium Enterprise Value Innovation and Application Program” in 2015 to provide the early funding database “Platform for Financing Data and Innovative Trends” (FinDIT) and to organize fundraising assistance, leadership seminars, fundraising matchmaking events, and the Global Angel & Venture Investment Summit. The Program ended in 2018 and it was renewed in the “Innovation and Fundraising Intelligent Support Program” in 2019 to continue to construct an innovative startup environment with transparent “market, entrepreneurship, and investment” information and comprehensive consultation resources, and gradually resolve startups’ deficiencies in “lack of entrepreneurship intelligence and market awareness” and “lack of early funding information” (plan site: <http://findit.org.tw>).

(4) Project for Promoting SMEs Development of Sound Finance

SMEA integrated the “Project to Strengthen the Capability of SMEs Accounting Application” and “Project for Improving SMEs’ Mastery of Financial Affairs” in 2018 and promoted the “Project for Promoting SMEs’ Development of Sound Finance” to provide SMEs with financial management for sustainability and help them resolve financial issues at different development stages. The services provided in 2019 include: (1) strengthening accounting application and management capabilities of SMEs and providing assistance for general finance and accounting; (2) improving corporate succession and finance and accounting capabilities and providing onsite diagnosis services; (3) promoting knowledge in SME development trends and finance and accounting; (4) improving the digital finance applications for SMEs and overall coordination and communication (plan site: <https://friap.moeasmea.gov.tw/index.php>).

2. SME Financing Services Platform

The SME Financing Services Platform was established by SMEA, MOEA to make it easier for SMEs to secure bank loans by providing financial diagnosis and clear, transparent details about SME operations that banks can use as a basis for decision-making when determining whether or not to grant loans to SMEs. If banks have a clearer picture of the business models that SMEs are using and of what their funding needs are, they are more likely to expand the provision of loans to SMEs, creating a win-win situation for SMEs and the creditors (plan site: https://www.jcic.org.tw/main_member/docDetail.aspx?uid=308&pid=285&docid=148).

3. Policy Loans for Special Projects to Help SMEs

The government provides SMEs with various types of policy loans, either directly or through collaboration with banks. What distinguishes these loans from ordinary ones is that the loans are granted for specific purposes, and have preferential interest rates. In 2019, altogether, 17 different types of policy loan are available in 11 categories: SME upgrading loans, loans for the purchase of production equipment, business start-up loans, R&D loans, tourism development loans, export and overseas investment loans, loans for entrepreneurs who have returned to Taiwan from overseas, and other loans.

4. Plan for Increasing Loans to SMEs by Domestic Banks

To encourage the development of a long-term partnership relationship between SMEs and banks, and thus help SMEs obtain working capital, the Financial Supervisory Commission (FSC) decided that implementation of the Plan for Increasing Loans to SMEs by Domestic Banks should continue into the fourteenth stage in 2019 with a plan target of NT\$270 billion. The “growth in the number of loan customers” was also added as an evaluation indicator in 2019 and the “Small and Startup Enterprise Financing Special Award” was added to encourage domestic banks to help provide more SMEs and small and startup companies with working capital. In 2018 (thirteenth stage), domestic banks made loans to SMEs amounting to a net increase of NT\$335.5 billion from 2017 (plan site: <http://www.banking.gov.tw/>).

5. Policy-based Loans and Financial Services for Enterprises Owned by Indigenous Peoples

The Council of Indigenous Peoples began recruiting financial counselors in 2011 to provide loan-related guidance services for economic industry loans, young entrepreneur loans, and micro-economic activity loans for indigenous people, which are provided by the Comprehensive Development Fund for Indigenous Peoples. The Council also established a toll-free hotline to provide financial services to indigenous people at 0800-508-188. The financial counselors provide indigenous people with loan advice, guidance and assistance during visits, and negotiate with local financial institutions to help indigenous people successfully gain funding.

II SME Financing and Credit Guarantees

1. SME Credit Guarantee Fund: Operating Mechanism and Application Process

To help strengthen the provision of credit guarantees to SMEs, the government established the SME Credit Guarantee Fund in 1974. The main purpose of establishing this fund was to provide credit guarantees to SMEs, and to work closely with financial institutions in the development of financing guidance services for SMEs, helping SMEs obtain the funding they need from financial institutions and thereby contributing to the healthy development of Taiwan’s SME sector and promoting Taiwan’s economic growth and social stability. The SME Credit Guarantee Fund’s main functions are as follows:

- (1) Helping SMEs overcome the difficulties that they experience when trying to provide the collateral needed to secure loans.
- (2) Making financial institutions more willing to provide loans to SMEs.
- (3) Maximizing the efficacy of guidance projects undertaken by other SME guidance organizations.

The mechanisms for the establishment and operation of the SME Credit Guarantee Fund

involved the allocation of a supporting budget by the government and the signing of contracts with financial institutions, whereby they agree to provide additional funding to boost the Fund's ability to provide credit guarantees, and to share some of the potential loss, thereby enabling the Fund to continue providing guarantees and helping SMEs that have significant development potential but lack sufficient collateral to secure the financing they need from financial institutions.

Application for a credit guarantee can be made either via a financial institution, or directly to the SME Credit Guarantee Fund, or a dedicated window, depending on the requirements of the individual enterprise making the application (plan site: <http://www.smeg.org.tw/>).

2. Benefits Achieved through Credit Guarantee Fund

(1) Helping SMEs Secure Funding

As of the end of December 2018, the SME Credit Guarantee Fund had helped a total of 406,964 enterprises. The total number of credit guarantees provided through financial institutions was over 7.11 million, with a cumulative credit guarantee volume of NT\$13,321.7 billion for loans of NT\$17,986.2 billion. The performance of the SME Credit Guarantee Fund in the last 5 years is outlined in Table 4-2-1.

Table 4-2-1 Performance of Credit Guarantee Fund in Credit Guarantee Provision, 2014-2018

Unit: Recipients; items; million NTS

Year	Item	No. of credit guarantee recipients	No. of credit guarantee applications accepted	Combined value of credit guarantees	Total amount of financing secured	Outstanding credit guarantees at year-end	Outstanding financing at year-end
2014		115,879	405,113	1,140,854	1,425,826	698,933	885,961
2015		118,309	382,936	1,020,753	1,336,580	634,274	838,395
2016		118,517	366,221	964,912	1,291,398	609,951	818,340
2017		116,097	345,805	969,806	1,287,392	602,037	802,044
2018		113,018	334,789	1,006,592	1,308,104	614,174	803,281

Source: Credit Guarantee Fund (2019).

(2) SME Credit Guarantee Fund Has Great Impact on Growth of SMEs

The vast majority of SMEs that received credit guarantees from the SME Credit Guarantee Fund have found that, within a few years, they were able to raise money on the capital markets or obtain loans directly from banks. Furthermore, as of December 2018, 2,769 of the SMEs that have been granted credit guarantees in the past have since grown sufficiently large to be classified as “large enterprises,” and 898 have secured a stock market, OTC, or GISA listing.

3. Government Policy Measures Being Implemented and Supported by Credit Guarantee Fund

(1) Credit Guarantee for Young Entrepreneur Dream Building Financing Loans

The Ministry of Economic Affairs integrated the “Young Entrepreneur Dream Building Financing Loans” and the “Young Entrepreneur Loans” into the “Loans for Young Entrepreneurs and

Start-ups” in 2014. The Small and Medium Enterprise Credit Guarantee Fund (SMEG) provides a maximum credit guarantee of 95% and a minimum credit guarantee of 80% for loans up to NT\$18 million. The loan is limited to the reserve required by the business, registration fees, working capital, and capital expenditures.

(2) Credit Guarantee for SME Innovation Development Project Loans

In order to shore up the innovative capabilities of SMEs, provide SMEs with the funds they need to achieve innovative management and spur development, and help SMEs employ innovation and advanced technology service models to expand into international markets, the Ministry of Economic Affairs (MOEA) launched the “SME Innovation Development Project Loan” in 2014. The program facilitates the provision of loan facilities to eligible applicants of up to NT\$20 million for working capital and up to NT\$80 million for capital expenditures. In addition, SMEG provides a minimum credit guarantee of 80% for each loan, thereby increasing the willingness of banks to make such loans. In addition, SMEG provides a minimum credit guarantee of 90% for loans to startups established for less than 5 years, which helps the startups gain working capital. If an aforementioned startup receives a specific award or program, an additional 5% is provided, up to NT\$5 million.

(3) Credit Guarantee for Small Enterprise Loans

To make it easier and more convenient for small businesses to access financing in the form of small advances of working capital from financial institutions, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs has continued to implement the “Small Enterprise Loans” program, wherein participating financial institutions independently formulate the loan rates but handle collections of loans guaranteed by SMEG based on the individual guarantee percentages of each case. In addition, SMEG provides a minimum credit guarantee of 90% for loans to startups established for less than 5 years, which helps the startups gain working capital. SMEG launched the “Small Enterprise Preferential Credit Guarantee Measures” in November 2018. The guarantee service fees are minimized based on conditions in individual cases, and the credit guarantee service fees for disaster recovery loans are waived for SMEs.

(4) Preferential Guarantee Measures for Innovative Industries

In coordination with the Financial Supervisory Commission (FSC)’s Incentives for Domestic Banks to Provide Innovative Industries Loans, SMEG has implemented Preferential Guarantee Measures for Innovative Industries for Asia’s Silicon Valley, biomedical, green energy, smart machinery, defense technology, agricultural modernization, and the circular economy, under the 5+2 Innovative Industries Plan, offering credit guarantees of up to 90%. The service fees for approved credit guarantees are reduced by an additional 0.025 percent.

(5) Guarantee Measures for Forward-Looking Infrastructure and Green Energy Technology Loans

In coordination with the government’s Forward-looking Infrastructure Development Program and green energy policy, preferential guarantee measures are provided to SMEs participating in

government procurements under the Forward-looking Infrastructure Development Program or SMEs that are in the green energy technology industry. SMEG hopes to thereby drive industrial development, attract investments from Taiwan and overseas, and increase employment by offering credit guarantees of up to 90%.

(6) Export Loan Preferential Credit Guarantee Project

Starting in 2016, SMEG and the MOEA's Bureau of Foreign Trade began jointly implementing the Export Loan Preferential Credit Guarantee Project. This provides additional guarantees for loans and credit guarantees of up to 90%, helping SMEs gain the capital required for exports. Depending on the region exported to, SMEG provides a guaranteed commission exemption or reduction for loan periods of less than one year. Starting July 12, 2018, the additional guarantee was also increased from NT\$60 million to NT\$100 million for SMEs exporting to countries targeted by Taiwan's New Southbound Policy (hereafter, 'New Southbound countries').

(7) Helping SMEs Acquire Financing Guarantees for Investments in New Southbound Countries

In order to accommodate the government's New Southbound Policy and help SMEs secure the funds they need to make investments in New Southbound countries, beginning in 2017, SMEG appropriated a sum of NT\$2 billion, the Agricultural Credit Guarantee Fund (ACGF) appropriated a sum of NT\$1 billion, and the Overseas Credit Guarantee Fund (OCGF) appropriated a sum of NT\$2 billion, resulting in a total of NT\$5 billion in earmarked funds. The maximum guarantee amount of NT\$100 million and up to 90% of loans is provided for SME investment plans in New Southbound countries or those approved by or registered with MOEA. The guarantee service fee is calculated at a fixed ratio of 0.1%.

(8) Direct Guarantee Project to Promote Business Innovation

SMEG began providing the Direct Guarantee Project to Promote Business Innovation in 2017. Eligible targets include projects that received subsidies or assistance related to MOEA innovation and research projects and SMEs recommended by the MOEA. The financing limit is within 80% of the approved innovation and R&D project minus the project subsidies or the amount after subsidies or assistance funding. The guarantee amount is 95% and the annual guarantee service fee rate is fixed at 0.5%.

(9) Preferential Credit Guarantee Measures for Excellence Awards

To help outstanding SMEs obtain capital required for business development, SMEG established the "Preferential Credit Guarantee Measures for Excellence Awards". Eligible recipients are SMEs that received the National Award of Outstanding SMEs, National Industrial Innovation Award, National Quality Award, Rising Star Award, Potential Taiwan Mittelstand Award, or Model of Entrepreneurs Award and that meet qualifications for SMEG. An additional credit guarantee of NT\$100 million is provided from July 12, 2018 to the end of 2019.

(10) 'Prosperous Year Project' Year-end Fund Credit Guarantee Measures

To help SMEs successfully obtain the funding required for the 2019 Chinese New Year, SMEG established the “‘Prosperous Year Project’ Year-end Fund Credit Guarantee Measures” to provide preferential measures for additional credit of up to NT\$3 million with a guarantee percentage of at least 80% and a 0.5% guarantee service fee. The service was available from November 13, 2018 to the end of February 2019.

(11) Small and Medium Enterprise Billion Credit Guarantee Project

To help startups and micro SMEs obtain financing from financial institutions, help facilitate their smooth upgrade, transformation, and succession, and reduce their financial burdens, SMEG launched the “Small and Medium Enterprise Billion Credit Guarantee Project” on May 3, 2019 to provide “expanded small loan guarantee measures” and “expanded batch guarantee measures” with up to NT\$6 million in credit guarantee for SMEs with paid-up capital of less than NT\$30 million or businesses with only taxation registration.

(12) To Help Reduce SME's Financial Burden, the Annual Guarantee Service Fee Rate Was Reduced

To help reduce SME's financial burden for credit guarantees, the annual guarantee service fee rate was reduced by 0.125 percentage points starting from May 9, 2019, from a range between 0.5% and 1.5%, to one between 0.375% and 1.375%.

(13) Preferential Guarantee Measures for Small and Medium Enterprise Investment in Taiwan

To encourage SMEs to invest in Taiwan, SMEG launched the “Preferential Guarantee Measures for Small and Medium Enterprise Investment in Taiwan” on May 10, 2019 to provide credit guarantees for capital expenditures for new plants (expansion) or additional machinery or equipment of NT\$100 million and up to 90% of the loans.

(14) Welcome Taiwanese Businesses' Investment to Taiwan Project Loan Guidelines

In collaboration with the government assistance for Taiwanese businesses to return to Taiwan and invest, SMEG began providing credit guarantees for loans organized in accordance with the “Welcome Taiwanese Businesses' Investment to Taiwan Project Loan Guidelines” on May 16, 2019. The maximum guarantee amount is 90% and the minimum annual guarantee service fee rate is 0.375%.

(15) Local Co-Creation Enterprise Project Loan Credit Guarantee

To help local co-creation enterprises obtain working capital, SMEG began organizing the “Local Co-Creation Enterprise Project Loan Credit Guarantee on June 3, 2019 to provide credit guarantee for short-term financing, medium-term financing, and capital expenditures for co-creation enterprises. The maximum guarantee amount is 90% and the minimum annual guarantee service fee rate is fixed at 0.375%.

(16) Social Innovation Enterprise Project Loan Credit Guarantee

To help social innovation enterprises obtain funding, SMEG began organizing the “Social Innovation Enterprise Project Loan Credit Guarantee” on June 3, 2019 to provide social innovation enterprises and type B enterprises with credit guarantee for short-term financing, medium-term financing, and capital expenditures. The maximum guarantee amount is 90% and the minimum annual guarantee service fee rate is fixed at 0.375%.

(17) Small and Medium Enterprise Accelerated Investment Loan Credit Guarantee

To encourage SMEs to accelerate investments, SMEG began implementing the “Small and Medium Enterprise Accelerated Investment Loan Credit Guarantee” on July 4, 2019 to provide an additional credit guarantee of up to NT\$100 million for capital and medium-term financing loans. The maximum guarantee amount is 95% and the minimum annual guarantee service fee rate is capped at 0.3%.

(18) Counterpart Guarantee

Beginning in 2006, the Small and Medium Enterprise Growth Fund (SMEG) launched a service for providing counter-guarantees in which an earmarked fund was established through cooperation between SMEG and key leading enterprises. SMEG then provided corresponding financial support for fund matching services in the form of credit guarantees to upstream, midstream, and downstream enterprises, third-party vendors, distributors, and affiliated enterprises. In May 2007, the scope of eligibility of program participants was extended to encompass relevant ministries and councils of the central government as well as local government authorities. Subsequently, earmarked funds were allocated by relevant government agencies, and these funds were then matched by SMEG. By working together to provide credit guarantees and consolidate the government’s guidance policies and credit guarantee schemes, the program provided a means to jointly aid SMEs and micro enterprises as well as individual entrepreneurs to secure funds from financial institutions needed to found new startups and maintain current operations, reinvigorating local economies and achieving a multiplier effect through resource sharing.

As of December 2018, the SME Credit Guarantee Fund had (1) collaborated with the central government on a total of 14,991 loans, amounting to a total of NT\$11.37 billion; (2) collaborated with local governments on a total of 7,017 loans, amounting to a total of NT\$4.94 billion; and (3) collaborated with companies on a total of 38,353 loans, amounting to a total of NT\$31.42 billion.

III Strengthening Investment in SMEs

1. Establishment of SME Startup Incubation Investment Trust Account

In October 2003, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs established the “Investment and Trust Account for Incubation and Start-up of SMEs” for the purpose of facilitating investment in domestic SMEs which show potential for development,

and thus increasing the national competitiveness of Taiwan's industries. The program includes specific criteria for the use of trust assets, and retains development firms specializing in SME investment along with financial institutions and venture capital enterprises to serve as management consultants for handling investment management affairs. The scope of investment comprises newly established SMEs, SMEs formed through incubator centers, and SMEs undergoing upgrade and transformation. In addition, to help SMEs raise funds to execute international technology transfers and engage in various activities such as technical cooperation and production, a sum of NT\$900 million was appropriated for the "Investment and Trust Account for Incubation and Start-up of SMEs," and the "Project for Cooperation on International Investments" was launched in May 2015 (<http://www.moeasmea.gov.tw/ct.asp?xItem=1284&ctNode=609&mp=1>).

2. National Development Fund's Plan for Promoting Investment in SMEs

To stimulate investment in the SME sector by venture capital firms and other private-sector companies, in 2007 the National Development Fund approved the Plan for Promoting Investment in SMEs. The SMEA selected a total of 28 venture capital firms to make collective investments in domestic SMEs, helping SMEs gain capital in the early stages. The SMEA also assigned designated personnel to provide investment services, including investment advice, diagnosis, and guidance, and organizing investment courses, business meetings, and investment fairs (plan site: <http://www.moeasmea.gov.tw/ct.asp?xItem=1283&ctNode=609&mp=1>).

3. National Development Fund's Plan for Promoting Investment in Strategic Service Industries

To stimulate investment in the strategic service industries to promote service industries and employment, service exports, and the financing of SMEs in service industries, on May 2012, the National Development Fund approved the Plan for Promoting Investment in Strategic Service Industries. The key elements of the Plan are: the Fund was allocated NT\$10 billion for investment in strategic service industries. This Plan is expected to be implemented over a period of 13 years, with the actual investment taking place during the first ten years, and the remaining three years being devoted to the disposal of remaining investments. In the plan, governmental and private venture capital engage in joint investment, and additional incentives are also provided to encourage venture capital to help operators achieve policy goals (plan site: <http://www.issip.org.tw>).

