

2017 White Paper on Small and Medium Enterprises in Taiwan



Small and Medium Enterprise Administration

Ministry of Economic Affairs

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Foreword

Taiwan's economic growth is expected to gain momentum in 2017, attributable not only to expansionary macroeconomic policies launched by major countries, but also to economic transformation programs launched by the Taiwan government.

As for the performance of SMEs in 2016, of particular note is the number of SMEs, which reached a record level of 1,408,313 and accounted for 97.73 percent of all enterprises in Taiwan. In addition, the number of employed persons in SMEs rose to 8,810,000 — the highest level in recent years — and represented 78.19 percent of all employed persons in Taiwan. These statistics clearly illustrate that SMEs function as a stabilizing force in the labor market and a key driving force of the country's economic development. The annual sales of SMEs in 2016 came to NT\$11,764 billion, accounting for 30.71 percent of the total annual sales of all enterprises in Taiwan.

In order to bear witness to the development of SMEs in Taiwan, the Small and Medium Enterprise Administration, Ministry of Economic Affairs has published the Chinese and English version White Paper on SMEs in Taiwan on an annual basis since 1992 and 1998 respectively.

In Part One of the 2017 White Paper, an extensive array of statistical figures is provided to describe the development of SMEs from a wide variety of perspectives in 2016, which includes a comparison with their performance in previous years, as well as with the performance of large enterprises.

The government has been actively helping SMEs in various ways, ensuring an innovation- and business-friendly environment in which necessary resources are available to them. In Part Two, the major government policies and measures related to SMEs over the period of 2016 and 2017 are emphasized, and the resulting effects in 2016 are examined. These policies and measures can be categorized into five areas: (1) Improving Financial and Funding Services and Strengthening Investment in SMEs; (2) Enhancing R&D and Promoting Upgrade and Transformation for SMEs; (3) Strengthening Start-ups, and Incubation and Acceleration Mechanisms; (4) Revitalizing Local Industries by Outreach Development and Regional Branding; and (5) Other Government Measures to Support SMEs, such as government procurement, policy loans for special projects, and regulatory flexibility. The Appendix to the 2017 White Paper also provides important SME statistics covering the years from 2014 to 2016 for reference purposes.

Providing guidance to support the development of SMEs requires a long-term effort and commitment. It is hoped that this White Paper will give readers both in Taiwan and overseas a better understanding of Taiwan's SMEs, while at the same time providing a useful reference work to assist SME managers in their decision-making. Your comments on the content of the White Paper would be most welcome and appreciated.



Ming-Ji Wu

Director-General

Small and Medium Enterprise Administration

Ministry of Economic Affairs

November 2017

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Summary

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: recognized as export vanguard early on, key partners in supply chains and industrial clusters later, and recently focal point of local economy, entrepreneurship, and industrial upgrade and transformation. Even with the ever-increasing export momentum, 2017 Taiwan economic growth will need more bolster from government policy to increase its pace on industrial upgrading and transformation.

2017 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 on development, financial and funding and human resources.

As for the performance of SMEs in 2016, the number of SMEs reached a record level of 1,408,313 up 1.76 percent from 2015, and accounted for 97.73 percent of all enterprises in Taiwan. In addition, the number of employed persons in SMEs increased to 8,810,000 up 0.58 percent from 2015 and represented 78.19 percent of all employed persons in Taiwan. The annual sales of SMEs in 2016 came to NT\$11,764.7 billion, down slightly by 0.33 percent from 2015, accounting for 30.71 percent of the total annual sales of all enterprises in Taiwan. In 2016, a total of 95,320 new SMEs were created.

With regard to industrial structure in Taiwan, the number of SMEs is mostly concentrated in the Service sector, with the proportion being 79.79 percent. 48.44 percent of SMEs are in Wholesale and Retail Trade, followed by Accommodation and Food Services industry (10.71 percent), and Manufacturing (10.17 percent). By the forms of organization, 53.71 percent of SMEs are sole proprietorships. By regional distribution, 46.63 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 left side concentration of the distribution of the years in existence for SMEs: share of SMEs in existence below 10 years is 48.82 percent (vs. 22.29 percent of large enterprises). However, there were nearly 50 percent SMEs had been going concerns 10 years or more by the end of 2016.

Six Special Municipalities combined represent 77.02 percent sales and 73.12 percent employed persons of SMEs, and have 1,014,819 SMEs, representing 72.06 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. Taiwanese 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 were taken by relevant government departments to assist SMEs in funding and credit guarantee, marketing, talent cultivation, technology upgrading and transformation, start-up promotion, incubation and acceleration mechanism, free trade policy, and improved legal and regulatory environment.

The government's development strategy for SMEs in 2016-2017 has focused on (1) Improving Financial and Funding Services and Strengthening Investment in SMEs; (2) Enhancing R&D and Promoting Upgrade and Transformation for SMEs; (3) Strengthening Start-ups and Incubation & Acceleration Mechanism; (4) Revitalizing Local Industries by Outreach Development and Regional Branding; and (5) Other Government Measures to Support SMEs, such as government procurement, policy loans for special projects and regulatory flexibility. 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 guidance and measures recently instituted by the government include helping SMEs acquire financing guarantees for investments in new southbound countries, "Project for Promoting Smart Commercial Services in the Asian Silicon Valley Project," and the Amendments to the Article 36-2 of the Act for Development of Small and Medium Enterprises to increase the rate of employment among young people and increase the salaries of basic personnel.



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: recognized as export vanguard early on, key partners in supply chains and industrial clusters later, and recently focal point of local economy, entrepreneurship, and industrial upgrade and transformation. Official data published by central government of 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 scales, industries, and sectors. Second, SMEs' financial structure and source of finance as well as human resources utilization, working conditions, and talent development are analyzed.

Facing unfavorable circumstances in the global value chain (mainland China's rising supply chains, in particular), Taiwanese SMEs, especially those play an important role in the upstream supply chain supporting large enterprises' production and exports, have to consider strengthening their competitiveness by cooperating with large companies or form clusters in overcoming trade barriers. The main development strategy for SMEs going forward will focus on the trend of smart economy, which creates opportunities for SMEs to innovate and start new business ventures through Internet of Things (IoT) and to upgrade and transform themselves through smart manufacturing by strengthening their typical competitive advantage in flexible production with customization, rapid manufacturing, and creative vitality.

CHAPTER 1

Major Trends in the Development of SMEs

After the global financial crisis in 2008, the global economy faced “Low growth, low interest rates, low prices” situation, and as connecting with international scene, Taiwan’s economy slowed down. However, with the increasing recovery strength of global economy, in 2016 Taiwan’s economy growth rate rose from the negative in the first quarter to 2.79 (close to 3 percent) percent in the fourth quarter. Overall, the economy growth rate in 2016 was 1.48, which was 0.79 percent higher than that in 2015; the economy growth for 2017 is expected to grow to 2.11 percent.

This chapter consists of five sections to examine main indicators and survey results from government units to understand the development of Taiwan’s SMEs in 2016. Section I mainly discusses the general business performance of SMEs. There are four major indices (number of enterprises, total annual sales, domestic sales, and export sales) for observations in terms of scales, industries, and sectors, as well as a year-by-year comparison. Section II shows the distribution of the number of enterprises, employees, and total annual sales in different regions in terms of sectors and counties / cities. Section III focuses on the current situation of female enterprises based on the four indices mentioned above. Section IV covers 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 in May 2016 from the Department of Statistics, Ministry of Economic Affairs. Section V offers an overview of SMEs’ R&D expenditure.

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

I General Business Performance of SMEs

Three major indices — total annual sales, domestic sales, and export sales — show mild recession in 2016 from 2015; the number of enterprises, the number of employed persons improved slightly and total sales, export sales declined slightly during the same period.