4. Implementation Project for Strengthening Investment in Strategic Manufacturing Industries

In order to copy the successful model of venture capital firms investing in high-tech industries, enhance the competitiveness of manufacturers, and accelerate industrial transformation and enhancement, in 2015, the National Development Fund (NDF) specially allocated NT\$10 billion to the Ministry of Economic Affairs' Industrial Development Bureau to realize the Implementation Project for Strengthening Investment in Strategic Manufacturing Industries. The funds are used exclusively with the domestic manufacturing industry. Features of this project include an

investment period reaching 10 years (investments are made in the first 7 years, and stakes are sold in the last 3 years), and establishing an advisory unit to conduct broad searches for potential investment projects. The project encourages venture capital firms to make investments and provides policy incentives to increase the effectiveness of investment (<http://www.psism.org.tw/cht/index.php>).

5. Statute for Industrial Innovation

The related preferential taxation measures in the “Statute for Industrial Innovation” were extended by 10 years in 2019. To help startups obtain working capital and increase investments in small and medium enterprises, Article 23-2 of the Statute states that where an individual invests at least NT\$1 million in cash in one year in domestic innovative startups that have been incorporated for less than two years and identified by the central authority in charge of relevant enterprises as high-risk innovative startups, and acquires and holds the new shares issued by the company for two years, up to 50% of the investment may be excluded from the individual’s consolidated income for the year in which the second anniversary of such shareholding falls. The aggregate amount excludable from an individual’s consolidated income each year in accordance with this paragraph shall not exceed NT\$3 million.

6. Project to Increase Investment in the Cultural and Creative Industry

The Ministry of Culture began implementing the Project to Increase Investment in the Cultural and Creative Industry in 2010, and allocated NT\$10 billion to invest in the domestic cultural and creative industry. The funds were invested in proportion with private investments, to find suitable cultural and creative companies to provide guidance on a corporate scale, thus giving cultural and creative companies greater market value. The Cultural Content Investment Project was implemented under this project in 2018, and encouraged content industry investors to apply to the Ministry of Culture for joint ventures (<http://cci.culture.tw/cht/index.php?code=list&ids=21>).

7. Fundraising Guidance Mechanism – GISA

TPEX launched the Go Incubation Board for Startup and Acceleration Firms (GISA) in 2014. GISA offers fundraising guidance mechanisms and equity fundraising that is untradeable to innovative micro-enterprises and SMEs that have creative ideas and development potential but which have not yet gone public. It thereby provides micro-enterprises and SMEs with a low-cost method for raising the funds they need to sustain and grow their operations and increase their brand awareness. This will help them recruit outstanding talent, expand their marketing channels, and further enhance their competitiveness to maintain corporate sustainability. The standard listing requirement is for paid-up capital reaching a minimum threshold of NT\$50 million; in contrast to this, the GISA does not set any requirements on the company’s paid-up capital. In addition, such companies are exempted from various other requirements such as having to undergo an initial public offering or comply with profitability requirements.

8. Equity Crowdfunding Program for Securities Dealers

In order to help more young people engage in entrepreneurial activities, the Financial Supervisory Commission (FSC) began allowing securities dealers to implement equity crowdfunding services in 2015 for joint-stock companies which (1) have paid-up capital of less than NT\$50 million and (2) have not yet gone public. Such companies are permitted to utilize an approved crowdfunding platform to raise funds, wherein total funding may not exceed NT\$30 million within a one-year period. General investors are limited to making a maximum of NT\$50,000 per investment proposal, and total investments on a single platform may not exceed NT\$100,000 within a 1-year period. In addition to giving startup teams another outlet to obtain the funding they need, these rules also serve to protect the rights and interests of investors.

CHAPTER 5

Enhancing R&D and Promoting Upgrading and Transformation for SMEs

The government promotes improvement in SMEs' digital application capabilities, helps enterprises achieve business and structural innovation and development, assists in the upgrading of green environmental protection and energy conservation technologies, and boosts SME's innovative R&D capacity to strengthen their health, to promote the upgrading and transformation of SMEs, to power the overall development of SMEs, and to enhance the competitiveness of SMEs in a globalized and liberal world.

This chapter is divided into four sections. Section I covers actual and virtual integration and various network resource applications for SMEs; Section II examines measures to enhance SME operation, quality and innovation; Section III reviews guidance on energy conservation, green opportunities, and sustainable growth models; Section IV discusses measures to promote up-, mid-, and downstream cooperation and innovation, in pursuit of high-value transformation and upgrade for SMEs.

I Measures Related to Actual / Virtual Integration and Network Resource Applications for SMEs

1. Digital Outreach Program for SMEs

The SMEA implemented the Digital Outreach Program for SMEs in 2016 to help launch clusters of co-op networks, facilitate digital outreach in rural communities, encourage the use of digital applications among early-stage SMEs, and increase the use of virtual channels and digital business methods by small businesses. In 2019, main action items include (1) further promoting digital applications in remote or rural areas, (2) establishing e-clusters, (3) assisting in cluster expansion and marketing, (4) fostering SMEs' information technology upgrading, and (5) cultivating sustainable development of clusters (plan site: <https://www.198.org.tw/>).

2. SME Mobile Payment Popularization and Promotion Plan

The SMEA began implementing the SME Mobile Payment Popularization and Promotion Plan in 2017 to achieve the Executive Yuan's goal of mobile payment adoption reaching 90% by 2025. Action plans in 2019 include completing the infrastructure for mobile payment, expanding the field of applications for mobile payment, and enhancing experiential marketing of mobile payment. The purposes of this are to broaden the scope of mobile payment services, offer citizens a more in-depth

experience of cashless consumption, and provide convenient access.

3. SMEs' Cloud Innovative Application Development Plan

The SMEA began implementing the Plan to Develop SMEs' Cloud-based Innovative Applications in 2016 with the goal of providing cloud services with featured applications that make a perceptible difference for enterprises. In 2019, large enterprises lead SMEs in the industry through alliances that focused on innovative cloud applications, and increased the utilization of cloud application services and commercial benefits.

4. SME Digital Broadband Applications Popularization and Promotion Plan

The SMEA began implementing the SME Digital Broadband Applications Popularization and Promotion Plan in 2017. The purposes of this Plan are to popularize digital broadband applications among SMEs and micro-enterprises in remote areas, and to enhance their digital capabilities, which will drive digital development in such areas. Main work items in 2019 include: (1) promoting digital applications for innovative business models of SMEs and micro-enterprises in remote areas; (2) organizing seminars and training related to digital applications; (3) reinforcing digital broadband signals.

5. ICT Applications for Manufacturing Industries: Moving Upward along the Value Chain from OEM toward ODM and OBM

The manufacturing industries ICT value-added application plan launched by the Industrial Development Bureau (IDB), MOEA, focuses on helping manufacturing industries move upward along the value chain from OEM model toward ODM and OBM through ICT applications and a pro-innovation, pro-business environment. The smart manufacturing integrated service value chain ecosystem was formed through the systemic integration of the services industry in 2019 (plan site: <http://www.ecos.org.tw>).

II Promoting Operational Excellence and Innovation

1. SME IP Value-added Program

The SMEA integrated the “SME IP Value-added Program” and the “Small Business Innovation Research (SBIR)” program in 2018. The program helps enterprises gain the ability and mechanisms necessary for managing and using their IP, and also enhances their R&D efficiency. Action plans for 2019 include customized guidance, general services, and IP-related knowledge and capacity enhancement services (plan site: <http://ipcc.moeasmea.gov.tw/>).

2. Project of Promoting Service Innovation for SMEs

The SMEA began actively implementing the Project of Promoting Service Innovation for SMEs in 2018. The project utilizes ICT applications and service innovation to help small businesses

innovate and transform. Main work items in 2019 include: (1) Value-added diagnosis and guidance for benchmark enterprises and guidance for innovative experience service clusters; (2) Establishing a digital innovation demonstration system; (3) Providing guidance for micro enterprise clusters; (4) Organizing innovation service experience and exchange activities (plan site: <http://micro.sme.gov.tw/index.php>).

3. SME Digital Transformation and Smart Manufacturing Promotion Program

The SMEA implemented the SME Digital Transformation and Smart Manufacturing Promotion Program in 2018 to enhance SMEs and help them transition to innovative business models. Main work items in 2019 include: (1) digital transformation and smart manufacturing innovative application diagnosis for small and medium manufacturing enterprises; (2) organization of consensus-building camps, innovation workshops, talent education, and related activities.

4. Project for Promoting Smart Commercial Services in the Asian Silicon Valley Project

In 2017, the MOEA's Department of Commerce executed the "Project for Promoting Smart Commercial Services in the Asian Silicon Valley Project," which is designed to support the launch of the "Asian Silicon Valley Promotional Plan" and ensure that the program has a wider range of effectiveness by integrating the local and global resources of Taiwan's commercial service industry and incorporating them into various intelligent and innovative solutions. Action plans for 2019: (1) developing intelligent commercial service solutions; (2) establishing intelligent commercial service case studies; (3) carrying out talent cultivation, and organizing innovation and startup activities (plan site: <https://like.logistics.org.tw/>).

III Guidance to SMEs on Energy Conservation, Green Opportunities, and Carbon Emission

1. Guidance Program for Rising Stars in SME Green Innovation

The Small and Medium Enterprise Administration under the Ministry of Economic Affairs launched the "Guidance Program for Rising Stars in SME Green Innovation" to help SMEs work toward developing environmental sustainability and value innovation and enhance their ability to adopt eco-friendly policies and business continuity management practices, and engage in corporate social responsibility. Action plans for 2019 include: (1) green sustainability and energy conservation management, consultation, and diagnosis; (2) green marketing and energy conservation management guidance for individual enterprises; (3) green supply chain guidance; (4) Working with associations to enhance the industry's overall green capacity; (5) green talent cultivation (plan site: <http://ghginfo.moeasmea.gov.tw>, <http://green2.pidc.org.tw/#/home>).

2. Taiwan Industrial Greenhouse and Energy Reduction Services Corps Program

The Industrial Development Bureau under the Ministry of Economic Affairs launched the “Taiwan Industrial Greenhouse and Energy Reduction Services Corps” program to help companies adopt energy-saving and carbon reduction measures which in turn offer various benefits such as increasing energy efficiency, reducing greenhouse gas emissions, and cutting costs. Action plans for 2019: (1) forming relationships with industrial chain energy conservation and carbon reduction partners; (2) energy conservation and carbon reduction visits; (3) energy conservation and carbon reduction technology exchanges, talent training, and diagnostic tools and applications for energy efficiency (plan site: <http://www.ftis.org.tw/tigers/>).

3. Green Technology Advancement Program

The Industrial Development Bureau under the Ministry of Economic Affairs launched the “Green Technology Advancement Program” to help various industries develop green technologies and comply with environmental regulations and standards. Action plans for 2019: (1) guidance to help various industries upgrade and reinforce their environmental protection policies; (2) study and formulate response measures to the latest trends in environmental regulations; (3) investigate and examine relevant environmental issues; and (4) advocacy and promotion (plan site: <https://proj.ftis.org.tw/eta/>).

4. Promoting Commercial Energy Conservation and Carbon Emissions Reduction Guidance

The MOEA’s Department of Commerce began promoting commercial energy conservation and carbon emissions reduction guidance in 2008 to help commercial service providers implement energy conservation measures and use improvements in energy efficiency to increase the competitiveness of the industry. Action plans for 2019: (1) energy conservation guidance, implementation, and promotion; (2) establishment of energy efficiency management guidelines; (3) Promotion of an energy conservation and financial analysis system; (4) promotion of an inter-agency consultation platform for commercial operations (plan site: <http://escs.cdri.org.tw>).

IV SMEs: R&D Enhancement and Technology Upgrade

1. Small Business Innovation Research Program (SBIR)

To encourage SMEs to engage in innovating industrial technologies, products and services, Taiwan’s government has continually promoted the “Small Business Innovation Research (SBIR) Program” in February 1999. In 2008, the “Promotion of Innovative R&D for Local Industries Program” (Local SBIR) was implemented, which is to assist in funding so that each municipal, county, and city government can allocate more funds for R&D addressing the needs of industries

with local characteristics.

The SBIR program processes applications by SMEs for conducting innovative research on industry technologies and products; businesses can file applications with the MOEA's SBIR program office to participate.

Local SBIR uses supportive funding provided by the Ministry of Economic Affairs to promote an innovative R&D program aimed at local cultural industries; businesses can file applications with their respective municipal, county, and city governments to participate.

The New Generation SBIR Program was planned and implemented in 2017 in coordination with the 5+2 Industrial Innovation Policy, as well as with the policy goals of innovation, startups, and industry enhancement and transformation. This includes SBIR that focuses on startups, providing incentives and subsidies in three stages, and providing theme-based subsidies and assistance to existing enterprises based on their industry's specific characteristics. The second "SBIR for Startups – Creativity Selection Plan (Stage 1)" was held in 2018. A total of 100 proposals were selected to receive an R&D grant in the amount of NT\$600,000 per project. In addition, a total of 44 proposals in the Creativity Selection Plan (Stage 1) were selected for the Stage 2 "Innovation Selection Plan," and 19 proposals received recommendations with total subsidies amounting to NT\$27.95 million. The 2019 Entrepreneurship Selection Plan is divided into the Newcomers and All-Star groups (plan site: <http://www.sbir.org.tw/index>).

2. Industrial Working Environment Improvement Project

In order to reduce industrial occupational hazards in the country, improve the investment and development environment, establish new competitive advantages and reduce overall operating risks, the IDB, MOEA has implemented the "Industrial Working Environment Improvement Project" with the following key tasks in 2019: (1) technical guidance to achieve baseline improvement; (2) technical guidance on risk management; (3) training and promotions; and (4) efforts to promote previous achievements (plan site: <http://www.cesh.twmail.org>).

3. Instant Technical Assistance to SMEs

In order to help SMEs upgrade and transform, the IDB, MOEA has implemented the "Instant Technical Assistance Program of SME" since 1999 by utilizing existing mature technological capabilities of the corporate world, academic community and technical services industry to provide R&D, design, production, logistics, automation and electronic technologies necessary for upgrading the industry and to provide real-time, small scale, short-term technical guidance, so that the technology levels of SMEs can be upgraded and their competitiveness enhanced. The 2019 priorities are: (1) case counseling management and promotion, and (2) one-on-one, short-term, small scale, or comprehensive counseling on technological upgrading (plan site: <https://www.itap.tw/>).

4. Conventional Industry Technology Development (CITD)

The MOEA's Industrial Development Bureau launched the "Traditional Industry Technology Development Assistance Plans" in 1991 to provide subsidies to traditional industries for research and development and encourage enterprises to conduct independent research and development, enhance the capabilities for innovation and R&D of traditional industries in Taiwan, accelerate upgrading and transformation, and improve competitiveness. The 2019 priorities are: (1) product development, (2) product design, (3) R&D alliance, (4) industry-academic R&D cooperation, and (5) commercialization of works from the "Young Designers' Exhibition" (plan site: <http://www.citd.moeaidb.gov.tw/CITDweb/Web/Default.aspx>).

5. Industrial Upgrade and Innovation Platform Counseling Program

In order to help industries upgrade and transform, the IDB, MOEA has launched the "Industrial Upgrade and Innovation Platform Counseling Program" by industry promotion measures to help firms to develop competitive products and services, and further to increase added value of industries and to connect with international markets. The main areas of the program are: (1) high-end products plan (for improving added value and shaping the high-value product image), (2) innovation and optimization plan (for encouraging firms to own core technologies and products and build up systematic solution methods), (3) new industry development plan (for encouraging firms to develop new products and services), and (4) theme-based development plan (themes initiated by IDB) (plan site: <https://tiip.itnet.org.tw/>).

6. A⁺ Industrial Innovation R&D Program

To lead businesses into investing in potential technologies in advanced industries, the DOIT announced that it would replace the "Industrial Technology Development Program (TDP)" with the "A⁺ Industrial Innovation R&D Program" to constantly encourage businesses to innovate in 2014. In the hope of guiding businesses to invest in high-end technology with higher industrial value, the DOIT encourages vertical- and cross-domain cooperation in order to tap industrial demand and develop a comprehensive industrial ecosystem and maximum efficiency.

In 2019, the A⁺ Industrial Innovation R&D Program can be divided into five types of programs: (1) Industrial Technology Foresight Research Program (emerging technologies, products, and services), (2) Integrated R&D Program (vertical- and cross-domain cooperation to tap industrial demand and develop a comprehensive industrial ecosystem and maximum efficiency), (3) Industrial Technology Innovation Center Program (R&D management system, encouraging foreign firms to set up R&D in Taiwan, intellectual property rights, etc.), (4) Special Programs, and (5) Global R&D New Partnership Program (plan site: <http://aiip.tdp.org.tw/index.php>).

7. Methods for Promoting Technical Innovation in Traditional Industries

The Department of Industrial Technology under the Ministry of Economic Affairs implemented "Methods for Promoting Technical Innovation in Traditional Industries" in the form of a project

which integrates relevant research institutions, combines resources from industry, academic, and research sectors, and helps traditional industries complete technical developments and upgrades.

Main action plans in 2019 are:

- (1) Value Added Transformation Plan for Conventional Industry: Selecting specific industries to support for their value-added transformation (plan site: <http://tipo.stars.org.tw/>).
- (2) Plan for the Provision of Assistance to SME Technology Development by the University Sector: Providing special project counseling and one-on-one counseling (plan site: <http://sita.stars.org.tw/>).

8. Service Industry Innovation Research Program (SIIR)

In order to foster the development of the commercial services industry and encourage enterprises to engage in research on “new service products,” “new business models” and “new marketing models” or the development of “new business application technologies,” the Department of Commerce has initiated the “SIIR” program to provide case-based subsidies, thus facilitating the introduction of new aspects and categories of business activities and enhancing the core competitiveness of the industry, while increasing its added value and creating a competitive advantage. In 2019, there are two subsidy categories, which are “innovative operations” and “integrated alliance,” and four added main themes for subsidies (smart business, brand creativity, digital life, and leisure experience) as the strategy for promoting industrial development (plan site: <http://gcis.nat.gov.tw/neo-s>).

9. Value-added Program for Industry by Indigenous People – Subsidies for Innovation R&D

The Council of Indigenous Peoples began providing innovation R&D subsidies for the first time in 2018 under the Value-added Program for Industry by Indigenous People. The subsidies aim to help indigenous enterprises engage in technology or service innovation and thereby create a competitive advantage. The Program provides subsidies to industry alliances formed under the Industry Demonstration Zone Project previously implemented by the Council of Indigenous Peoples, or to indigenous enterprises (including individual cases and syndicates) in 2019 (plan site: <https://www.apc.gov.tw>).

CHAPTER 6

Strengthening Start-ups and Incubation & Acceleration Mechanisms

To continue to build a high-quality environment for innovation in Taiwan, the government is establishing a comprehensive ecosphere for creativity, innovation, and entrepreneurship and actively implementing entrepreneurship incubation and assistance programs.

This chapter consists of three sections. Section I discusses incorporation of online-offline systems into the innovation incubation ecosystem; Section II focuses on strengthening the Incubation Support System; Section III covers strategy optimization to meet international standards.

I Incorporation of Online-Offline Systems into the Innovation Incubation Ecosystem

1. Project for Integrating the Service Platform Infrastructure in the Taiwan Entrepreneurial Ecosystem

The SMEA is promoting the establishment of the Project for Integrating the Infrastructure of Service Platform in the Taiwan Entrepreneurial Ecosystem, and integrates innovation and startup resources in various fields through a strategic alliance, which also involves international organizations. Action plans for 2019: (1) strengthening functions of the entrepreneurial consultation and guidance information platform; (2) facilitating cross-domain exchanges of innovation, and linking startups with potential to both international and corporate opportunities; (3) observing startups around the world with a global perspective, conducting rolling analysis of developments in the domestic startup ecosystem; (4) establishing and implementing innovation industry and entrepreneurship measures, and regulatory adjustment mechanisms.