As of 2016, there were a total of 1,440,958 enterprises in Taiwan, accounting for 97.73 percent of the total number of enterprises in Taiwan (1,408,313), a record high. SMEs are mostly concentrated in the Service sector, with the proportion being around 80 percent, of which wholesale and retail trade accounts for 48.44 percent. 53.71 percent SMEs are sole proprietorships. One of the major features of SMEs is that they are more flexible in market entry and exit than large enterprises. That explains the left side concentration of the distribution of the years in existence for SMEs: share

of SMEs in existence below 10 years is 48.82 percent while majority (77.72 percent) of large enterprises have been in existence for at least 10 years. Newly-established SMEs, defined as those that have been in existence for less than one year, account for 6.77 percent; about 30 percent SMEs have been in existence for less than 5 years. In 2016, SMEs' sales totaled NT\$11,764.7 billion, accounting for 30.71 percent of total sales of all enterprises; domestic share of total SMEs' sales accounted for 87.90.

SMEs are heavily concentrated in Northern Taiwan. In 2016, 46.63 percent (657 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: 1,015 thousand or 72.06 percent of total SMEs combined. In terms of employment, number of employed persons in SMEs reaches 4,032,000 (46.04 percent) in Northern Taiwan; Taiwan's Six Special Municipalities are the top six employers with total 6,442,000 (73.12 percent) employed persons.

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

1. A Total of 1,408,000 SMEs in 2016, a Record High

Number of SMEs set records several times after contraction during 2007-2009 global financial crisis. As of 2016, there were a total of 1,408,313 SMEs in Taiwan, accounting for 97.73 percent of the total number of enterprises in Taiwan, a record high. This figure represented an increase of 24,332 enterprises or 1.76 percent from 2015. However, the number of large enterprises was 32,645 enterprises, down 0.34 percent from 2015, accounting for 2.27 percent of the total number of enterprises (Table 1-1-1).

2. Number of Employed Persons in SMEs Reached 8,810,000 in 2016, a Record High

In 2016, number of employed persons in SMEs reached 8,810,000 of which 6,472,000 were paid employees; both were record high. However, the growth rate was down slightly after 2011; the growth rate of employed persons in SMEs in 2015 was a mere 0.57 percent. SMEs contributed 78.19 percent of total employed persons and 72.50 percent of total paid employees (Table 1-1-1).

3. About 80 Percent of SMEs in Service Sector, Down Slightly

In terms of the sectors, shares of SMEs by sectors have been quite stable and share of SMEs in industry grew slightly while share of SMEs in service decreased slightly after 2010. In 2016, SMEs are mostly concentrated in the service sector, with the proportion being 79.79 percent, and the industrial sector accounts for 19.40 percent. As of 2016, there were a total of 1,123,729 SMEs in service sector, representing an increase of 24,710 SMEs or 1.86 percent from 2015; there were a total of 273,204 SMEs in industrial sector, representing a growth at 1.55 percent, slightly slower than that in service sector (Table 1-1-2).

Table 1-1-1 Number of Enterprises, Annual Sales, Number of Employed Persons and Number of Paid Employees in Taiwan, 2015-2016

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

Indicator \ Enterprise size	All enterprises		SMEs		Large enterprises	
	2015	2016	2015	2016	2015	2016
No. of enterprises	1,416,738	1,440,958	1,383,981	1,408,313	32,757	32,645
Share of total	100.00	100.00	97.69	97.73	2.31	2.27
Annual growth rate	2.21	1.71	2.29	1.76	-0.97	-0.34
Total sales	38,875,340	38,312,769	11,803,115	11,764,677	27,072,225	26,548,091
Share of total	100.00	100.00	30.36	30.71	69.64	69.29
Annual growth rate	-3.39	-1.45	-0.31	-0.33	-4.68	-1.94
Domestic sales	29,158,853	28,848,507	10,325,260	10,340,886	18,833,593	18,507,621
Share of total	100.00	100.00	35.41	35.85	64.59	64.15
Annual growth rate	-2.87	-1.06	-0.19	0.15	-4.27	-1.73
Export sales	9,716,487	9,464,262	1,477,855	1,423,791	8,238,632	8,040,471
Share of total	100.00	100.00	15.21	15.04	84.79	84.96
Annual growth rate	-4.94	-2.60	-1.13	-3.66	-5.59	-2.41
No. of employed persons	11,198	11,267	8,759	8,810	1,415	1,432
Share of total	100.00	100.00	78.22	78.19	12.64	12.71
Annual growth rate	1.07	0.62	1.03	0.57	2.04	1.20
No. of paid employees	8,860	8,926	6,424	6,472	1,413	1,429
Share of total	100.00	100.00	72.50	72.50	15.94	16.01
Annual growth rate	1.41	0.74	1.49	0.75	1.99	1.13

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 1,025,000 government employees, accounting for 9.10 percent of all employed persons and 11.48 percent of all paid employees.
3. 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 or 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.

Source:

1. Fiscal Information Agency, Ministry of Finance, Value-Added Business Tax (VAT) data (2015-2016).
2. Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data (2015-2016).

Table 1-1-2 Shares of SMEs in Taiwan by Sector, 2010-2016

Unit: Enterprises; million NT\$; %

Sector \ Year	2010	2011	2012	2013	2014	2015	2016
All SMEs	1,247,998	1,279,784	1,306,729	1,331,182	1,353,049	1,383,981	1,408,313
Agricultural sector	0.91	0.90	0.90	0.90	0.85	0.84	0.81
Industrial sector	18.67	19.01	19.07	19.19	19.43	19.45	19.40
Service sector	80.42	80.09	80.02	79.91	79.72	79.72	79.79
Total sales	10,709,005	11,226,933	11,381,770	11,321,842	11,839,868	11,803,115	11,764,677
Agricultural sector	0.17	0.16	0.18	0.19	0.20	0.20	0.21
Industrial sector	49.41	50.13	50.13	48.67	49.27	48.23	47.41
Service sector	50.42	49.7	49.69	51.13	50.53	51.56	52.38
Domestic sales	9,088,972	9,567,948	9,633,690	9,897,617	10,345,095	10,325,260	10,340,886
Agricultural sector	0.18	0.17	0.19	0.19	0.20	0.20	0.20
Industrial sector	45.47	46.28	45.65	45.72	46.23	45.13	44.35
Service sector	54.36	53.55	54.16	54.09	53.58	54.68	55.45
Export sales	1,620,033	1,649,985	1,748,080	1,424,225	1,494,773	1,477,855	1,423,791
Agricultural sector	0.14	0.12	0.10	0.19	0.22	0.23	0.23
Industrial sector	71.52	72.5	74.82	69.21	70.36	69.94	69.66
Service sector	28.34	27.38	25.08	30.60	29.42	29.83	30.11

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2010-2016).

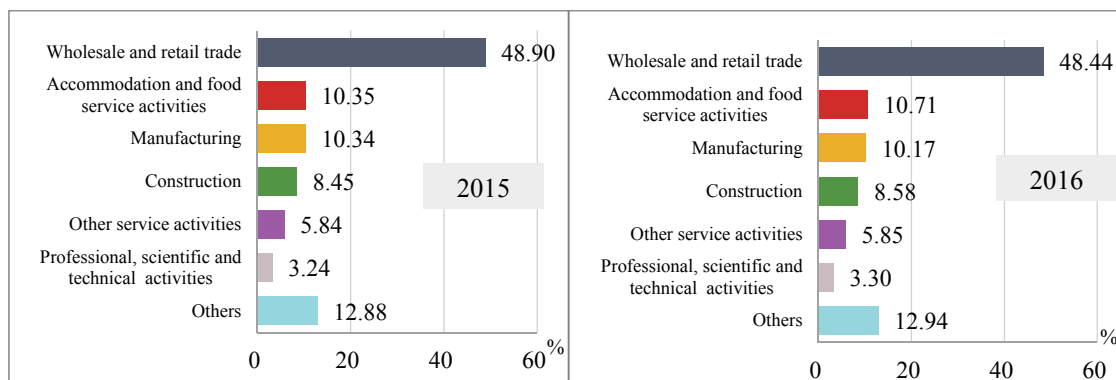
4. About 50 Percent SMEs Were in Wholesale and Retail Trade