2. Startup Hubs and Website

To allow full utilization of entrepreneurial services located on online platforms, the SMEA established a physical location (Start-up Hub) in 2015 to provide startups with comprehensive resources and support services, based on the concept of one-stop service. The SMEA completed a new version of its Start-up Hub website (<http://sme.moeasmea.gov.tw/startup/>) the same year (2015), filling the government's role as a medium for promoting innovation and startups via an online platform. Action plans for 2019: (1) providing startups with the best support through

Start-up Hubs for northern, central, and southern Taiwan, a toll-free hotline for startups (0800-589-168), (2) maintenance and optimization of the Start-up Hub website, and (3) a nationwide tour to provide services to startups.

3. Project for Supportive Platform of Social Innovation Enterprises

The SMEA integrated resources across departments through the Project for Supportive Platform of Social Innovation Enterprises in 2018, and organized a nationwide tour. Opinions of social enterprises were collected and barriers were eliminated to establish a friendly environment for social innovation. Work items in 2019 include: (1) providing free consultation services and in-depth guidance for incubation; (2) constructing a social innovation registration database, and including social innovation products into common supply contracts; (3) implementing the Buying Power – Social Innovation Product and Service Procurement Incentive Mechanism; (4) organizing the Asia Pacific Social Enterprise Summit.

(plan site: <https://sme.moeasmea.gov.tw/startup/modules/se/>)

4. Social Innovation Lab

The Social Innovation Lab was opened on October 18, 2017 as a directly operated service location for social innovation. People can gather together in this open space to discuss and focus on social and environmental issues, and resources such as guidance and social networks are provided to realize and optimize creative ideas, from which solutions for sustainability can be found. At present, two rounds of recruitment have resulted in 33 social innovation teams.

II Strengthening the Incubation Support System

1. Project for the Great Entrepreneurship Academy

The SMEA established the Great Entrepreneurship Academy in 2003 to help SMEs utilize digital information, satisfy the wide range of knowledge they need for business, and enable all citizens to achieve lifelong learning. The academy is an integrated portal for e-learning and physical courses, and operates a one-stop charging station for SMEs in Taiwan. Work items in 2019 include: (1) offering nearly 650 free online courses; (2) providing an organization learning area for enterprises, diverse e-learning services and lifelong learning electronic passport services; (3) offering startup-related courses and family business successor training (plan site: <https://www.smelearning.org.tw/>).

2. Start-up Demonstration Development Program

The SMEA began implementing the Start-up Demonstration Development Program in 2018 to drive the development of startups and guide them into the government market; procurements from startups have been made under the program using common supply contracts. The Program provides convenience, increases government authorities' willingness to experience innovative products and services, and provides cooperation experience with the government while increasing export opportunities for startups. Work items in 2019 include: (1) assisting startups in acquiring common

government supply contracts; (2) satisfying government needs with startup solutions: Allowing businesses to plan and adjust products or services in accordance with the requirements of government authorities (plan site: <https://www.spp.org.tw/spp/>).

3. SME Incubators

To help SMEs get established, innovate and grow at various stages, strengthen start-ups and incubation, and accelerate forward-looking SMEs' global connection, since 1997 the SMEA has been working with other government agencies, research institutions, universities and private-sector companies to implement the government's incubation center policy and encourage the establishment of new incubation centers. The following sections describe the current state of incubation center operation in Taiwan.

(1) Current Status of Incubators

There are over 160 incubation centers in Taiwan. Performance of all Incubation Centers: in 2018, 58 incubation centers received subsidies totaling NT\$223 million from SMEA which successfully induced incremental capital investment of NT\$10.9 billion.

By the end of 2018, SMEA had provided subsidy to 143 incubation centers and induced cumulated incremental capital investment of NT\$142.5 billion. The total number of people working at these firms was 298,996 (Table 6-2-1).

Table 6-2-1 Incubation Center Performance, 2014-2018

Unit: 100 million NT\$; enterprises; persons; items

Item \ Year		2014	2015	2016	2017	2018
Input	SMEA subsidy	1.52	1.59	1.57	1.28	2.23
Output	No. of incubated SMEs	2,000	1,951	1,921	1,713	1,510
	No. of incubated startups	1,327	1,294	1,413	1,108	967
	Employees	27,138	26,346	24,788	20,728	13,618
	Ratio of increased capital over subsidy	63.16	106.91	64.13	87.5	48.8
	Increased capital	96	170	101	112	109
	No. of enterprises listed on stock market or OTC	9	9	9	9	5

Source: Small and Medium Enterprise Administration, Ministry of Economic Affairs (2019).

(2) Innovative Approach

The “SME Incubator Development Project” in 2019 was created to continue to guide the transformation of incubators into new incubator institutions, and develop their incubation resources into a sharing and support system for startups. The project develops three types of incubators: international startup accelerators, technology startup amplifiers, and industry co-creation networks. The project promotes the internationalization of private incubation centers, enhances technologies for incubation in schools, and strengthens local incubation to support the innovative startup assistance system and build a comprehensive incubation ecosystem.

(3) Incubation Centers Operated Directly by SMEA

The SMEA began the establishment of incubation centers such as Nangang Software Incubator in 2002 to focus on the incubation of key technology industries and provide SMEs with comprehensive incubation services for different development stages.

To cultivate R&D of key high-tech industries, MOEA has established five incubation centers through direct investment since 2002 to offer technology support and services in consultancy, resource sharing, brand marketing and business matching for startups and SMEs, and help them transform, enhance R&D abilities and boost their international presence.

4. Constructing Eco-system for International Incubation and Start-ups Acceleration Program

SMEA began implementing the “Constructing Eco-system for International Incubation and Start-ups Acceleration Program” in 2018 to integrate Taiwan’s entrepreneurial resources, strengthen connections between industries, provide strong support with respect to funding and space, and accelerate startups’ entry into different industry markets. The program creates an incubation ecosystem with innovation and startups at its core, and fully integrates different industries’ capacities. Work items in 2019 include: (1) improving the development environment for the incubation industry: 1. conducting research programs on incubators, 2. formulating future industrial development strategies; (2) encouraging enterprises to invest in startup industries; (3) promoting international strategic cooperation in incubation.

5. Knowledge Industry Promotion and Development Plan

The SMEA began promoting the “Knowledge Industry Promotion and Development Plan” in 2018 to provide SMEs, incubators, and startups with the knowledge and capabilities for innovative digital transformation, improve the service capabilities for the incubation industry, and achieve rapid growth of SMEs and startups. Action plans for 2019: (1) establishing a knowledge service platform to provide digital tools, mentors, and market information services; (2) organizing industry SME and business matchmaking activities to connect businesses to domestic and foreign markets; (3) adopting an ecosystem model to support the incubation industry (plan site: <https://www.smefast.org.tw/>).

6. Women’s Entrepreneurship Flying Geese Program

The SMEA began implementing the Women’s Entrepreneurship Flying Geese Program in 2012, which provides customized and integrated services to women entrepreneurs based on their needs at different stages. The program creates a friendly entrepreneurial environment to enhance women’s economic strength and competitiveness. Action plans for 2019: (1) women entrepreneurship knowledge courses and after-course group entrepreneurship consultation; (2) continuous accelerated assistance over 3 to 6 months with the exclusive women entrepreneurship accelerator; (3) women entrepreneurship elite contests, media promotion for successful model cases, and elite gathering events; (4) organizing social media marketing and training courses in collaboration with

Facebook and Google (plan site: <https://woman.sysme.org.tw/>).

7. Business Startup Phoenix Plan for Microenterprises

The Ministry of Labor has promoted the “Business Startup Phoenix Plan for Microenterprises” since 2007 to create a friendly environment for entrepreneurship, assist micro enterprises development, and create job opportunities. Action plans for 2019: (1) organizing entrepreneurship courses and provide people with free comprehensive entrepreneurship consultation and assistance services before, during, and after starting their businesses; (2) targeting businesses set up by women aged 20 to 65, residents of remote islands, middle-aged to elderly people aged 45 to 65, and the unemployed covered by employment insurance and provide up to NT\$1 million (increased to NT\$2 million on April 19, 2019) in low-interest entrepreneurship loan and interest subsidies. A nationwide toll-free service hotline at 0800-092-957 and the Business Startup Phoenix Plan for Microenterprises website (<http://beboss.wda.gov.tw/>) are provided for people to access more information.

8. Executive Yuan National Development Fund Startup Angel Project

In order to boost entrepreneurial momentum in Taiwan and encourage technical innovation and applied development in the private sector, the Executive Yuan’s National Development Fund launched a special project in 2013 called the “Executive Yuan National Development Fund Startup Angel Project”. Action plans for the project in 2019 include the following: (1) assist with and help review applications for either guidance or funding by startups; (2) business start-up and incubation (3) at present, 127 participating organizations with innovative and entrepreneurial potential have already been linked together, thereby providing a source of high-quality cases for inclusion in the program, fundraising and matchmaking opportunities needed by enterprises receiving guidance to carry out future expansion, and a means for providing referrals to government sources of funding and cooperating together on guidance efforts (plan site: www.angel885.org.tw).

9. Angel Investor Program

The National Development Fund (NDF) approved the Angel Investment Program in 2017, under which the NDF and angel investors jointly invest in startups registered in Taiwan or foreign startups whose business activities are mainly in Taiwan. The program provides startups with working capital during the early stages, and also utilizes the investment experience of angel investors to provide startups with subsequent guidance, consultation, and networking (plan site: www.df.gov.tw).

10. U-start Innovation and Startup Program

U-start was implemented to create a culture of innovation and entrepreneurship on campuses, encourage universities to optimize the campus entrepreneurship environment, integrate school incubation and assistance resources, provide young entrepreneurs with space and resources for experiments, cultivate talents with entrepreneurial capabilities, and assist young students in entrepreneurship and implementation. The project provides entrepreneurship teams with two stages

of subsidies (rewards) (plan site: <http://ustart.yda.gov.tw/>).

11. Lean Startup Guidance Program for Indigenous People of Taiwan

The Council of Indigenous Peoples began implementing the Lean Startup Guidance Program for Indigenous People of Taiwan in 2015 to support indigenous people in engaging in indigenous industries, and thereby create more industrial development opportunities. The program provides entrepreneurship subsidies with a focus on economic foundation, cultural heritage, and environmental sustainability. The program further guides indigenous startups to use innovative business models and improve their knowledge in business and financial management, and also makes visits to business locations. Business diagnosis is conducted to understand gaps in the market, so that the startups can improve upon their weaknesses and show their strengths (plan site: <http://startup.cpc.tw/index.asp>).

III Strategy Optimization to Meet International Standards

1. New Southbound Policy Entrepreneurship Opportunity Increasing with Linking GEN Program

SMEA and the Global Entrepreneur Network (GEN) co-organized the 2018 GEC+ (Global Entrepreneurship Congress+) based on the theme of “Enabling Social Impact with AI+IoT”. It brought together IoT companies and startups in Taiwan to utilize their IoT technologies and advantages in integrated software/hardware applications, so that they may gain business opportunities and engage in international cooperation. The event achieved goals of “providing innovative and diverse development channels”, “helping startups advance into international markets,” and “opening up a new southbound eco-industrial chain”. Taiwan also signed the gAsia Pass Digital Entrepreneur Card Initiative Framework with five countries including India, Indonesia, South Korea, Thailand, and New Zealand through GEN to co-create international entrepreneurship resource sharing mechanisms.

2. Taiwan Innovation City Project and Entrepreneur Visa

The Executive Yuan ratified Entrepreneur Visas in 2015 to attract outstanding foreign entrepreneurs to Taiwan, and to inject new energy into the innovation and startup environment. Foreign entrepreneurs and entrepreneurs from Hong Kong and Macau with capacity and technology for innovation will be eligible for a 1-year residency after meeting certain requirements determined by the Investment Commission of the Ministry of Economic Affairs. Once they establish a company and provide evidence of business activity, they will be eligible to extend their residency an additional 2 years. Foreign entrepreneurs and entrepreneurs from Hong Kong and Macau who legally reside in Taiwan for 5 consecutive years, provided that they are physically present in Taiwan for over 183 days each year, will be eligible to apply for permanent residency or for registered permanent residency.

The SMEA began implementing the Taiwan Innovation City Project in 2018 to provide incentives for strategic start-ups, international accelerators, and entrepreneurship talent development enterprises to take up residence in Startup Terrace. The Project provides related subsidies and offers one-stop services to provide startups and teams with comprehensive consultation and physical services, including preliminary consultation for Entrepreneur Visas, assistance with applications, and tracking the progress of individual cases. Efforts were further made to optimize Entrepreneur Visas and carry out legislative procedures. International Entrepreneur Initiative Taiwan (IEIT) English Portal: <https://startup.sme.gov.tw/>. “Startup Terrace” website: <http://www.startupterrace.tw>.

CHAPTER 7

Revitalizing Local Industries by In-depth Development, Marketing and Expansion

To stimulate local economic development, create more local job opportunities, improve urban and rural marketing performance, and gain insights on domestic and foreign market opportunities, the government has adopted diverse assistance measures to help local industries and SMEs as a whole establish their niches and expand into domestic and overseas markets.

This chapter is divided into three sections. Section I discusses plans to promote development of local industrial clusters; Section II focuses on measures to help local industries build marketing capabilities; Section III covers SME business matchmaking and export expansion.

I Promoting Development of Local Industrial Clusters

1. The Project for Development of Village Industry

The SMEA began actively investing resources to assist in the development of village industries in 1989. The SMEA began utilizing the special budget of the Forward-Looking Infrastructure Development Program in 2018 to drive industrial development, revitalize the economy, and provide stable employment opportunities. The SMEA subsidized the construction of industrial parks by county and city governments for village industries that form clusters, play key roles in their areas, and drive the development of related industries. The SMEA further optimized public spaces and hardware industrial parks to help production-scale SMEs move in. The concepts of the digital economy, experiential economy, and circular economy are further applied to production processes and innovative business models in the parks, and aim to drive enhancement and innovation, and to create an industrial value system. This project uses a competitive proposal mechanism and subsidizes the needs of special municipalities and county and city governments for industrial development, in hopes of driving the development of surrounding village industries (plan site: <https://www.otop.tw/city/fund>).

2. Small Business for Township Revitalization

The SMEA began implementing the project “Small Business for Township Revitalization (SBTR)” in 2018 to help SMEs apply the concepts of the circular economy, the digital economy, and the experiential economy. The project increases enterprise robustness through production processes and innovative business models, thus guiding enterprises towards the superior local, industrial, and

human resources of townships to be utilized for industrial transformation, create new value, and achieve the vision of “township revitalization.” Proposals for this project are divided into four categories: Individual Enterprises (Category A), Collaborative Enterprises (Category B), Platform Operations (Category C), and Design Activation (Category D) (plan site: <https://sbtr.org.tw/>).

3. Industry Transformation and Upgrade Program for Local Industrial Clusters

MOEA’s Industrial Development Bureau has promoted the “Industry Transformation and Upgrade Program for Local Industrial Clusters” since 2014 to help transform traditional factories into “tourism factories” and help unique factories improve their educational and entertainment tourism value and new business model. Contents of the plans for 2019: (1) tourism factory evaluation and promotion; (2) selection of high-quality tourism factories and tourism factories with an international appeal; (3) inter-regional integration, value-added assistance, etc.

4. Creative Life Industry Development Program

In order to help businesses combine creative and cultural elements into the development of creative products and services encompassing merchandise, locations, services, and events, as well as go on to create innovative new business models which lead to greater value-added economic activity and more business opportunities, the Industrial Development Bureau under the Ministry of Economic Affairs launched the “Creative Life Industry Development Program”. Action plans for the program in 2019 include evaluating and selecting companies in the creative lifestyle sector, organizing and providing guidance on improving customer experiences, and jointly implementing promotional efforts for industry-specific marketing (plan site :<http://www.creativelife.org.tw/>).

II Help Local Industries Build Marketing Capabilities and Regional Brands

1. OTOP (One Town One Product) Program

In 1989, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs launched a policy for providing guidance to local cultural industries. Through cooperation between specialized guidance teams and businesses, the policy helps local industries work toward adopting boutique and specialized business models. Under Taiwan’s “One Town One Product” (OTOP) brand image, the policy also promotes products in Taiwan with local characteristics and a reputation for high quality. Main action plans for 2019: (1) organizing or participating in domestic and overseas exhibition events; (2) organizing local industry OTOP design awards and award ceremony activities; (3) planning and promoting tours with unique local features. One Town One Product Taiwan: <https://www.otop.tw/>.

2. OTOP (One Town One Product) International Marketing Alliance Program

The SMEA has promoted the “Counseling Project for Internationalization of Local Cultural Industries” since 2007, which features the use of Taiwan’s joint OTOP brand, selects companies and products with international market development potential, enhances overseas identification and localization, and integrates relevant industry alliances and matchmaking for collaborative development of global channels. SMEA participated in Taiwan Expos in New Southbound countries and expanded overseas exhibition and sales outlets to enable unique local industries in Taiwan to expand into international markets. Main action plans for 2019: (1) talent cultivation, matchmaking for business opportunities, and expansion of channels; (2) providing diagnosis and assistance services to enterprises with the development potential to expand into international markets (<https://www.otop.tw/>).

III SME Business Matchmaking and Export Expansion

1. Small and Medium Enterprise Digital Innovation International Marketing Project

The SMEA began implementing the “Small and Medium Enterprise Digital Innovation International Marketing Project” in 2019 to use high-tech digital marketing, e-commerce platforms, and integrated virtual and actual channels to create innovative digital marketing and innovation business models to help small and medium enterprises expand into the international market. Main action plans for 2019: (1) organizing alliances for southbound industrial business opportunities and constructing an international collaboration network for SMEs; (2) professional consulting and international market diagnosis services; (3) assisting high-quality digital innovative enterprises; (4) organizing a series of matchmaking activities to create international business opportunities (plan site: <http://info.moeasmea.gov.tw/>).

2. Project of Enhancing SMEs’ Cross-domain Innovation and Value-added Capability

The MOEA implemented the Project of Enhancing SMEs’ Cross-domain Innovation and Value-added Capability in 2017. The project integrates resources and member expertise across government departments, legal persons, and domains, and utilizes value-added technologies, service innovation, and business model changes to create a cross-domain ecosystem for SMEs. This will help SMEs utilize technologies as they create greater value and develop innovative business models. SMEA connects domestic and foreign export resources to create a collaborative model for enterprises in the ecosystem with potential for export to jointly expand international markets. Strategies for 2019 include promoting an ecosystem for software and hardware innovation, regional growth, value growth, and export potential (plan site: <http://smefuture.org.tw>).

3. Small and Medium Enterprise Business Growth and Value-added Project

SMEA has promoted the “Small and Medium Enterprise Business Growth and Value-added Project” since 2018 to help small and medium enterprises achieve sustainable development, strengthen their structures, and improve international competitiveness. Main action plans: (1) providing consulting and diagnosis services from “business management perspectives” with professional consultants; (2) promoting communication and cooperation between enterprises and helping enterprises publish and display new products and new technologies; (3) providing government procurement information and consulting and assistance services to accelerate the expansion and matchmaking of business opportunities for enterprises (plan site: <http://smeomcs.moeasmea.gov.tw>).

4. Trade Promotion Working Plan

The Bureau of Foreign Trade, MOEA has launched the Trade Promotion Working Plan to promote export market diversification, with particular focus on increasing Taiwan’s exports share in emerging markets.