In terms of the industries, 48.44 percent of SMEs are in wholesale and retail trade, a total of 682,218 in 2016 (up 5,427 from 2015), followed by accommodation and food service activities with 10.71 percent of SMEs, a total of 150,893 (up 7,716), and 3rd in manufacturing with 10.17 percent, a total of 143,184, followed by construction with 8.58 percent, other service activities with 3.30 percent, professional, scientific and technical activities with 3.30 percent (Figure 1-1-1).

5. Domestic Share of Total Sales of SMEs in 2016 Accounted for 88 Percent

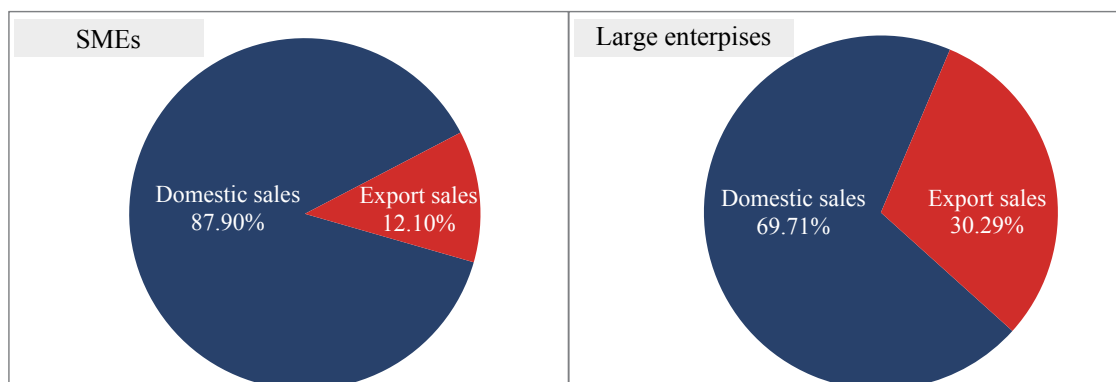
In 2016, SMEs' sales totaled NT\$11,764.7 billion, accounting for 30.71 percent of total sales of all enterprises; domestic share of total SMEs' sales accounted for 87.90 percent (NT\$10,340.9 billion), with SMEs' domestic sales up 0.15 percent from 2015. Large enterprises' sales totaled NT\$26,548.1 billion; domestic share of total large enterprises' sales accounted for 69.71 percent (NT\$18,507.6 billion), showing SMEs were more domestically oriented than large enterprises (Figure 1-1-2 and Table 1-1-1).

Figure 1-1-1 Number of SMEs Distribution by Industry, 2015-2016



Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2015-2016.

Figure 1-1-2 Shares of Domestic and Export Sales in Total Sales by Enterprise Size, 2016



Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2016.

6. Total Export Sales of SMEs Down 3.66 Percent in 2016

Taiwan's economic growth rate in 2016 was a mere 1.48 percent, 0.76 percentage points up from the growth rate of 0.72 percent in 2015. The total sales of SMEs, total domestic sales of SMEs, and total export sales of SMEs fell by 0.33 percent, rose by 0.15 percent, and fell by 3.66 percent respectively (Table 1-1-1).

2016 SMEs' export propensity (SME export sales' share of the SMEs' total sales) was at 12.11 percent, down 0.41 percentage points from 2015; 2016 SMEs' export contribution (SME export sales' share of all enterprises' export sales) was at 15.04 percent, down 0.17 percentage points from 2015, which is relatively lower than the history records, still lower than SMEs' export contribution level in 2009 (Table 1-1-3).