(1) Trade Promotion Working Plan

Main tasks include: (1) organizing frequent overseas exhibition events, inviting foreign buyers to make purchases in Taiwan, and providing customized project services; (2) providing business opportunity information services through diverse channels and maintaining and operating Taiwan’s portal website for trade — “Taiwantrade”; (3) providing services for overseas operations and branches; and (4) cultivating talent in international marketing (plan site: <http://info.taiwantrade.com/CH/>).

(2) Integrating Private Sector Resources for Market Development

In 1998, the Bureau of Foreign Trade began working to integrate the resources of various associations with an aim to jointly develop and expand international markets. Activities mainly include organizing delegations to travel overseas on trade missions, participating in trade shows and international economic and trade conferences, holding professional training for persons working in the field of international trade, and providing subsidies to individual companies or establishments to participate in overseas international exhibitions.

(3) Launching Various Projects and Programs

A. New Southbound Market Innovation Marketing Development Project

To help companies grasp business opportunities in consumer markets in ASEAN and South Asia, the Bureau of Foreign Trade implemented the “High-Quality Low-Cost Emerging Markets Improvement Project” from 2016 to 2018 and extended the Project in 2019 with the “New Southbound Market Innovation Marketing Development Project”. Specific approaches in 2019 include: (1) providing business opportunity information services through diverse channels; (2) promoting cross-industry cluster guidance alliances for “retail channels” and “commercial channels” to provide related professional consultation and guidance; (3) assisting companies in using digital

technologies and new media for online product tests and social media marketing promotion, and organizing precision buyer matchmaking events (plan site: <http://mvp-plan.cdri.org.tw/>).

B. Green Trade Implementation Project

The Bureau of Foreign Trade has promoted the “Green Trade Implementation Project” since 2017 to help domestic companies respond to global green industry trends, gain a better understanding of environmental regulations in various other nations and green procurement standards of major global manufacturers, and win global green business opportunities. Specific approaches in 2019 include: (1) assisting domestic companies in collecting overseas green trade business opportunities and government policies and regulations; (2) operations and maintenance of the “Green Product Verification Index Platform” to provide companies with consultation and assistance for green product marketing and attestation and preferential green attestation fees; (3) organizing professional marketing expansion delegations and green ecospheres, and participating in important international green exhibitions (plan site: <http://www.greentrade.org.tw/>).

C. Taiwan Industrial Image Promotion Project

To enhance the recognition and favorable image of Taiwanese products and high-quality industries for target markets and consumers and thus improve the international image of Taiwan’s industries and promote export growth, the Bureau of Foreign Trade continuously promotes the “Taiwan Industrial Image Promotion Project” which uses the “Taiwan Excellence” logo as the brand for domestic SMEs and the subject in the promotion of the image of Taiwan’s industries. The main projects consist of diverse and integrated marketing and promotional activities including: (1) experience with excellent Taiwanese products, (2) localized innovative approaches and sports marketing, and (3) brand image ad campaign and promotional videos (plan site: <http://www.taiwanexcellence.org>).

D. Project to Secure Business Opportunities in Global Government Procurement

The Bureau of Foreign Trade began the “Project to Secure Business Opportunities in Global Government Procurement” in 2009 to provide information, capabilities, networking, and marketing services which are crucial for companies who seek to participate in tenders of foreign governments. The Bureau also helps businesses obtain business opportunities of the international development banks. The main work items include inviting winning bidders or tendering authorities of government procurement tenders to discuss procurement with domestic companies and organizing case development delegations (plan site: <http://gpa.taiwantrade.com.tw/>).

E. Smart Machinery Overseas Promotion Project

The Bureau of Foreign Trade, MOEA launched the Smart Machinery Overseas Promotion Project in 2018 to show international buyers the competitiveness and differentiation of Taiwan’s smart machinery solutions. Integrated marketing campaigns are held during major international exhibitions in mature markets, such as Europe, the United States, and Japan, as well as other markets such as Mexico, Russia, Vietnam, the Philippines, Thailand, India, and Indonesia. The campaigns help Taiwan’s smart machinery companies find potential buyers and gain overseas business opportunities (plan site: <https://www.twmt.tw/language/zh-tw/%e9%a6%96%e9%a0%81/>).

F. International Market Development Subsidy Plan

The Bureau of Foreign Trade, MOEA launched the International Market Development Subsidy Plan in 2013 to encourage manufacturers to apply diversified, innovative and integrated marketing to international market expansion through special project subsidy. 2019 subsidies included 46 cases with total subsidies amounting to NT\$127 million (plan site: <http://www.imdp.org.tw/index.php>).

G. Textile Export Promotion Project

To continue to assist Taiwanese textile industries in expanding foreign markets, the Bureau of Foreign Trade began promoting the “Textile Export Promotion Project” in 2017 and organizes international exhibitions for joint promotion, procurement consultation meetings for international buyers in Taiwan, one-on-one trade negotiations in foreign countries, small-scale expansion delegations, emerging market delegations, and other activities to jointly develop mature markets in Europe and the Americas as well as New Southward Policy countries (plan site: <http://export.textiles.org.tw>).

CHAPTER 8

Other Government Measures to Support SMEs

To optimize the business environment for SMEs, the government continues to promote related support for SMEs including government aid for various SME guidance fees, improvements to the legal system for SMEs, participation in international exchanges, talent cultivation for SMEs, and the organization of various selection and commendation activities for SMEs.

This chapter comprises five sections that will discuss other SME-supporting resources and measures not covered in previous chapters. Section I presents the utilization of government resources to assist SMEs, such as government procurement and SME financing. Section II examines the government's regulatory flexibility relating to SMEs to help create a first-class legal environment for SMEs. Section III outlines the active role of government agencies in organizing and participating in international affairs and activities of SMEs. Section IV covers manpower cultivation in SMEs. Section V covers national SME awards from the Ministry of Economic Affairs.

I Government Resources Allocated to SMEs

It is explicitly stated in the Act for the Development of SMEs that the government should clearly specify in the SME White Paper the amount of resources allocated to SMEs. In addition to the resources expended by the government on SMEs, this section will also contain statistics pertaining to the government's procurement of property, public works or labor from SMEs as well as special loans made available to SMEs. However, statistics on government guidance resources and financing are limited to those from agencies at the central government level.

1. Assistance to SMEs Totaled NT\$27.934 Billion

The statistics on resources allocated by the government for SME guidance purposes include funding to government agencies that have a significant relationship with SMEs, e.g., the Small and Medium Enterprise Administration, Ministry of Economic Affairs (SMEA, MOEA), Industrial Development Bureau, Bureau of Foreign Trade, Department of Commerce, Department of Industrial Technology and Department of Investment Services, as well as training expenses of the Ministry of Labor.

Based on the final budget for MOEA units, a budget totaling NT\$33.391 billion was approved for 2018 and NT\$24.938 billion was allocated to SMEs. It accounted for 74.68% of the final

budget, which was 1.7 percentage point higher than in 2017. As overall expenses in 2018 decreased by NT\$244 million from 2017 but the assistance fees used for small and medium enterprises increased by NT\$389 million with an annual increase of 6.34%. This was mainly due to the increase in the spending on SMEs of the SMEA, Bureau of Foreign Trade, and Department of Industrial Technology (Table 8-1-1).

Table 8-1-1 Ministry of Economic Affairs Resources and Funding Allocated to SMEs

Unit: 100 million NT\$, %

Organizer	Annual funding	Fiscal year final accounts		Total amount allocated to SMEs		Increase (decrease) ③=②-①
		2017	2018	2017①	2018②	
SMEA (SME Development Fund included)		48.70	51.07	48.70 (100.00)	51.07 (100.00)	2.37
IDB (Industrial technology guidance and Industrial Park Development and Management Fund included)		82.08	73.80	48.68 (59.30)	44.44 (60.22)	-4.23
BOFT (Overseas marketing and marketing consultation, and Trade Promotion Fund included)		49.29	49.66	44.66 (90.60)	45.77 (92.16)	1.10
DOC (Promotion of trade modernization and commercial technology development included)		11.16	9.24	6.29 (56.37)	6.00 (64.97)	-0.29
DOIT		145.11	150.13	97.15 (66.95)	102.09 (68.00)	4.94
Total		336.35	333.91	245.48 (72.98)	249.38 (74.68)	3.89

Note:

1. SMEA stands for Small and Medium Enterprise Administration; IDB stands for Industrial Development Bureau; BOFT stands for Bureau of Foreign Trade; DOC stands for Department of Commerce; DOIT stands for Department of Industrial Technology.

2. Figures in parentheses represent the percentages in the final accounts.

Source: Various government agencies.

In 2018, in addition to the relevant government resources allocated to SMEs by agencies such as the MOEA, 36 financial institutions and 23 credit cooperatives also contributed a total of NT\$2.613 billion to the Small and Medium Enterprise Credit Guarantee Fund of Taiwan to enhance the Fund's strength. Training expenses of the Council of Labor Affairs for SMEs totaled NT\$0.386 billion. Therefore, government guidance resources allocated to SMEs totaled NT\$27.934 billion in 2018.

2. Providing SMEs with Special Loans Totaling NT\$2.22 Billion

Eligible SMEs in Taiwan have access to the following various types of special loans: The Free Trade Industry Revitalization and Counseling Preferential Loans, Small and Medium Enterprises Development Fund Supports Export Loans, Overseas Investment Loans, Overseas Construction Project Loans, SME Development Fund Special Loans, Indigenous Integrated Development Fund Loans and Micro-Business Start-up Phoenix Loans and Employment Insurance Startup Loans for the Jobless (Ministry of Labor). A total of NT\$2.22 billion in government-funded SMEs loans was made in 2018 (Table 8-1-2).

Table 8-1-2 Special Loans to SMEs Funded by the Government in 2018

Unit: 100 million NT\$

Name of loan	Eligible applicant	Structure	Status	
			Total loan amount	Government funding
The Free Trade Industry Revitalization and Counseling Preferential Loans	To accommodate need for guidance on revitalization efforts, structural adjustments, and financial relief under assistance programs and proposals designed to address economic trade liberalization policies and industry adjustments for companies in relevant industries, such as manufacturing and services, which have distressed assets or sustained losses, or other companies with losses in particular industries as determined by relevant competent authority	Every loan comes from National Development Fund of Executive Yuan	13.26	12.77
Small and Medium Enterprises Development Fund Supports Export Loans Overseas Investment Loans Overseas Construction Project Loans	SMEs	SME Development Fund	4.70	4.70
Special Loan Assistance for SMEs to Take Root	SMEs	Supported with long-term special funding allocation or of National Development Council or banks with proprietary funds	34.65	0.10
Indigenous Integrated Development Fund Loans (Indigenous Youth Business Loans, Indigenous Economic Industry Loans, Indigenous Micro-Business Activities Loans included for production use)	Indigenous people	Fully funded by Council of Indigenous Peoples	4.63	4.63
Micro-Business Start-up Phoenix Loan Employment Insurance Startup Loans for the Jobless	Women aged 20-65, offshore islands residents and women aged 45-65 and the jobless with employment insurance	Loans provided by banks' own funds and interests subsidized by Ministry of Labor	2.80	0.0
Total			60.04	22.20

Source: Various government agencies.

3. Government Procurement from SMEs Reached NT\$844.1 Billion

According to Government Procurement System statistics on awarded contracts published in March 2019, in 2018 the total amount of government procurement totaled NT\$1,696.7 billion, an increase of 36.9 percent from 2017; the total amount contracted or subcontracted by SMEs (including all cases over NT\$0.1 million) in government procurement totaled NT\$844.1 billion, an increase of 6.0 percent from 2017. Share of government procurement from SMEs in 2018 was 49.8%, down 14.4 percentage points from 2017.

II Regulatory Flexibility to Create a First-class Legal Environment for SMEs

Recent key measures taken by the government to create a high-quality legal environment to assist SMEs include regulatory affairs concerning small and medium enterprises, helping SMEs adapt to critical regulatory frameworks, and SME innovation application experiments.

1. Regulatory Affairs Concerning Small and Medium Enterprises

To encourage SMEs to focus resources on innovation, certain provisions of the “Regulations Governing the Reduction of Expenditures for Small and Medium Enterprises Research and Development as Investment” were amended and promulgated on October 3, 2018. The Regulations listed joint research and development expenses of SMEs and domestic and foreign universities or research institutions as R&D expenditures to incorporate the R&D capacity of academic and research institutions into the industry. In addition, the taxation regulations approved by taxation agencies were also adjusted to ensure consistency between related procedures and rules between the Regulations and the “Regulations Governing the Reduction of Expenditures for Companies and Limited Partnership Businesses Research and Development as Investment” and prevent excessive complications in applications filed by SMEs and simplify work procedures and costs.

2. Helping SMEs Adapt to Critical Regulatory Frameworks

(1) Relaxing Audits of Accounting Vouchers with Digitalization

To reduce the burden of the cost of compiling account books and vouchers for businesses, the Ministry of Finance reassessed related regulations for accounting vouchers of for-profit businesses after receiving recommendations. It amended and promulgated certain articles of the “Regulations on the Management of Account Books and Vouchers of For-Profit Businesses by Taxation Authorities” on January 11, 2019. The amendment expressly states that for-profit businesses that use digital methods to process and store account books and vouchers are only required to provide the digital files of account books and vouchers for investigations by taxation authorities and they are not required to print such information. This measure helps businesses reduce accounting management costs and reduces the risks of the storage of printed documents.

(2) Commodity Tax Adjustments for Beverages that Contain Solids

Standards for different types of solids had been established for packaged beverages that contain solids to determine whether the commodity tax is applicable. However, the range of solids that can be added to beverage products has grown increasingly complex and may result in disputes in such judgments. As such, numerous meetings have been arranged to help businesses negotiate with the competent authority of the fiscal administration to relax regulations. The Ministry of Finance issued an interpretation letter on November 21, 2018 to relax regulations specified in Article 8 of the “Commodity Tax Act”. The different standards were unified to eliminate the commodity tax for beverages with more than 18% solids so that businesses have clearer, fairer, and more reasonable targets for legal compliance.

3. SME Innovation Application Experiment

The innovative application service validation mechanism was adopted in 2017 based on the concept of a sandbox experiment. It resolves the dilemma of finding a balance between industry innovation and regulatory supervision, by helping enterprises clarify the applicability of laws, and also through innovative application experiments, in hopes of gradually optimizing the regulatory environment for innovation and startups.

(1) Clarification of the Legal Status of Payment Collection Services Run by Cross-border Companies in Taiwan

To clarify the “legal status of payment collection services run by cross-border companies in Taiwan”, the SMEA assisted businesses in negotiations with the competent authorities of regulations such as the FSC, Central Bank, and the Department of Commerce of MOEA to reach a consensus, clarify issues of the applicability of regulations, and promote the implementation of overseas e-commerce platform funding and services in Taiwan. The clarification will reduce the cost of foreign exchange and credit card service fees for domestic companies and consumers.

(2) Clarification and Promotion of Specific Regulations for Private Vehicle Sharing Matchmaking Services

To help businesses clarify the private vehicle sharing matchmaking services they intend to develop, allow drivers and passengers to share the cost of fuel expenses, tolls, and other expenses, and clarify whether such drivers are required to apply for car transportation licenses, the SMEA organized an inter-agency coordination meeting in 2018 to jointly discuss the “feasibility of cost-sharing private vehicles”. The Ministry of Transportation and Communications later drafted the “Private Vehicle Sharing Principles” to clarify the items to be complied with for commuting and ride sharing. Only the energy expenses and tolls derived from shared rides can be shared, and such rides are limited to two rides per day.

III Participating in International SME Meetings and Events

Taiwan has actively participated in international organizations, various bilateral cooperation projects, incubation, and industrial-academic cooperation for many years to help startups and SMEs participate in international trade affairs, improve the international perspectives of SMEs, and achieve bilateral exchanges. The following is a list of important events Taiwan hosted or participated in in 2018 and 2019.

1. Participating in APEC

(1) Participating in APEC Small and Medium Enterprises Working Group, SMEWG

Taiwan attended the 47th and 48th “APEC SME Working Group Ministerial Meetings” on September 12, 2018 and May 30, 2019 to report the “Stage 4 APEC Online-to-Offline (O2O) Initiative: Empowering SMEs to Embrace Digital Transformation” with four member economies. Taiwan also joined three member economies to propose the “APEC Local Innovation Ecosystem Initiative: Revitalization for Inclusive Growth and Sustainable Future” and related plans which received APEC funding. These are some of Taiwan’s active contributions in APEC.

(2) Organization of the “APEC O2O Summit” and “APEC SME Digital Resilience Training Workshop”

SMEA and Kaohsiung City Government jointly organized the “2018 APEC O2O Summit from July 2 to July 3, 2018 to focus on global digital economy development trends, SME digital upgrades, and digital startup experience to help facilitate the digital transformation of SMEs. SMEA also organized the “APEC SME Digital Resilience Training Workshop” on July 4, 2018 and invited senior industry, government, and academic experts from New Southbound countries such as Thailand, the Philippines, and Malaysia to visit Taiwan and discuss issues for enhancing SME digital resilience and information security issues.

2. New Southbound Industrial Collaboration Summit

The Chinese National Federation of Industries and the MOEA’s Industrial Development Bureau began co-organizing the New Southbound Industrial Collaboration Summit in 2017. SMEs can use this platform to gain information on ASEAN markets, and create new business opportunities in those markets. A total of six forums were organized in 2018 including Industrial Collaboration Summits between Taiwan and Thailand, Taiwan and Indonesia, Taiwan and Malaysia, Taiwan and Vietnam, and Taiwan and the Philippines. Taiwan continued to use the collaboration platforms with the six nations to identify target industries for development in 2019 and focus on key bilateral industrial collaboration to promote more highlight cases, conduct in-depth discussions on issues, and help remove obstacles for industrial collaboration to intensify bilateral cooperation.

3. Promoting SME International Exchange and Collaboration

SMEA of the MOEA participated in bilateral annual ministerial meetings with SME Memoranda of Cooperation with Malaysia, the Philippines, Thailand, Vietnam, India, Japan and the United States, attended bilateral ministerial meetings with the Philippines, Singapore, Thailand, India, and the European Union, and promoted plurilateral and multilateral cooperation, such as WTO and CPTPP.

SMEA of the MOEA also signed an “SME Support and Cooperation Promotion Memorandum of Understanding” between the R.O.C. and Japan. Regular meetings at practical levels are organized each year to enhance exchange of SME support information and opinions. Related seminars, business negotiation meetings, and other business support activities are organized through cooperation each year to promote cooperation and communication between SMEs in

Taiwan and Japan and next-generation business owners.

As of the end of December 2018, a total of 301 people in 43 foreign delegations were received.

IV Manpower Cultivation in SMEs

1. SME Management and Entrepreneur Talent Cultivation

To improve the knowledge and capacity of enterprises at each stage of development, and improve enterprises' talent cultivation capacity, the Small and Medium Enterprise Administration, MOEA implemented a variety of talent cultivation projects starting in 2018, based on SMEs' different needs. The Great Entrepreneurship Academy was planned to provide both online and in-person courses and promote lifelong learning passports among SMEs (plan site: <https://www.smelearning.org.tw/>).

2. Talent Training Programs in the Manufacturing Industry

To train talents necessary for industrial upgrading and transformation and construct a professional talent training environment, the Industrial Development Bureau of the MOEA continues to promote professional talent development programs for industries to organize short-term professional courses and medium- to long-term cultivation training programs, establish baselines and evaluation of professional skills, and cooperate with industries and academia for talent cultivation. Furthermore, related units have engaged in cross-departmental collaboration in coordination with developments in the digital economy and the 5+2 innovative industries since 2017 to promote "interdisciplinary digital talent cultivation" by integrating with universities and legal person research institutions to train innovation and application talents for industries (plan site: <https://idbtrain.stpi.narl.org.tw/classinfo.htm>).