Table 1-1-3 Number and Sales Performance of SMEs, 2010-2016

Unit: Enterprises; million NT\$; %

Indicator \ Year	2010	2011	2012	2013	2014	2015	2016
No. of SMEs	1,247,998	1,279,784	1,306,729	1,331,182	1,353,049	1,383,981	1,408,313
Ratio	97.68	97.63	97.67	97.64	97.61	97.69	97.73
Annual growth rate	1.30	2.55	2.11	1.87	1.64	2.29	1.76
SME total sales	10,709,005	11,226,933	11,381,770	11,321,842	11,839,868	11,803,115	11,764,677
Ratio	29.55	29.64	30.23	29.44	29.42	30.36	30.71
Annual growth rate	16.54	4.84	1.38	-0.53	4.58	-0.31	-0.33
SME domestic sales	9,088,972	9,567,948	9,633,690	9,897,617	10,345,095	10,325,260	10,340,886
Ratio	34.67	34.51	34.66	34.58	34.46	35.41	35.85
Annual growth rate	15.44	5.27	0.69	2.74	4.52	-0.19	0.15
SME export sales	1,620,033	1,649,985	1,748,080	1,424,225	1,494,773	1,477,855	1,423,791
Ratio (Export contribution)	16.16	16.29	17.74	14.48	14.62	15.21	15.04
Export propensity	15.13	14.70	15.36	12.58	12.62	12.52	12.11
Annual growth rate	23.07	1.85	5.95	-18.53	4.95	-1.13	-3.66

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 (2010-2016).

The relatively lower export contribution rate and the low export propensity of SMEs are generally attributed to the relative strength in New Taiwan Dollar (NTD), the transformation in the structure of Taiwan's industries, and external impacts. Competing countries' aggressive monetary easing policy made Taiwan exporters less competitive through currency appreciation. Besides, in recent years, mainland China and other neighboring countries adopted aggressive export expansion and import substitution strategy that posed significant challenge to Taiwan's export. Some of Taiwan's key roles in the international supply chain were replaced by competitors. Slow progress in business environment and regional economic integration also eroded Taiwan's competitiveness.

The low total exports of SMEs in recent years were mainly driven by the manufacturing sector export. We show the breakdown of SMEs exports by industry in manufacturing sector in Appendix C Table C-9. In terms of export amount within the manufacturing sector, the dominant driver was electronic parts and components in the period of 2012 to 2015. It was down about 50 percent to NT\$287.53 billion in 2013 mainly due to European debt crisis. It rose slightly about 2.70 percent to NT\$295.3 billion in 2014 (28.44 percent of all manufacturing sector export), and then declined slightly 1.54 percent in 2015 primarily due to weak global recovery and intensified supply chain competition from developing and emerging markets including mainland China and ASEAN member countries, amounting to NT\$290.75 billion. In 2016, SMEs' electronic parts and components exports rose again by 4.88 percent, amounting to NT\$304.95 billion.