3. Talent Training Programs in the Service Industry

Courses on big data analysis, digital marketing, and the Internet of Things (IoT) were planned for the retail and integrated service industries, and were offered using the resources of various associations beginning in 2017 by Department of Commerce, MOEA. The shortage in talent needed by industry was further reduced in 2019 as talent training programs on intelligent commercial service applications, both basic (10 classes) and advanced (2 classes), were offered.

4. Talent Training Programs in International Interdisciplinary Technology Management

The cultivation of international interdisciplinary technology management talent began in 2000 by the Department of Industrial Technology, MOEA. Students first took prerequisite courses in Taiwan, then attended international seminars, studied abroad, and gained practical experience under the guidance of a mentor in a different region. This enabled students to apply what they learned and bring innovation management systems into enterprise to inspire creativity. The project

ended in 2018.

5. International Business Management Talent Cultivation

In response to the industry's demand for foreign trade talents, the Bureau of Foreign Trade of the MOEA began training work in two categories, namely, specialized training and on-the-job training since 1987. The "Meet Taiwan" project was implemented in 2009 to cultivate MICE talent, while the "Funding for Taiwanese Student Internships in Emerging Markets" project cultivates students' understanding of international trade processes, international marketing, and cross-cultural business administration of emerging markets in Southeast Asia since 2014.

6. Cooperating with industries and academia for talent cultivation

The Ministry of Education offered industrial technology graduate programs starting in the spring of 2011. Enterprises and schools jointly submitted program applications based on industry needs, and the programs were offered after gaining approval from the Ministry of Education, increasing the supply of master's-level talent needed by enterprises. Furthermore, the Industrial College Program was implemented to offer industrial programs, which consist of jointly planned courses taught by mentors and internships that lead directly to employment. Students that graduate from the programs are able to immediately work at the enterprise co-organizing the program.

7. Enterprise Talent Improvement and Independent Studies for Laborers

The Ministry of Labor implemented the Enterprise Human Resource Upgrade Plan since 2004 to help business entities organize on-the-job training. The Small Enterprises Talent Skill Progressive Program was launched in 2014, and provides specialized, individual guidance and consultation services and entrepreneurship studies courses for small enterprises with fewer than 50 employees. Entrepreneurship courses are also offered.

Furthermore, the Industrial Human Resource Investment Program was implemented in 2005, and offers a wide variety of practical training courses in cooperation with private training institutes. A maximum subsidy of NT\$70,000 over three years is provided for each individual to encourage on-the-job training for laborers and accumulate human capital.

8. Entrepreneurship Studies, Consultation, and Guidance

To encourage people to start businesses and stabilize business management, the Ministry of Labor has promoted entrepreneurship studies and consultation and guidance that encompass the following: (1) providing beginner courses, advanced courses, and improvement courses for entrepreneurship as well as online marketing courses; (2) establishing digital entrepreneurship courses on labor development digital service platforms to provide people with methods for learning across different points in time, places, and platforms; (3) organizing entrepreneurship consultants to provide people with free entrepreneurship consultation and assistance services before, during, and after starting their businesses (plan site:<https://portal.wda.gov.tw>).

V National SME Awards from Ministry of Economic Affairs

The SMEA established the “National Award of Outstanding Small and Medium Enterprises” in 1992 for the purpose of selecting SMEs with outstanding performance in management, innovation, branding, quality, and image as well as specific contributions to the society as models of the industry. They receive public commendation to promote the establishment of SME benchmark models to create a model for all SMEs in Taiwan to learn from each other’s successes, help inspire each other, and accelerate business upgrades. Various national awards are granted to SMEs by the MOEA with the purpose of encouraging the upgrading and development of SMEs with sound management, outstanding performance according to various management criteria, and sustainable contribution to the society.

1. National Award of Outstanding Small and Medium Enterprises

The SMEA established the “National Award of Outstanding Small and Medium Enterprises” in 1992 for the purpose of selecting SMEs with outstanding performance in management, innovation, branding, quality, and image as well as specific contributions to the society as models of the industry. They receive public commendation to promote the establishment of SME benchmark models to create a model for all SMEs in Taiwan to learn from each other’s successes, help inspire each other, and accelerate business upgrades. 12 SMEs are expected to win the Award in 2019. As of the end of 2018, 291 SMEs have won the award (award site: <http://smeaward.moeasmea.gov.tw/>).

2. Rising Star Award

The SMEA established the “Rising Star Award” in 1998 to use selection and commendation activities to select outstanding SMEs with high levels of competitiveness, outstanding export performance, and comprehensive management systems that make them role models for other domestic enterprises. SMEA also hopes to use related events to disperse the role model effect and continue to promote cooperation within and between industries and encourage more SMEs that mainly operate in Taiwan to expand into international markets. As of the end of 2018, 298 SMEs have been recognized as “Rising Stars” (award site: <http://award.moeasmea.gov.tw/>).

3. SMEs Innovation Award

The SMEA has organized the “SMEs Innovation Award” since 1993 to continue to reward outstanding SMEs with specific performance in innovation and research through organized and systematic methods. The Award encourages enterprises to continue to accumulate R&D capacity to achieve local technological development and attain the goals for industry upgrade and healthy development. Innovative products from a total of 30 SMEs are expected to be selected in 2019. As of 2018, a total of 860 innovative SME products have been selected and 64 enterprises that have won awards have been listed on the Taiwan Stock Exchange or Taipei Exchange, 14 enterprises are listed on the emerging market, and eight companies have become public companies (award site:

<http://tsia.moeasmea.gov.tw/>).

4. Business Startup Awards

The SMEA began the “Business Startup Award” in 2002 and it became the only national award for startups that have been created for less than five years. The Award seeks startups with innovative technologies, products, services, or business models to develop startups with high-quality operating models, establish successful cases for success, and invigorate domestic innovation and entrepreneurship. As of 2018, a total of 240 enterprises have won the award and at least 17 enterprises have been listed on the Taiwan Stock Exchange or Taipei Exchange, or have become public companies. In addition, 47 enterprises have received venture capital investment or have been merged by other enterprises (award site: <https://startupaward.sme.gov.tw/>).

5. Model of Entrepreneurs Award

Since 2005, the SMEA began providing subsidies to the “Model of Entrepreneurs Award” organized by the National Innovation and Entrepreneurship Association (previously known as the National Association of Young People Entrepreneurs) to encourage the private sector to organize events that recognize model entrepreneurs, encourage entrepreneurs to pursue their passions and take courageous steps, promote positive cycles for the sustainable development of the society and enterprises, and improve Taiwan’s competitiveness. A total of 630 individuals have won the award since 1978 including 429 winners in the country and 201 winners overseas as well as 168 enterprises that are listed on the Taiwan Stock Exchange or Taipei Exchange, or are emerging stocks (award site: <https://www.careernet.org.tw/modules.php?name=kaimo>).



Appendix

Appendix A Act for Development of Small and Medium Enterprises

Appendix B Standards for Identifying Small and Medium Enterprises

Appendix C SME Statistics by Industry

APPENDIX A

Act for Development of Small and Medium Enterprises

Publically announced in accordance with the Presidential Decree dated February 4, 1991.

Revised in accordance with the Presidential Decree dated May 21, 1997.

Revised in accordance with the Presidential Decree dated January 21, 1998.

Revised in accordance with the Presidential Decree dated December 27, 1990.

Revised in accordance with the Presidential Decree dated December 21, 2001.

Revised in accordance with the Presidential Decree dated December 17, 2003.

Revised in accordance with the Presidential Decree dated November 25, 2009.

Revised in accordance with the Presidential Decree dated June 4, 2014.

Revised in accordance with the Presidential Decree dated January 6, 2016.

Chapter 1 General Principles

Article 1

This Act is enacted for the furtherance of sound development of small and medium enterprises by helping them improve their operation environments, promoting mutual cooperation, and assisting them in striving for growth with their own efforts. With regard to matters not provided for in this Act, the provisions of other relevant acts and regulations shall apply.

Article 2

The term “small and medium enterprises” used in this Act shall refer to the enterprises which have legally completed company registration or commercial registration under the Act and conform to the standards for identifying small and medium enterprises.

The standards referred to in the preceding paragraph shall be drawn up by the central competent authority according to the category, capital stock, amount of operating revenue and the number of regular employees and shall be submitted periodically to the Executive Yuan for approval.

Other government authorities, which administer small and medium enterprise assistance and guidance may, in accordance with their respective operational requirements, formulate separate criteria with loose requirements for objects of assistance and guidance.

Article 3

The term “competent authority” used in this Act shall be the Ministry of Economic Affairs at the central government level, the provincial (municipal) government at the province (municipality) level, and the county (city) government at the county (city) level.

Where any of the matters set forth in this Act involves the functional duties of an authority in charge of a particular enterprise, the competent authority referred to in this Act shall handle such matters in coordination with the said authority in charge of such enterprise.

For enforcement of this Act, government at various levels shall set up or designate a government agency to provide assistance and guidance.

Article 4

For achieving the objectives of this Act, the competent authority concerned shall take appropriate assisting or encouraging measures in respect of the following:

1. Market research and development;
2. Furtherance of rationalization of business operations;
3. Promotion of mutual cooperation;
4. Acquisition and securing of production factors and technology;
5. Education and training of competent personnel; and
6. Other matters relating to the establishment or sound development of small and medium enterprises.

In formulating the policy, acts and regulations, and measures in the preceding paragraph, the competent authority concerned shall aim the contents at the furtherance of improvement and development of the business operations of small-scaled enterprises without unfair treatment in respect of financial and taxation systems and other related matters.

The central competent authority shall publish a white paper, at the end of each fiscal year, on small and medium enterprises given the enforcement status, the review results and the prospective development of the provisions of the preceding two paragraphs.

Article 5

For furthering small and medium enterprises to conduct market research and development activities, the assistance and guidance provided by the competent authority to small and medium enterprises shall be emphasized on the provision of information services, the creation of exclusive brands for their own products, arrangement of marketing channels and/or development of potential market.

Article 6

For furthering small and medium enterprises to rationalize their business operations, the assistance and guidance provided by the competent authority shall be emphasized on the following:

1. Research and development and development of new products;
2. Modernization and renovation of production facilities and improvement of production technology;
3. Improvement of the methods of operational management;
4. Expansion of market and acquisition of necessary information;
5. Conversion and adjustment of the field of business; and
6. Acquisition of resources and technical know-how for business operation.

Article 7

For encouraging mutual cooperation between small and medium enterprises, the assistance and guidance to be provided by the competent authority shall be emphasized on the following:

1. Vertical amalgamation of businesses of the trade and establishment and promotion of the satellite-factory system;
2. Horizontal amalgamation of businesses of the trade and establishment and promotion of joint production and marketing system;
3. Mutual fund or cooperative enterprise;
4. Technical cooperation and development of common technology;
5. Procurement of common equipment; and
6. Establishment of strategic marketing points.

Article 8

For assisting small and medium enterprises to acquire and secure production resources and technology, the assistance and guidance to be provided by the competent authority shall be emphasized on the following:

1. Formation and accumulation of capital;
2. Capital accommodation;
3. Acquisition of land, plant building, equipment, business site and business information;
4. Personnel training and upgrading of labor productivity;
5. Securing the sources of agricultural and industrial raw materials and technical know-how;
6. Assisting small and medium enterprises to obtain fund from capital market; and
7. Upgrading of the level of services and technical skill.

Article 9

The central competent authority shall set up small and medium enterprise development fund, with the use thereof to be confined to the following:

1. To finance the operating expenses required for carrying out assistance plans,
2. To take part in investment and development projects or provide financing assistance and guaranty jointly with financial institutions under the condition that such financial institutions or credit guarantee institutions can not provide financing or guaranty under normal terms and conditions,
3. To make investment in small and medium enterprise development companies, or to take part in investment in small and medium enterprise with small and medium enterprises development companies, financial institutions and identified investment institutions.
4. To provide financial support to the juridical persons institutions that are incorporated to conduct the activities specified in Article 4 , and
5. Other purposes relating to the furtherance of sound development of small and medium enterprises and as specified in this Act.

For the income-expenditures, safeguarding and utilization of the small and medium enterprise development fund, a small and medium enterprise development fund management committee shall be formed, with its organization structure and the regulations for income and expenditure, safeguarding and utilization of the fund to be stipulated by the Executive Yuan.

Article 10

The small and medium enterprise development fund shall be derived from the following sources:

1. Appropriation from the annual budget programmed by the central government,
2. Appropriation from other special-case funds,
3. Donation from individuals or public and private business organizations or groups,
4. Interests accrued on the fund, and
5. Other associated income.

The donation referred to in item 3 the preceding paragraph may, when certified by the competent authority, be deductible from the total income of the current year, free from any restriction on the amount, in accordance with the Income Tax Act.

Article 11

The provincial (municipal) and the county (city) competent authority (henceforth referred to as “local competent authority”) may, taking into account of the specific development requirements of small and medium enterprises, under its jurisdiction, draw up assistance plan and formulate budget, and shall be responsible for the execution.

To carry out the assistance plan referred to in the preceding paragraph, the local competent authority may apply to the small and medium enterprise development fund for subsidy or assist the small and medium enterprises to obtain capital accommodation under special projects.

Article 12

The competent authority may, taking into account of actual requirements, cooperate with or consign to public and/or private research and service institutions, financial institutions, credit guarantee institutions, trade promotion institutions, industrial and/ or commercial organizations or other agencies for execution of the assistance activities under this Act; and shall set up separate assistance systems in connection with respectively the operations including financial accommodation, operational management, production technology, research and development information management, industrial safety, pollution control, marketing, mutual cooperation, and quality reinforcement, etc.

The regulations governing establishment up and supervision of the assistance systems shall be drawn up by the central competent authority and submitted to the Executive Yuan for approval.

Article 12-1

In enacting or adjusting acts related to small and medium enterprises, governments at various levels shall review the operation scales or characteristics of small and medium enterprises to facilitate observance by small and medium enterprises.

The central competent authority shall periodically review the acts related to small and medium enterprises on term, and judge the adapt ability of small and medium enterprises, and the influence to small and medium enterprises, and take a review report to the Legislative Yuan yearly.

Chapter 2 Financing Facilities and Guaranty

Article 13

In order to meet the capital requirements for small and medium enterprises, the central competent authority shall coordinate with financial institutions and credit guarantee institutions to enhance their respective functions of providing financing and guaranty to small and medium enterprises.

In order to meet the capital requirements for small and medium credit guarantee institutions, the central competent authority shall allocate budget for donation to such credit guarantee institutions for the maintenance of their guarantee capacity. Financial institutions which contract with such credit guarantee institutions shall also cooperate with the donation whereas and the central competent authority may also solicit donation from private businesses.

The total amount of donation from various financial institutions mentioned in the preceding Paragraph, taking into account the actual requirements, may be adjusted upward annually until reaching 35% of the total donation amount and be determined by the central competent authority according to the safekeeping amount, overdue ratio, substitute pay off amount, credit remainder, net value, profit and loss status, and the donated amount.

The central competent authority shall actively help small and medium enterprises get the loan from banks, and report the review results of each fiscal year to the Legislative Yuan.

Article 14

All banks throughout the Republic of China shall, within the scope of their respective business, elevate the ratio of financing facilities provided to small and medium enterprises and shall set up small and medium enterprises assistance center in order to enhance the provision of relevant services.

Article 15

The competent authority shall coordinate various agencies to make ample budget available for providing special loans to small and medium enterprises, and instruct sponsoring banks to provide special or emergency financing facilities or to extend loans to meet with the requirements of enterprises implementing business converting projects or adapting to the change of economic situation; and to elevate, when necessary, the ceiling of such financing, loans and guaranty.

Article 16

The term “special financing” used in the preceding Article shall refer to the financing provided to small and medium enterprises carrying out any of the following projects:

1. Operational project for reinforcement of competitiveness;
2. Research and development, pollution control or market expansion project;
3. Project for creation of new product(s) or upgrading the quality of product(s);
4. Factory relocation project which must be carried out so as to meet with the requirements of environment protection, urban planning, or road construction or other infrastructural projects sponsored by the government;
5. Any other special projects as approved by the competent authority.

Article 17

The term “emergency financing facilities” as used in Article 15 shall refer to the following financing provided to small and medium enterprises:

1. Loan provided as revolving fund in support of production and sales during the period of significant economic crisis;
2. Loan required for recovery of significant natural disaster;
3. Other loan as required to cope with emergency events.

Article 18

The term “loans to meet with the requirements of enterprises implementing business converting projects or adapting to the change economic situation” used in Article 15 shall refer to any of the following loans extended to small and medium enterprises:

1. Loan provided as revolving fund in support of production and sales during the period of economic recession;
2. Loan required for procurement of replacement or additional machinery and equipment in the course of business conversion; or
3. Loan required for procurement of automation equipment for improvement of productivity.

Article 19

Funds appropriated from the small and medium enterprise development fund for participate in the loans or guaranties sponsored by financial institutions or credit guarantee institutions in accordance with the preceding three Articles; the ratio of such appropriations may be determined by the competent authority in accordance with the actual requirements.

With regard to the bad debts resulted from causes which are not attributable to the intentional act, gross negligence or malpractice of the personnel handling the relevant matters set forth in the preceding Paragraph, they shall be fully indemnified from damage liabilities and exempt from disciplinary measures, according to the provisions of item 1, Article 77 of the Audit Act.

Article 20

The competent authority concerned may coordinate the financial institutions and/or credit guarantee enterprises to give priority to small and medium enterprises, which have sound management, financial and accounting systems and have paid up all taxes due, in providing financing facilities and guaranties.

Article 21

Where the operation of a small or medium enterprise is affected or it has to move to another place in order to meet with the requirements of environmental protection, urban planning, or road construction or other projects sponsored by the government, the competent authority shall assist it to apply for operating revolving loan or relocation loan from financial institution, and assist it to acquire the land required for factory relocation, when it is deemed necessary.

Article 22

Where a small or medium enterprise suffers great damages caused by natural disaster, the competent authority shall coordinate the financial authority for tax exemption or reduction or other remedies.

Article 23

In order to prevent small and medium enterprises from involvement in domino effect resulted from the close-down of their respective related enterprises, the competent authority may coordinate and assist industrial associations to establish, either separately or jointly, mutual guaranty fund(s) for prevention of chain close-down of small and medium enterprises so as to provide credit guarantee in respect of special financing facilities for the small and medium enterprises having financial or operational difficulties in such cases.

The small and medium enterprise development fund may, when necessary, contribute to such mutual guaranty fund(s) at the initial stage upon its (their) establishment.

Chapter 3 Operation Management, Market and Product Development

Article 24

The competent authority may establish or assist the private sector to establish a small and medium enterprise guidance and service center, and may cooperate with relevant public and private institutions to provide small and medium enterprises with the following guidance and services:

1. Business operation diagnosis;
2. Improvement of the marketing and production technology, operation management and financial structure of small and medium enterprises;
3. Training of management or technical personnel of small and medium enterprises;
4. Production and market information and consultation services; and
5. Other relevant businesses activities.

Article 24-1

The competent authority may set up funds to assist in the development of local culture industries for local economic prosperity.

Article 25

For improvement of the operating efficiency and reinforcement of the competitiveness of small and medium enterprises, the competent authority may assist small and medium enterprises to jointly engage in activities such as production, marketing, procurement, transportation, cooperation in technology development, and research and development.

Article 26

The central competent authority may work jointly with relevant institutions, universities and colleges in the training of professionals in the fields of operation diagnosis and business administration so as to provide small and medium enterprises with guidance and services.

Article 27

The competent authorities may provide necessary assistance to various industrial associations or industrial and commercial organizations which have a dedicated service unit responsible for providing services to small and medium enterprises.

Article 28

For encouraging small and medium enterprises to manufacture quality and/or high value-added products or service, and to expand export market, the competent authority shall provide, in conjunction with institutions concerned, technical and marketing guidance and assist medium and small enterprises to participate in overseas exhibition, acquire market information, make joint advertising activities, trademark registration, patent application, or establish joint distribution warehouses abroad.

Where the plan of a small or medium enterprise for manufacturing quality and/or high value-added products or service planning has been evaluated and approved by the competent authority in conjunction with authorities concerned, the said small or medium enterprise may apply to the small and medium enterprise development fund to subsidize the expenses incurred in product and market developments.

Article 29

For upgrading the level of production skill of small and medium enterprises, the competent authority may entrust technical service institutions or retain technical experts to make research and development for new products or to acquire advanced technology for providing relevant guidance and services to various industries.

For transfer of new products or advanced technology, the competent authority may collect reasonable charges for amortization of costs incurred; If necessary, these charges may also be partly subsidized by the small and medium enterprise development fund.

Article 30

In order to assist small and medium enterprises for research and development, the competent authority may cooperate with appropriate technology research institutes in the establishment of institutes or places for exclusive use by small and medium enterprise conducting research , testing and development of technical skill and/or new products.

Small and medium enterprises may apply for use, by paying necessary charges, the equipment and facilities of the institutes or places set forth in the preceding to conduct experiment and research activities.

Article 31

The competent authority may, when it deems necessary, negotiate with public or private enterprises for appointment of their respective technical personnel, and support and assistance system to provide guidance in the fields of production skill or service know-how as required by small and medium enterprises.

Article 32

The central competent authority may establish or assist in the establishment of small and medium enterprise development companies to invest directly or indirectly in the small and medium enterprises having development potential and to provide consulting services and other relevant services in connection with domestic and/or overseas technical cooperation, market and product development or investment.

The central competent authority shall provide assistance to the institutes and juridical persons established for carrying out the activities specified in Article 4 of this Act.

The central competent authority may coordinate with the competent authority in charge of banking business under the Banking Act for approval of the participation of banks in the said small and medium enterprise development company so as to enable them to directly provide services referred to in the preceding paragraph.

The small and medium enterprise development fund may take part in the investment for capital formation of small and medium enterprise development companies.

The regulations governing the establishment and operation of the small and medium enterprise development companies and the standard and proportion of investment made by the small and medium enterprise development fund shall be stipulated by the Executive Yuan.

Chapter 4 Tax Remittance

Article 33

Where an investor provides a parcel of land in an industrial zone as his capital investment in a small or medium enterprise, and the said medium or small enterprise agrees to allow the investor to furnish the stock(s) of the said small or medium enterprise acquired by the said investor as the security for his payment of taxes, then the land value increment tax payable by the said investor may be paid in five equal installments in five consecutive years from the year in which the said parcel of land is committed to the investment.

The land to be invested under the preceding paragraph shall be used only by the said small or medium enterprise for its own. If the land is not used by the said small or medium enterprise for its own or is transferred to any other person, the outstanding land value increment tax shall be paid, in a lump sum, by the investor.

Article 34

Where a small or medium enterprise has moved, on account of any of the following causes, its factory or plant into an industrial zone, an industrial zone under an urban plan, or an industrial land designated in accordance with the act for Encouragement of Investment prior to the enforcement of this Act, the land value increment Tax payable on the sale or transfer of its original factory or plant site (land) shall be levied at the lowest tax rate:

1. Where the original factory land does not meet with the zoning requirements upon implementation of the urban planning or zoning plan;
2. Where the relocation of factory or plant is applied by the said small or medium enterprise and is approved by the competent authority due to the difficulties in making necessary improvement to meet with the requirements for pollution control, public safety or maintenance of natural landscape;
and

3. Where the relocation of factory or plant implemented under the initiative assistance of the government.

Where the new factory land of a small or medium enterprise is transferred to another party (or other parties) within three years after the factory relocation made under the preceding paragraph, the reduced portion of land value increment tax reduced while assessing such tax on the original factory land sold or transferred prior to the factory relocation shall be assessed supplementarily in accordance with the act.

Article 35

This article is enacted to promote innovation and research and development of small and medium enterprises. A small and medium enterprise, by investing in research and development, may select to get the amount of tax credit up to 30% of the current year profit-seeking enterprise income tax payable between the following two methods. No change of the method is allowed once the choice is made.

1. Tax credit up to 15% of the research and development expenses, applied to the current year profit-seeking enterprise income tax payable.
2. Tax credit up to 10% of the research and development expenses, applied to the annual profit-seeking enterprise income tax payable for three years, starting from the current year.

For any instrument and equipment used for research and development, experiment or quality inspection purposes, if its service life is more than two years, the depreciation thereof may be accelerated by one half (1/2) of the number of years applicable as listed in the table of service life of fixed assets annexed to the Income Tax Act. Balance of service life in a length of less than one year after the depreciation acceleration shall not be taken into account.

The standards referred to the tax credit from investment in this Article, regarding scope, application deadline, application procedure, approving authority, applicable period, tax credit rate and other related matters shall be stipulated by the Executive Yuan.

Article 35-1

To promote circulation and application of innovation and R&D results, new shares of stock issued to a small and medium enterprise in exchange of its intellectual property rights, by an enterprise that is not listed in the Taiwan Stock Exchange, OTC, or the Emerging Stock Board, shall be excluded from the current year profit-seeking enterprise taxable income of the said small and medium enterprise.

New shares of stock issued to an individual in exchange of her (his) intellectual property rights, by an enterprise that is not listed in the Taiwan Stock Exchange, OTC, or the Emerging Stock Board, shall be excluded from the current year taxable consolidated income of the said individual.

When shares of stock mentioned in preceding Paragraph 1 and 2 are transferred through an actual transaction, stock gift, or inheritance, the total stock value shall be included in the current year taxable income of the recipient(s), calculated based on the actual transaction price or the fair market value of the stock at the time of the transfer, minus the related expenses or cost, incurred but not recognized yet, in obtaining the stock.

The above mentioned enterprise that issues new shares of stock to obtain intellectual property rights should report to the local tax authority within 30 days from the day after the date of the stock transfer. The said enterprise is subject to a 20% fine based on the actual transfer amount and required to resubmit the report with voucher(s) in required format if it fails to meet the reporting deadline, to report the fact, or to report with voucher(s) in required format.

In case the said small and medium enterprise or the individual who receive the shares of stock through intellectual property transfer is unable to provide the cost basis of the transfer for income calculation, a default 30% of the transaction price shall be applied to the cost basis of obtaining the stock.

Article 36

A small and medium-sized enterprise may retain and withhold from distributing a surplus earning in an amount not exceeding double the amount of its paid-in capital. In case the retained and undistributed earnings exceed the aforesaid limit, any additional surplus earning retained in each year thereafter shall be free from the restriction stipulated in the Income Tax Act after as profit seeking enterprise income tax at the rate of 10% has been surcharged.

The retain and withhold from distributing a surplus earning after 1998 until then, shall obey the Income Tax Acts, and not apply to the preceding paragraph.

Article 36-1

Small and medium enterprises development companies may raise the preparation to investment loss, under 20% of the investment amount, so as to compensate for actual loss. If there is no actual loss situation within 5 years, they shall turn the raising preparation to be the benefit of the 5th year.

When corporations calculate the clearing accounts income due to cancellation, rescission, revocation, mergence, or transference with Article 75, of the Income Tax Act, the accumulate remaining amount from the investment loss preparation within the preceding paragraph, shall turn to be the benefit of the same year.

Article 36-2

This article is enacted to respond to changes in the international economic situation and promote the willingness of domestic small and medium enterprises to invest and raise the domestic employment rate. During the period when the Composite Leading Indicators are above certain levels, a newly created small and medium enterprise or an existing small and medium enterprise that commits certain amount of capital expansion, hires certain number of additional people and increases its aggregate gross salary payments, it can deduct up to 130% of the annual gross salary payments to the additional domestic hires from its current year profit-seeking enterprise income.

Of the additional domestic hires mentioned in the preceding Paragraph who are 24 years old or younger, the small and medium enterprise can deduct up to 150% of the annual gross salary payments to these young domestic hires from its current year profit-seeking enterprise income.

During the period when the Composite Leading Indicators are above certain levels, if a small and medium enterprise raises the average salary paid to the domestic junior employees, it can deduct up to 130% of the incremental annual gross salary payments, excluding statutory basic wage adjustment, to the junior employees from its current year profit-seeking enterprise income. However, the additional salary paid to the new hires shall not be deducted here as it has been used for tax benefit applied to the provisions in the preceding two Paragraphs.

During the applicable period of this Article, if the said small and medium enterprise fails to meet the preceding three key requirements in a year, it shall calculate its profit-seeking enterprise income and income tax payable based on the provisions of the Income Tax Act, starting from that year.

The standards referred to Paragraph 1, 2 and 3 of this Article, regarding levels of the Composite Leading Indicators, applicable period, investment amount, number and types of additional people hired, aggregate gross salary payments, the range of junior employees, calculation of the average salary paid, approving authority, application deadline, application procedure, and measures of other related matters, shall be stipulated by the central competent authority and the Ministry of Finance.

The amendment as stipulated in Paragraph 2, 3, 4 and 5 on December 18, 2015, shall be effective on January 1, 2016 until May 19, 2024. The proviso in Article 40 of the Act shall not be applied.

Article 36-3

In case a small and medium enterprise is qualified for the tax benefit of the same nature in the Act for Industrial Innovation, it can only select one Act for this tax benefit.

Chapter 5 Public Procurement Projects or Public Works

Article 37

Governments at various levels and government-owned enterprises shall assist small and medium enterprises to acquire business opportunities in making public announcements for procurement projects or construction of public works.

Article 38

For making public announcement for procurement projects, construction of public works or for entrustment of research and development tasks, government at various levels and government-owned enterprises shall, based on actual requirements, establish qualification requirement and registration system in respect of small and medium enterprises eligible for acting as a supplier or bidder.

Chapter 6 Supplementary Provisions

Article 39

The Executive Yuan may form a Small and Medium Enterprise Policy Deliberation Committee to be in charge of planning and reviewing the small and medium enterprise development policy. The organizational rules shall be stipulated by the Executive Yuan.

Article 40

This Statute shall come into force from the date of promulgation. However, Article 35, Article 35-1, and Article 36-2 come into force for 10 years from May 20, 2014.

APPENDIX B

Standards for Identifying Small and Medium Enterprises

Approved by Executive Yuan Order Tai (80) Jing #33054 on October 19, 1991.

Promulgated by Ministry of Economic Affairs Order Jing (80) Chi Tzu #059364 on November 25, 1991.

Revision approved by Executive Yuan Order Tai (84) Jing #32284 on September 4, 1995.

Revision promulgated by Ministry of Economic Affairs Order Jing (84) Chi Tzu #84029087 on September 27, 1995.

Revision approved by Executive Yuan Order Tai (89) Jing #10056 on April 8, 2000.

Revision promulgated by Ministry of Economic Affairs Order Jing (89) Chi Tzu #89340202 on May 3, 2000.

Revision approved by Executive Yuan Order Yuan Tai Jing #0940022741 on June 14, 2005.

Revision promulgated by Ministry of Economic Affairs Order Jing Chi Tzu #09400561550 on July 5, 2005.

Revision approved by Executive Yuan Order Yuan Tai Jing #0980048943 on August 17, 2009.

Revision promulgated by Ministry of Economic Affairs Order Jing Chi Tzu #09800639470 on September 2, 2009.

Revision approved by Executive Yuan Order Yuan Tai Jing #1040008378 on March 4, 2015.

Revision promulgated by Ministry of Economic Affairs Order Jing Chi Tzu #10404601530 on March 30, 2015.

Article 1

The Standards have been drawn up in accordance with the provisions of Paragraph 2, Article 2 of the Small and Medium-sized Enterprise Development Statute (hereinafter referred to as the “Statute”).

Article 2

The term “SME” as used in the Standards shall mean an enterprise which has completed company registration or business registration in accordance with the requirements of the laws, and which conforms to the following standards:

1. The enterprise is an enterprise in the manufacturing, construction, or mining and quarrying industry with either paid-in capital of NT\$80 million or less, or less than 200 regular employees.

2. The enterprise is an enterprise in the industry other than any of those mentioned in the Sub-paragraph immediately above and either had its sales revenue of NT\$100 million or less in the previous year, or has less than 100 regular employees.

Article 3

The term “small-scale enterprise” as used in Paragraph 2, Article 4 of the Statute shall mean a SME with less than 5 regular employees.

Article 4

The term “sales revenue” as used in the Standards shall be determined based on the figure as approved by the tax authorities in the year immediately prior to the year of determination. If the approval has not been given by the tax authorities, the determination shall be made in accordance with the following provisions:

1. Sales revenue shall be based on the operating revenue noted on the income tax declaration form for the most recent year bearing the “Documents Received” seal of the tax authorities.
2. If the enterprise is unable to obtain the document referred to in the Sub-paragraph immediately above, sales revenue shall be based on the sales value noted on the sales and tax declaration form for the full year of the most recent year, with commissioned sales and non-operating income deducted.
3. In the case of sale representatives required to pay business tax by the tax authorities according to the laws, sales revenue shall be presumed to be NT\$100 million or less.

If the enterprise was established in the previous year and less than one year has elapsed since business registration, or if business registration took place in the current year, sales revenue for the full year shall be calculated on the basis of the conversion from the figure already declared for each period.

Article 5

The “number of regular employee” as used in the Standards shall be based on the average monthly number of insured persons for whom labor insurance registration has been made with the Labor Insurance agency for the Taiwan and Fukien Region in the most recent 12 months.

Article 6

An enterprise shall be deemed to be a SME if any of the following is applicable:

1. In the case of a SME which has received guidance for expansion, where after expansion the size of the enterprise exceeds the standards listed in Article 2, such enterprise shall continue to be deemed to be a SME for two years immediately after the date of expansion.
2. In the case of a SME which has received guidance for merger, where after the merger the size of the enterprise exceeds the standards listed in Article 2, such enterprise shall continue to be deemed to be a SME for three years immediately after the date of the merger.

3. Where a guidance agency, guidance system or relevant agency undertakes the provision of collective guidance for SMEs in a given industry, if some of the enterprises exceed the standards listed in Article 2, and if the guidance agency, guidance system or relevant agency determines that there is good reason for providing joint guidance, such enterprises shall be deemed to be SMEs during the period of collective guidance.

Article 7

The Standards shall come into effect on the date of promulgation.

APPENDIX C

SME Statistics by Industry

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Table C-1 Number of Enterprises by Industry and Enterprise Size, 2016-2018

Unit: Enterprises; %

Enterprise size		Total	SMEs	Share	Large enterprises	
Industry / year						Share
Total	2016	1,440,958	1,408,313	97.73	32,645	2.27
	2017	1,471,433	1,437,616	97.70	33,817	2.30
	2018	1,501,642	1,466,209	97.64	35,433	2.36
Agriculture, Forestry, Fishing and Animal Husbandry	2016	11,446	11,380	99.42	66	0.58
	2017	11,972	11,899	99.39	73	0.61
	2018	11,366	11,288	99.31	78	0.69
Mining and Quarrying	2016	1,134	1,103	97.27	31	2.73
	2017	1,108	1,079	97.38	29	2.62
	2018	1,093	1,064	97.35	29	2.65
Manufacturing	2016	148,971	143,184	96.12	5,787	3.88
	2017	149,322	143,429	96.05	5,893	3.95
	2018	149,821	143,853	96.02	5,968	3.98
Electricity and Gas Supply	2016	973	839	86.23	134	13.77
	2017	1,195	1,055	88.28	140	11.72
	2018	1,480	1,322	89.32	158	10.68
Water Supply and Remediation Activities	2016	7,545	7,250	96.09	295	3.91
	2017	7,603	7,268	95.59	335	4.41
	2018	7,740	7,383	95.39	357	4.61
Construction	2016	122,044	120,828	99.00	1,216	1.00
	2017	126,131	124,897	99.02	1,234	0.98
	2018	129,904	128,646	99.03	1,258	0.97
Wholesale and Retail Trade	2016	699,329	682,218	97.55	17,111	2.45
	2017	706,784	689,038	97.49	17,746	2.51
	2018	711,534	693,019	97.40	18,515	2.60
Transportation and Storage	2016	32,371	31,266	96.59	1,105	3.41
	2017	33,111	31,979	96.58	1,132	3.42
	2018	33,654	32,443	96.40	1,211	3.60
Accommodation and Food Service Activities	2016	151,440	150,893	99.64	547	0.36
	2017	157,969	157,388	99.63	581	0.37
	2018	164,237	163,617	99.62	620	0.38

Table C-1 Number of Enterprises by Industry and Enterprise Size, 2016-2018 (Continued)

Unit: Enterprises; %

Enterprise size		Total	SMEs		Large enterprises	
Industry / year				Share		Share
Information and Communication	2016	20,416	19,642	96.21	774	3.79
	2017	21,612	20,808	96.28	804	3.72
	2018	22,861	21,982	96.16	879	3.84
Financial and Insurance Activities	2016	19,328	16,850	87.18	2,478	12.82
	2017	19,931	17,372	87.16	2,559	12.84
	2018	20,666	17,964	86.93	2,702	13.07
Real Estate Activities	2016	36,603	35,157	96.05	1,446	3.95
	2017	37,515	35,973	95.89	1,542	4.11
	2018	38,948	37,171	95.44	1,777	4.56
Professional, Scientific and Technical Activities	2016	47,285	46,523	98.39	762	1.61
	2017	49,205	48,397	98.36	808	1.64
	2018	51,439	50,554	98.28	885	1.72
Support Service Activities	2016	30,651	30,126	98.29	525	1.71
	2017	31,644	31,097	98.27	547	1.73
	2018	32,568	31,999	98.25	569	1.75
Education	2016	2,433	2,417	99.34	16	0.66
	2017	2,797	2,780	99.39	17	0.61
	2018	3,824	3,798	99.32	26	0.68
Human Health and Social Work Activities	2016	785	766	97.58	19	2.42
	2017	1,027	1,007	98.05	20	1.95
	2018	1,113	1,090	97.93	23	2.07
Arts, Entertainment and Recreation	2016	25,594	25,464	99.49	130	0.51
	2017	27,891	27,733	99.43	158	0.57
	2018	32,909	32,742	99.49	167	0.51
Other Service Activities	2016	82,610	82,407	99.75	203	0.25
	2017	84,616	84,417	99.76	199	0.24
	2018	86,485	86,274	99.76	211	0.24

Note:

1. The term "SME" shall mean an enterprise which has completed company registration or business registration in accordance with the requirements of the laws, and which conforms to the following standards: (1) the enterprise is an enterprise in the Manufacturing, Construction, Mining and Quarrying industry with paid-in capital of NT\$80 million or less; (2) the enterprise is an enterprise in the industry other than any of those mentioned above and had its sales revenue of NT\$100 million or less in the previous year, according to the Standards for Identifying Small and Medium Enterprises.
2. Since 2017, the industries are classified according to the 10th revision of Industry Classification Standard by Directorate-General of Budget, Accounting and Statistics (DGBAS).

Source: Fiscal Information Agency, Ministry of Finance, Value-Added Business Tax (VAT) data (2016-2018).

Table C-2 Total Sales Value by Industry and Enterprise Size, 2016-2018

Unit: Million NT\$, %

Enterprise size		Total	SMEs		Large enterprises	
Industry / year				Share		Share
Total	2016	38,312,769	11,764,677	30.71	26,548,091	69.29
	2017	40,169,099	12,139,513	30.22	28,029,586	69.78
	2018	42,663,539	12,624,472	29.59	30,039,067	70.41
Agriculture, Forestry, Fishing and Animal Husbandry	2016	46,826	24,420	52.15	22,406	47.85
	2017	53,668	27,489	51.22	26,179	48.78
	2018	52,573	28,824	54.83	23,749	45.17
Mining and Quarrying	2016	42,839	29,147	68.04	13,692	31.96
	2017	43,454	29,301	67.43	14,153	32.57
	2018	49,436	32,180	65.09	17,256	34.91
Manufacturing	2016	13,608,467	4,070,669	29.91	9,537,797	70.09
	2017	14,506,053	4,279,857	29.50	10,226,196	70.50
	2018	15,335,930	4,456,814	29.06	10,879,117	70.94
Electricity and Gas Supply	2016	794,817	6,611	0.83	788,206	99.17
	2017	843,161	7,316	0.87	835,845	99.13
	2018	910,487	8,468	0.93	902,019	99.07
Water Supply and Remediation Activities	2016	173,392	55,809	32.19	117,583	67.81
	2017	208,564	60,108	28.82	148,456	71.18
	2018	213,825	62,684	29.32	151,141	70.68
Construction	2016	2,148,502	1,417,221	65.96	731,281	34.04
	2017	2,133,675	1,412,521	66.20	721,154	33.80
	2018	2,326,984	1,527,771	65.65	799,213	34.35
Wholesale and Retail Trade	2016	13,713,916	4,338,504	31.64	9,375,411	68.36
	2017	14,386,521	4,397,080	30.56	9,989,440	69.44
	2018	15,076,833	4,475,925	29.69	10,600,908	70.31
Transportation and Storage	2016	1,141,593	270,968	23.74	870,625	76.26
	2017	1,215,870	278,330	22.89	937,539	77.11
	2018	1,272,112	287,676	22.61	984,436	77.39
Accommodation and Food Service Activities	2016	622,182	442,287	71.09	179,895	28.91
	2017	655,114	468,385	71.50	186,729	28.50
	2018	692,988	491,310	70.90	201,678	29.10

Table C-2 Total Sales Value by Industry and Enterprise Size, 2016-2018 (Continued)

Unit: Million NT\$, %

Enterprise size		Total	SMEs	Share	Large	
Industry / year					enterprises	Share
Information and Communication	2016	1,064,855	119,942	11.26	944,914	88.74
	2017	1,093,203	126,785	11.60	966,418	88.40
	2018	1,238,943	133,616	10.78	1,105,327	89.22
Financial and Insurance Activities	2016	2,277,273	203,068	8.92	2,074,205	91.08
	2017	2,243,145	212,859	9.49	2,030,287	90.51
	2018	2,512,536	216,723	8.63	2,295,813	91.37
Real Estate Activities	2016	1,060,509	230,233	21.71	830,276	78.29
	2017	1,162,729	256,316	22.04	906,413	77.96
	2018	1,241,823	275,209	22.16	966,614	77.84
Professional, Scientific and Technical Activities	2016	705,177	213,510	30.28	491,667	69.72
	2017	713,679	224,259	31.42	489,419	68.58
	2018	776,800	239,899	30.88	536,901	69.12
Support Service Activities	2016	540,152	147,708	27.35	392,444	72.65
	2017	524,944	152,811	29.11	372,133	70.89
	2018	547,973	164,385	30.00	383,588	70.00
Education	2016	16,003	10,985	68.64	5,018	31.36
	2017	16,838	12,397	73.62	4,442	26.38
	2018	20,318	14,989	73.77	5,329	26.23
Human Health and Social Work Activities	2016	27,817	2,730	9.81	25,087	90.19
	2017	28,190	5,747	20.39	22,443	79.61
	2018	31,580	7,167	22.69	24,413	77.31
Arts, Entertainment and Recreation	2016	91,406	55,881	61.14	35,525	38.86
	2017	102,069	59,514	58.31	42,555	41.69
	2018	111,531	68,591	61.50	42,940	38.50
Other Service Activities	2016	237,044	124,982	52.73	112,062	47.27
	2017	238,221	128,437	53.92	109,783	46.08
	2018	250,866	132,240	52.71	118,626	47.29

Note and source: See Table C-1.

Table C-3 Domestic Sales Value by Industry and Enterprise Size, 2016-2018

Unit: Million NT\$, %

Enterprise size		Total	SMEs	Share	Large enterprises	Share
Industry / year						
Total	2016	28,848,507	10,340,886	35.85	18,507,621	64.15
	2017	30,172,981	10,717,138	35.52	19,455,843	64.48
	2018	32,043,842	11,171,567	34.86	20,872,275	65.14
Agriculture, Forestry, Fishing and Animal Husbandry	2016	39,310	21,152	53.81	18,158	46.19
	2017	46,367	23,704	51.12	22,662	48.88
	2018	45,962	25,849	56.24	20,113	43.76
Mining and Quarrying	2016	42,319	28,917	68.33	13,402	31.67
	2017	42,865	29,043	67.75	13,822	32.25
	2018	48,821	31,878	65.29	16,943	34.71
Manufacturing	2016	7,186,164	3,093,557	43.05	4,092,607	56.95
	2017	7,690,831	3,299,999	42.91	4,390,833	57.09
	2018	8,076,468	3,450,250	42.72	4,626,218	57.28
Electricity and Gas Supply	2016	779,125	6,469	0.83	772,655	99.17
	2017	828,879	7,216	0.87	821,664	99.13
	2018	887,756	8,400	0.95	879,357	99.05
Water Supply and Remediation Activities	2016	165,106	54,405	32.95	110,700	67.05
	2017	198,012	58,531	29.56	139,481	70.44
	2018	200,552	60,991	30.41	139,561	69.59
Construction	2016	2,085,042	1,404,354	67.35	680,688	32.65
	2017	2,082,614	1,399,285	67.19	683,329	32.81
	2018	2,276,091	1,514,362	66.53	761,730	33.47
Wholesale and Retail Trade	2016	11,377,639	3,938,119	34.61	7,439,520	65.39
	2017	11,948,763	4,003,967	33.51	7,944,796	66.49
	2018	12,503,618	4,083,156	32.66	8,420,462	67.34
Transportation and Storage	2016	816,889	262,190	32.10	554,699	67.90
	2017	854,493	270,222	31.62	584,271	68.38
	2018	907,016	279,158	30.78	627,858	69.22
Accommodation and Food Service Activities	2016	620,380	442,060	71.26	178,319	28.74
	2017	653,345	468,193	71.66	185,152	28.34
	2018	690,769	491,033	71.08	199,736	28.92

Table C-3 Domestic Sales Value by Industry and Enterprise Size, 2016-2018 (Continued)

Unit: Million NT\$, %

Enterprise size		Total	SMEs	Share	Large	
Industry / year					enterprises	Share
Information and Communication	2016	957,200	111,914	11.69	845,285	88.31
	2017	977,871	117,301	12.00	860,570	88.00
	2018	1,117,791	121,978	10.91	995,813	89.09
Financial and Insurance Activities	2016	2,273,226	202,360	8.90	2,070,866	91.10
	2017	2,234,380	212,026	9.49	2,022,354	90.51
	2018	2,504,640	215,497	8.60	2,289,143	91.40
Real Estate Activities	2016	1,057,675	229,348	21.68	828,326	78.32
	2017	1,159,810	255,444	22.02	904,365	77.98
	2018	1,238,711	274,221	22.14	964,490	77.86
Professional, Scientific and Technical Activities	2016	553,952	205,336	37.07	348,616	62.93
	2017	563,570	214,978	38.15	348,592	61.85
	2018	606,409	229,478	37.84	376,932	62.16
Support Service Activities	2016	533,082	146,605	27.50	386,477	72.50
	2017	517,979	151,714	29.29	366,265	70.71
	2018	540,564	163,022	30.16	377,542	69.84
Education	2016	15,924	10,947	68.75	4,977	31.25
	2017	16,750	12,340	73.67	4,411	26.33
	2018	20,170	14,885	73.80	5,285	26.20
Human Health and Social Work Activities	2016	24,663	2,670	10.83	21,993	89.17
	2017	27,960	5,683	20.33	22,276	79.67
	2018	30,846	7,078	22.95	23,768	77.05
Arts, Entertainment and Recreation	2016	91,105	55,746	61.19	35,359	38.81
	2017	101,603	59,324	58.39	42,279	41.61
	2018	111,055	68,361	61.56	42,694	38.44
Other Service Activities	2016	229,709	124,737	54.30	104,972	45.70
	2017	226,890	128,168	56.49	98,722	43.51
	2018	236,600	131,970	55.78	104,630	44.22

Note and source: See Table C-1.

Table C-4 Export Sales Value by Industry and Enterprise Size, 2016-2018

Unit: Million NT\$, %

Enterprise size		Total	SMEs		Large	
Industry / year			Share	enterprises	Share	
Total	2016	9,464,262	1,423,791	15.04	8,040,471	84.96
	2017	9,996,119	1,422,375	14.23	8,573,744	85.77
	2018	10,619,697	1,452,905	13.68	9,166,792	86.32
Agriculture, Forestry, Fishing and Animal Husbandry	2016	7,516	3,269	43.49	4,247	56.51
	2017	7,301	3,785	51.84	3,517	48.16
	2018	6,611	2,975	45.00	3,636	55.00
Mining and Quarrying	2016	520	230	44.32	289	55.68
	2017	590	259	43.86	331	56.14
	2018	615	302	49.11	313	50.89
Manufacturing	2016	6,422,303	977,112	15.21	5,445,191	84.79
	2017	6,815,222	979,858	14.38	5,835,364	85.62
	2018	7,259,463	1,006,563	13.87	6,252,899	86.13
Electricity and Gas Supply	2016	15,692	142	0.90	15,550	99.10
	2017	14,282	100	0.70	14,182	99.30
	2018	22,731	69	0.30	22,662	99.70
Water Supply and Remediation Activities	2016	8,286	1,403	16.94	6,883	83.06
	2017	10,553	1,577	14.94	8,976	85.06
	2018	13,273	1,693	12.76	11,580	87.24
Construction	2016	63,460	12,867	20.28	50,593	79.72
	2017	51,061	13,236	25.92	37,825	74.08
	2018	50,893	13,410	26.35	37,483	73.65
Wholesale and Retail Trade	2016	2,336,277	400,386	17.14	1,935,891	82.86
	2017	2,437,758	393,113	16.13	2,044,645	83.87
	2018	2,573,215	392,770	15.26	2,180,446	84.74
Transportation and Storage	2016	324,704	8,778	2.70	315,926	97.30
	2017	361,376	8,108	2.24	353,268	97.76
	2018	365,096	8,518	2.33	356,577	97.67
Accommodation and Food Service Activities	2016	1,803	227	12.60	1,575	87.40
	2017	1,769	192	10.85	1,577	89.15
	2018	2,219	277	12.48	1,942	87.52

Table C-4 Export Sales Value by Industry and Enterprise Size, 2016-2018 (Continued)

Unit: Million NT\$, %

Enterprise size		Total	SMEs	Share	Large enterprises	
Industry / year						Share
Information and Communication	2016	107,656	8,027	7.46	99,628	92.54
	2017	115,332	9,484	8.22	105,848	91.78
	2018	121,152	11,638	9.61	109,514	90.39
Financial and Insurance Activities	2016	4,047	708	17.51	3,338	82.49
	2017	8,765	833	9.50	7,933	90.50
	2018	7,895	1,225	15.52	6,670	84.48
Real Estate Activities	2016	2,834	885	31.22	1,949	68.78
	2017	2,919	872	29.86	2,047	70.14
	2018	3,112	988	31.75	2,124	68.25
Professional, Scientific and Technical Activities	2016	151,225	8,174	5.41	143,051	94.59
	2017	150,109	9,281	6.18	140,827	93.82
	2018	170,390	10,421	6.12	159,969	93.88
Support Service Activities	2016	7,071	1,104	15.61	5,967	84.39
	2017	6,965	1,097	15.75	5,868	84.25
	2018	7,409	1,363	18.40	6,046	81.60
Education	2016	79	38	48.04	41	51.96
	2017	88	57	64.68	31	35.32
	2018	148	104	70.44	44	29.56
Human Health and Social Work Activities	2016	3,154	60	1.89	3,094	98.11
	2017	231	64	27.60	167	72.40
	2018	734	89	12.11	645	87.89
Arts, Entertainment and Recreation	2016	301	135	44.79	166	55.21
	2017	467	191	40.86	276	59.14
	2018	476	230	48.29	246	51.71
Other Service Activities	2016	7,334	246	3.35	7,092	96.70
	2017	11,330	269	2.37	11,061	97.63
	2018	14,266	270	1.89	13,996	98.11

Note and source: See Table C-1.

Table C-5 Total Employment by Industry and Enterprise Size, 2016-2018

Unit: Thousand persons; %

Enterprise size		Total	Share	SMEs	Share	Large		Govern- ment
Industry / year						enterprises	Share	
Total	2016	11,267	100.00	8,810	78.19	1,432	12.71	1,025
	2017	11,352	100.00	8,904	78.44	1,425	12.55	1,023
	2018	11,434	100.00	8,965	78.41	1,450	12.68	1,019
Agriculture, Forestry, Fishing and Animal Husbandry	2016	557	100.00	552	99.05	2	0.28	4
	2017	557	100.00	551	99.09	1	0.23	4
	2018	561	100.00	556	99.13	1	0.18	4
Mining and Quarrying	2016	4	100.00	3	82.98	0	0.15	1
	2017	4	100.00	3	88.69	0	0.00	0
	2018	4	100.00	3	81.63	0	0.00	1
Manufacturing	2016	3,028	100.00	2,193	72.41	818	27.02	17
	2017	3,045	100.00	2,218	72.83	810	26.61	17
	2018	3,064	100.00	2,212	72.18	834	27.23	18
Electricity and Gas Supply	2016	30	100.00	4	12.31	3	8.81	24
	2017	30	100.00	5	15.37	4	11.87	22
	2018	30	100.00	4	14.47	2	6.08	24
Water Supply and Remediation Activities	2016	82	100.00	35	42.40	1	1.50	46
	2017	82	100.00	35	42.28	1	1.50	46
	2018	81	100.00	34	41.98	2	2.07	46
Construction	2016	899	100.00	884	98.37	8	0.84	7
	2017	901	100.00	886	98.28	9	0.99	7
	2018	904	100.00	890	98.41	7	0.81	7
Wholesale and Retail Trade	2016	1,853	100.00	1,782	96.17	65	3.48	6
	2017	1,875	100.00	1,801	96.05	67	3.57	7
	2018	1,901	100.00	1,825	96.03	66	3.48	9
Transportation and Storage	2016	440	100.00	318	72.32	71	16.25	50
	2017	443	100.00	315	71.07	76	17.11	52
	2018	446	100.00	320	71.84	71	15.84	55
Accommodation and Food Service Activities	2016	826	100.00	804	97.28	22	2.71	0
	2017	832	100.00	810	97.29	22	2.68	0
	2018	838	100.00	814	97.16	24	2.82	0

Table C-5 Total Employment by Industry and Enterprise Size, 2016-2018 (Continued)

Unit: Thousand persons; %

Enterprise size		Total		SMEs		Large enterprises		Government
Industry / year			Share		Share		Share	
Information and Communication	2016	249	100.00	182	73.24	66	26.44	1
	2017	253	100.00	187	73.80	66	25.87	1
	2018	258	100.00	193	74.68	65	25.01	1
Financial and Insurance Activities	2016	424	100.00	329	77.64	79	18.54	16
	2017	429	100.00	330	76.95	82	19.19	17
	2018	432	100.00	334	77.15	83	19.10	16
Real Estate Activities	2016	100	100.00	96	95.74	3	2.57	2
	2017	103	100.00	100	97.19	2	2.12	1
	2018	106	100.00	101	95.55	4	3.82	1
Professional, Scientific and Technical Activities	2016	368	100.00	293	79.61	49	13.28	26
	2017	372	100.00	298	80.26	48	13.00	25
	2018	374	100.00	297	79.41	52	13.81	25
Support Service Activities	2016	286	100.00	260	90.69	26	9.16	0
	2017	292	100.00	267	91.22	25	8.41	1
	2018	296	100.00	269	91.07	25	8.49	1
Public Administration and Defense; Compulsory Social Security	2016	374	100.00	1	0.21	0	0.00	373
	2017	373	100.00	0	0.07	0	0.00	372
	2018	367	100.00	1	0.14	0	0.00	367
Education	2016	652	100.00	234	35.93	65	9.97	353
	2017	652	100.00	239	36.62	62	9.56	351
	2018	653	100.00	247	37.80	63	9.60	343
Human Health and Social Work Activities	2016	444	100.00	218	49.15	143	32.29	82
	2017	451	100.00	230	51.05	140	31.00	81
	2018	456	100.00	230	50.51	143	31.28	83
Arts, Entertainment and Recreation	2016	103	100.00	83	80.25	5	5.34	15
	2017	106	100.00	85	80.78	5	4.32	16
	2018	110	100.00	88	80.06	6	5.20	16
Other Service Activities	2016	547	100.00	539	98.48	6	1.14	2
	2017	551	100.00	543	98.59	5	0.92	3
	2018	554	100.00	547	98.88	4	0.79	2

Note:

1. Since 2017, the industries are classified according to the 10th revision of Industry Classification Standard by Directorate-General of Budget, Accounting and Statistics (DGBAS).
2. For the purposes of this table, SMEs are defined as firms in the Manufacturing, Construction and Mining and Quarrying industries with less than 200 regular employees and firms in other industries with less than 100 regular employees.
3. Employment indicates employed persons, including employers, own-account workers, paid employees and unpaid family workers.
4. "0" represents zero or less than one unit (1,000 persons); "-" represents no data available.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data (2016-2018).

Table C-6 Number of Paid Employees by Industry and Enterprise Size, 2016-2018

Unit: Thousand persons; %

Unit: Thousand persons,

Enterprise size		Total		SMEs		Large enterprises		Government
Industry / year			Share		Share		Share	
Total	2016	8,926	100.00	6,472	72.50	1,429	16.01	1,025
	2017	9,006	100.00	6,560	72.84	1,423	15.80	1,023
	2018	9,083	100.00	6,616	72.84	1,448	15.94	1,019
Agriculture, Forestry, Fishing and Animal Husbandry	2016	90	100.00	84	94.13	2	1.69	4
	2017	92	100.00	87	94.57	1	1.34	4
	2018	92	100.00	87	94.69	1	1.08	4
Mining and Quarrying	2016	4	100.00	3	82.30	0	0.16	1
	2017	4	100.00	3	88.16	0	0.00	0
	2018	4	100.00	3	81.47	0	0.00	1
Manufacturing	2016	2,782	100.00	1,948	70.01	817	29.37	17
	2017	2,802	100.00	1,975	70.49	810	28.91	17
	2018	2,828	100.00	1,976	69.88	833	29.48	18
Electricity and Gas Supply	2016	30	100.00	3	11.58	3	8.88	24
	2017	30	100.00	4	14.42	4	12.00	22
	2018	30	100.00	4	13.33	2	6.16	24
Water Supply and Remediation Activities	2016	76	100.00	29	37.77	1	1.62	46
	2017	75	100.00	28	37.03	1	1.63	46
	2018	74	100.00	27	36.54	2	2.26	46
Construction	2016	759	100.00	744	98.07	8	1.00	7
	2017	756	100.00	740	97.95	9	1.18	7
	2018	754	100.00	740	98.10	7	0.97	7
Wholesale and Retail Trade	2016	1,165	100.00	1,094	93.93	64	5.52	6
	2017	1,186	100.00	1,111	93.75	67	5.64	7
	2018	1,200	100.00	1,124	93.72	66	5.51	9
Transportation and Storage	2016	358	100.00	237	66.09	71	19.86	50
	2017	364	100.00	236	64.85	76	20.77	52
	2018	365	100.00	240	65.65	71	19.31	55
Accommodation and Food Service Activities	2016	527	100.00	505	95.79	22	4.20	0
	2017	539	100.00	516	95.83	22	4.13	0
	2018	548	100.00	524	95.69	23	4.29	0

Table C-6 Number of Paid Employees by Industry and Enterprise Size, 2016-2018
(Continued)

Units: Thousand persons; %

Enterprise size		Total	Share	SMEs	Share	Large		Govern- ment
Industry / year						enterprises	Share	
Information and Communication	2016	234	100.00	167	71.52	66	28.14	1
	2017	239	100.00	173	72.31	65	27.34	1
	2018	246	100.00	180	73.47	64	26.21	1
Financial and Insurance Activities	2016	420	100.00	326	77.46	79	18.68	16
	2017	426	100.00	327	76.82	82	19.29	17
	2018	427	100.00	329	76.93	82	19.27	16
Real Estate Activities	2016	90	100.00	86	95.27	3	2.86	2
	2017	93	100.00	90	96.89	2	2.35	1
	2018	95	100.00	90	95.04	4	4.25	1
Professional, Scientific and Technical Activities	2016	297	100.00	222	74.82	49	16.37	26
	2017	299	100.00	226	75.50	48	16.12	25
	2018	305	100.00	228	74.84	51	16.86	25
Support Service Activities	2016	263	100.00	237	89.94	26	9.89	0
	2017	270	100.00	244	90.52	24	9.09	1
	2018	274	100.00	247	90.40	25	9.13	1
Public Administration and Defense; Compulsory Social Security	2016	374	100.00	1	0.21	0	0.00	373
	2017	373	100.00	0	0.07	0	0.00	372
	2018	367	100.00	1	0.14	0	0.00	367
Education	2016	620	100.00	202	32.63	65	10.46	353
	2017	621	100.00	208	33.43	62	10.04	351
	2018	621	100.00	215	34.62	63	10.08	343
Human Health and Social Work Activities	2016	415	100.00	189	45.62	143	34.53	82
	2017	421	100.00	201	47.68	140	33.12	81
	2018	429	100.00	203	47.33	143	33.28	83
Arts, Entertainment and Recreation	2016	81	100.00	61	75.03	5	6.75	15
	2017	85	100.00	65	76.12	5	5.37	16
	2018	89	100.00	67	75.50	6	6.35	16
Other Service Activities	2016	342	100.00	333	97.56	6	1.83	2
	2017	334	100.00	326	97.68	5	1.51	3
	2018	335	100.00	329	98.18	4	1.29	2

Note and source: See Table C-5.

Table C-7 Overview of Newly Established Enterprises by Industry and Enterprise Size, 2018

Unit: Enterprises; million NT\$, %

Enterprise size		Total	SMEs	Large enterprises	
Industry				Share	Share
Number of enterprises					
Total	102,353	102,189	100.00	164	100.00
Agriculture, Forestry, Fishing and Animal Husbandry	746	746	0.73	0	0.00
Mining and Quarrying	33	33	0.03	0	0.00
Manufacturing	4,975	4,930	4.82	45	27.44
Electricity and Gas Supply	289	289	0.28	0	0.00
Water Supply and Remediation Activities	460	460	0.45	0	0.00
Construction	9,041	9,036	8.84	5	3.05
Wholesale and Retail Trade	39,810	39,729	38.88	81	49.39
Transportation and Storage	1,802	1,799	1.76	3	1.83
Accommodation and Food Service Activities	18,521	18,516	18.12	5	3.05
Information and Communication	2,366	2,359	2.31	7	4.27
Financial and Insurance Activities	1,070	1,066	1.04	4	2.44
Real Estate Activities	3,008	3,000	2.94	8	4.88
Professional, Scientific and Technical Activities	4,594	4,590	4.49	4	2.44
Support Service Activities	2,507	2,507	2.45	0	0.00
Education	760	759	0.74	1	0.61
Human Health and Social Work Activities	111	111	0.11	0	0.00
Arts, Entertainment and Recreation	6,447	6,446	6.31	1	0.61
Other Service Activities	5,813	5,813	5.69	0	0.00
Total sales					
Total	225,281	179,280	100.00	46,001	100.00
Agriculture, Forestry, Fishing and Animal Husbandry	445	445	0.25	0	0.00
Mining and Quarrying	465	465	0.26	0	0.00
Manufacturing	19,978	18,831	10.50	1,148	2.50
Electricity and Gas Supply	133	133	0.07	0	0.00
Water Supply and Remediation Activities	1,136	1,136	0.63	0	0.00
Construction	22,873	22,068	12.31	805	1.75
Wholesale and Retail Trade	106,445	79,397	44.29	27,048	58.80
Transportation and Storage	4,427	3,898	2.17	528	1.15
Accommodation and Food Service Activities	24,825	23,994	13.38	831	1.81
Information and Communication	6,286	4,267	2.38	2,019	4.39
Financial and Insurance Activities	1,850	1,310	0.73	540	1.17
Real Estate Activities	7,078	4,660	2.60	2,418	5.26
Professional, Scientific and Technical Activities	17,113	6,670	3.72	10,443	22.70
Support Service Activities	3,193	3,193	1.78	0	0.00
Education	610	499	0.28	111	0.24
Human Health and Social Work Activities	264	264	0.15	0	0.00
Arts, Entertainment and Recreation	5,156	5,045	2.81	110	0.24
Other Service Activities	3,004	3,004	1.68	0	0.00

Table C-7 Overview of Newly Established Enterprises by Industry and Enterprise Size, 2018 (Continued)

Unit: Million NT\$, %

2010 (continued)

Unit: Million NT\$, %

Enterprise size	Total	SMEs	Share	Large	
Industry				enterprises	Share
Domestic sales					
Total	192,833	169,211	100.00	23,623	100.00
Agriculture, Forestry, Fishing and Animal Husbandry	432	432	0.26	0	0.00
Mining and Quarrying	465	465	0.27	0	0.00
Manufacturing	15,597	14,943	8.83	654	2.77
Electricity and Gas Supply	133	133	0.08	0	0.00
Water Supply and Remediation Activities	1,092	1,092	0.65	0	0.00
Construction	22,838	22,033	13.02	805	3.41
Wholesale and Retail Trade	89,158	74,435	43.99	14,723	62.33
Transportation and Storage	3,937	3,824	2.26	113	0.48
Accommodation and Food Service Activities	24,824	23,993	14.18	831	3.52
Information and Communication	5,568	3,549	2.10	2,019	8.55
Financial and Insurance Activities	1,825	1,285	0.76	540	2.29
Real Estate Activities	7,048	4,629	2.74	2,418	10.24
Professional, Scientific and Technical Activities	7,755	6,457	3.82	1,298	5.50
Support Service Activities	3,133	3,133	1.85	0	0.00
Education	609	498	0.29	111	0.47
Human Health and Social Work Activities	264	264	0.16	0	0.00
Arts, Entertainment and Recreation	5,155	5,044	2.98	110	0.47
Other Service Activities	3,001	3,001	1.77	0	0.00
Export sales					
Total	32,447	10,069	100.00	22,378	100.00
Agriculture, Forestry, Fishing and Animal Husbandry	13	13	0.12	0	0.00
Mining and Quarrying	0	0	0.00	0	0.00
Manufacturing	4,382	3,888	38.61	494	2.21
Electricity and Gas Supply	0	0	0.00	0	0.00
Water Supply and Remediation Activities	44	44	0.44	0	0.00
Construction	35	35	0.35	0	0.00
Wholesale and Retail Trade	17,287	4,962	49.29	12,325	55.07
Transportation and Storage	489	74	0.74	415	1.85
Accommodation and Food Service Activities	1	1	0.01	0	0.00
Information and Communication	718	718	7.13	0	0.00
Financial and Insurance Activities	25	25	0.25	0	0.00
Real Estate Activities	31	31	0.30	0	0.00
Professional, Scientific and Technical Activities	9,358	213	2.12	9,145	40.86
Support Service Activities	60	60	0.59	0	0.00
Education	1	1	0.01	0	0.00
Human Health and Social Work Activities	0	0	0.00	0	0.00
Arts, Entertainment and Recreation	1	1	0.01	0	0.00
Other Service Activities	3	3	0.03	0	0.00

Note:

1. Since 2017, the industries are classified according to the 10th revision of Industry Classification Standard by Directorate-General of Budget, Accounting and Statistics (DGBAS).

2. "0" represents zero or less than one unit (one enterprise or a million NT\$).

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

Table C-8 Overview of Female-owned Enterprises by Industry and Enterprise Size, 2018

Unit: Enterprises; million NT\$; %

Cont. Enterprises, million A\$3, 70

Industry	Enterprise size	Total	Female-owned enterprises				
			Sub-total	SMEs	Large		
					Share	enterprises	Share
Number of enterprises							
Total		1,484,548	540,864	533,659	100.00	7,205	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		11,353	2,845	2,825	0.53	20	0.28
Mining and Quarrying		1,089	246	243	0.05	3	0.04
Manufacturing		148,460	41,307	40,682	7.62	625	8.67
Electricity and Gas Supply		1,427	350	330	0.06	20	0.28
Water Supply and Remediation Activities		7,725	2,265	2,188	0.41	77	1.07
Construction		129,637	32,550	32,323	6.06	227	3.15
Wholesale and Retail Trade		702,536	268,356	264,103	49.49	4,253	59.03
Transportation and Storage		32,903	8,834	8,657	1.62	177	2.46
Accommodation and Food Service Activities		162,969	75,787	75,628	14.17	159	2.21
Information and Communication		21,813	6,367	6,248	1.17	119	1.65
Financial and Insurance Activities		20,211	6,912	6,091	1.14	821	11.39
Real Estate Activities		38,494	11,697	11,320	2.12	377	5.23
Professional, Scientific and Technical Activities		50,054	18,323	18,174	3.41	149	2.07
Support Service Activities		32,266	12,354	12,230	2.29	124	1.72
Education		3,693	1,697	1,688	0.32	9	0.12
Human Health and Social Work Activities		1,096	446	443	0.08	3	0.04
Arts, Entertainment and Recreation		32,651	11,053	11,036	2.07	17	0.24
Other Service Activities		86,171	39,475	39,450	7.39	25	0.35
Total sales							
Total		37,473,691	6,282,463	3,107,165	100.00	3,175,298	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		52,035	11,614	7,472	0.24	4,142	0.13
Mining and Quarrying		49,155	4,651	4,554	0.15	97	0.00
Manufacturing		13,034,311	1,219,496	745,433	23.99	474,063	14.93
Electricity and Gas Supply		887,629	30,122	2,071	0.07	28,051	0.88
Water Supply and Remediation Activities		212,110	52,244	19,109	0.61	33,135	1.04
Construction		2,254,597	498,398	389,293	12.53	109,105	3.44
Wholesale and Retail Trade		13,129,378	2,936,603	1,307,778	42.09	1,628,825	51.30
Transportation and Storage		1,146,828	233,797	81,742	2.63	152,055	4.79
Accommodation and Food Service Activities		658,668	219,321	176,350	5.68	42,971	1.35
Information and Communication		1,044,613	144,471	31,142	1.00	113,329	3.57
Financial and Insurance Activities		2,368,966	429,312	68,107	2.19	361,205	11.38
Real Estate Activities		1,213,397	199,027	71,558	2.30	127,469	4.01
Professional, Scientific and Technical Activities		653,664	126,064	72,257	2.33	53,807	1.69
Support Service Activities		381,651	85,889	54,727	1.76	31,162	0.98
Education		18,860	5,671	4,273	0.14	1,398	0.04
Human Health and Social Work Activities		30,935	5,191	4,737	0.15	454	0.01
Arts, Entertainment and Recreation		102,784	23,766	18,783	0.60	4,983	0.16
Other Service Activities		234,112	56,829	47,782	1.54	9,047	0.28

Table C-8 Overview of Female-owned Enterprises by Industry and Enterprise Size, 2018
(Continued)

Unit: Million NT\$, %

Enterprise size Industry	Total	Female-owned enterprises				
		Sub-total	SMEs	Share	Large enterprises	Share
Domestic sales						
Total	29,010,218	5,395,543	2,845,135	100.00	2,550,408	100.00
Agriculture, Forestry, Fishing and Animal Husbandry	45,500	10,265	6,712	0.24	3,553	0.14
Mining and Quarrying	48,711	4,617	4,520	0.16	97	0.00
Manufacturing	7,474,688	871,949	616,076	21.65	255,873	10.03
Electricity and Gas Supply	866,974	25,453	2,062	0.07	23,391	0.92
Water Supply and Remediation Activities	199,550	51,001	18,344	0.64	32,657	1.28
Construction	2,210,145	492,992	387,901	13.63	105,091	4.12
Wholesale and Retail Trade	10,879,998	2,522,045	1,185,790	41.68	1,336,255	52.39
Transportation and Storage	851,355	160,970	79,814	2.81	81,156	3.18
Accommodation and Food Service Activities	656,482	218,798	176,296	6.20	42,502	1.67
Information and Communication	937,994	129,141	28,946	1.02	100,195	3.93
Financial and Insurance Activities	2,362,913	427,602	67,696	2.38	359,906	14.11
Real Estate Activities	1,210,353	198,378	71,219	2.50	127,159	4.99
Professional, Scientific and Technical Activities	508,151	106,949	69,997	2.46	36,952	1.45
Support Service Activities	376,414	84,181	54,411	1.91	29,770	1.17
Education	18,715	5,607	4,209	0.15	1,398	0.05
Human Health and Social Work Activities	30,626	5,191	4,737	0.17	454	0.02
Arts, Entertainment and Recreation	102,313	23,671	18,688	0.66	4,983	0.20
Other Service Activities	229,339	56,736	47,720	1.68	9,016	0.35
Export sales						
Total	8,463,473	886,920	262,030	100.00	624,890	100.00
Agriculture, Forestry, Fishing and Animal Husbandry	6,535	1,349	760	0.29	589	0.09
Mining and Quarrying	444	34	34	0.01	0	0.00
Manufacturing	5,559,623	347,547	129,357	49.37	218190	34.92
Electricity and Gas Supply	20,655	4,669	9	0.00	4660	0.75
Water Supply and Remediation Activities	12,560	1,243	765	0.29	478	0.08
Construction	44,452	5,406	1,392	0.53	4014	0.64
Wholesale and Retail Trade	2,249,380	414,558	121,988	46.55	292,570	46.82
Transportation and Storage	295,473	72,827	1,928	0.74	70899	11.35
Accommodation and Food Service Activities	2,186	523	54	0.02	469	0.08
Information and Communication	106,619	15,330	2,196	0.84	13134	2.10
Financial and Insurance Activities	6,053	1,710	411	0.16	1299	0.21
Real Estate Activities	3,044	649	339	0.13	310	0.05
Professional, Scientific and Technical Activities	145,513	19,115	2,260	0.86	16855	2.70
Support Service Activities	5,237	1,708	316	0.12	1392	0.22
Education	145	64	64	0.02	0	0.00
Human Health and Social Work Activities	309	0	0	0.00	0	0.00
Arts, Entertainment and Recreation	471	95	95	0.04	0	0.00
Other Service Activities	4,773	93	62	0.02	31	0.00

Note:

- Whether an enterprise should be classified as male-owned or female-owned was determined using the registered identity of the business owner.
- The totals given in this table do not conform to those given in Table C-1~C-4 because some enterprises are registered as being owned by other enterprises or by foreigners; these enterprises were excluded from the data used in this table; data from male- and female-owned enterprises are included in total.
- "0" represents zero or less than one unit (a million NT\$).

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2018).

Table C-9 Export Sales Value of SMEs by Manufacturing Industry, 2016-2018

Unit: Million NT\$; %

Indicator / Year Industry	Export sales			Share of total		
	2016	2017	2018	2016	2017	2018
Total	977,112	979,858	1,006,563	100.00	100.00	100.00
Food Products and Prepared Animal Feeds Manufacturing	9,713	10,250	10,820	0.99	1.05	1.07
Beverages Manufacturing	602	452	530	0.06	0.05	0.05
Tobacco Products Manufacturing	0	0	0	0.00	0.00	0.00
Textiles Manufacturing	23,073	22,602	21,948	2.36	2.31	2.18
Wearing Apparel and Clothing Accessories	11,693	10,736	9,753	1.20	1.10	0.97
Leather, Fur and Related Products	10,773	8,339	7,418	1.10	0.85	0.74
Wood and of Products of Wood and Bamboo	2,442	2,906	2,322	0.25	0.30	0.23
Paper and Paper Products	12,178	7,107	5,985	1.25	0.73	0.59
Printing and Reproduction of Recorded Media	3,999	3,826	4,158	0.41	0.39	0.41
Petroleum and Coal Products Manufacturing	126	146	154	0.01	0.01	0.02
Chemical Material, Fertilizers and Nitrogen Compounds, Plastic and Rubber Materials, Man-made Fibres	23,163	26,691	29,178	2.37	2.72	2.90
Other Chemical Products Manufacturing	14,542	14,259	13,509	1.49	1.46	1.34
Pharmaceuticals and Medicinal Chemical Products Manufacturing	845	1,424	1,563	0.09	0.15	0.16
Rubber Products Manufacturing	11,045	11,850	12,257	1.13	1.21	1.22
Plastic Products Manufacturing	50,307	48,291	51,901	5.15	4.93	5.16
Non-metallic Mineral Products Manufacturing	17,554	19,907	20,059	1.80	2.03	1.99
Basic Metal Manufacturing	33,064	29,693	30,723	3.38	3.03	3.05
Fabricated Metal Products Manufacturing	117,110	120,014	125,843	11.99	12.25	12.50
Electronic Parts and Components Manufacturing	304,950	301,530	309,452	31.21	30.77	30.74
Computers, Electronic and Optical Products Manufacturing	35,005	35,548	35,333	3.58	3.63	3.51
Electrical Equipment Manufacturing	44,867	42,764	35,542	4.59	4.36	3.53
Machinery and Equipment Manufacturing	131,117	141,460	149,239	13.42	14.44	14.83
Motor Vehicles and Parts Manufacturing	16,482	14,952	15,797	1.69	1.53	1.57
Other Transport Equipment and Parts Manufacturing	46,681	48,076	52,744	4.78	4.91	5.24
Furniture Manufacturing	16,288	15,683	16,908	1.67	1.60	1.68
Other Manufacturing	31,156	27,831	29,352	3.19	2.84	2.92
Repair and Installation of Industrial Machinery and Equipment	8,335	13,520	14,075	0.85	1.38	1.40

Note and source: See Table C-1.

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