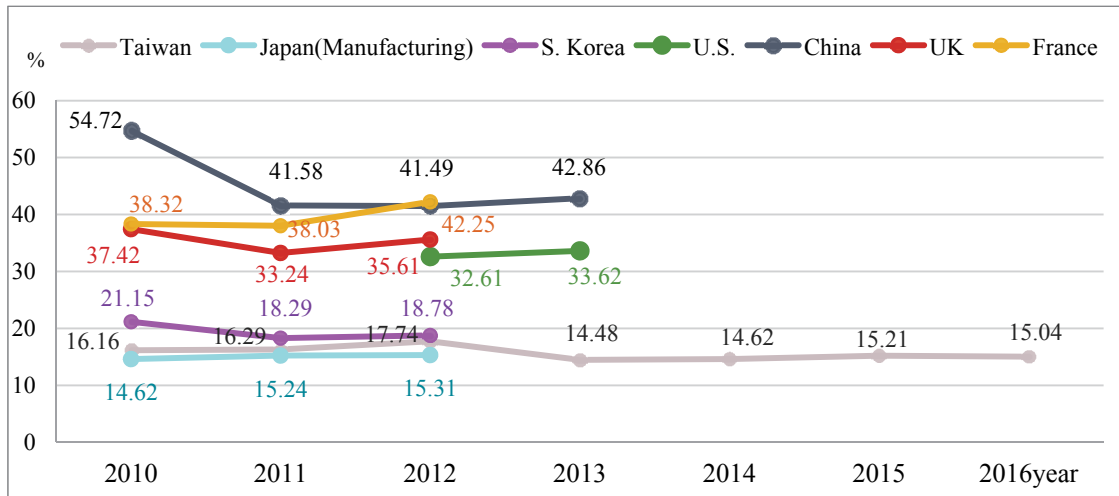
The next four industries contributing the most to SMEs' 2015 exports were machinery and equipment, electrical equipment, fabricated metal products, computers, electronic and optical products, plastic products, and other transport equipment manufacturing. The first three industries in 2016 remain the same, and the fourth, computers, electronic and optical products manufacturing, fell hugely to seventh due to falling prices driven by plunging prices of oil. Plastic products ranked No. 5 in 2015 but rose to fourth in 2016 due to falling prices driven by plunging prices of oil. Other transportation equipment squeezed into fifth. However, although the total export growth rate fell by 3.66 percent, some industries included textiles manufacturing (annual growth rate up 2.31 percent), paper and paper products (up 8.37 percent), petroleum and coal products manufacturing (up 28.57 percent), chemical material, fertilizers and nitrogen compounds, plastic and rubber materials, man-made fibres (up 19.01 percent), electronic parts and components manufacturing (up 4.88 percent) were bright spots with growing exports in 2016. In contrast, computers, electronic and optical products manufacturing (down 41.81 percent), wood and of products of wood and bamboo (down 23.83 percent), basic metal manufacturing (down 21.31 percent), repair and installation of industrial machinery and equipment (down 13.00 percent), leather, fur and related products (down 12.40) and non-metallic mineral products manufacturing (down 10.50 percent) showed two-digit decrease, implied that the slump of the foreign demand, China's red supply-chain, the emerge and competition of emerging countries (such as South-east countries) might be the reasons of Taiwan's slowdown of export growth.

The total sales of large enterprises, total domestic sales of large enterprises, and total export sales of large enterprises in 2016 fell by 1.94 percent, 1.73 percent, and 2.41 percent respectively, for worse than those of SMEs, showing low resilience to economic stress (Table 1-1-1).

SMEs in different countries play different roles in globalization (measured by export contribution). Take Japan and South Korea, Taiwan's main competitors, for examples:

Japan SMEs used to be more domestic market oriented. Due to globalization and cost concern, Japanese large manufacturers have aggressively outsourced and relocated businesses globally. This plus intensified competition from imported products in domestic market with limited growth, has made more Japan SMEs turn to overseas markets for expansion, as indicated by the modest rise of their export contribution from 14.15 percent in 2009 to 15.31 percent in 2012 (Figure 1-1-3).

Although the global success of chaebol (a typical business conglomerate structure in South Korea) such as Samsung and Hyundai have boosted South Korea's standing abroad, at home their economic dominance has prompted concerns that they have developed a near-monopoly on the country's most talented workers and capital, while restricting the prospects of SMEs that supply and compete with them. Since 1980s, the government has pared back the dominance of the chaebol and allocated more resources to SMEs. In 1990s, SMEs' export contribution passed that of large enterprises for the first time. However, facing challenge of cost control, technology and business transformation, and heightened price competition from cheap products of mainland China (South Korea have signed FTAs with many countries including mainland China), South Korea SMEs' export contribution showed similar volatile but generally downward trend (2010-2012) to that of Taiwan SMEs (2010-2014) (Figure 1-1-3).

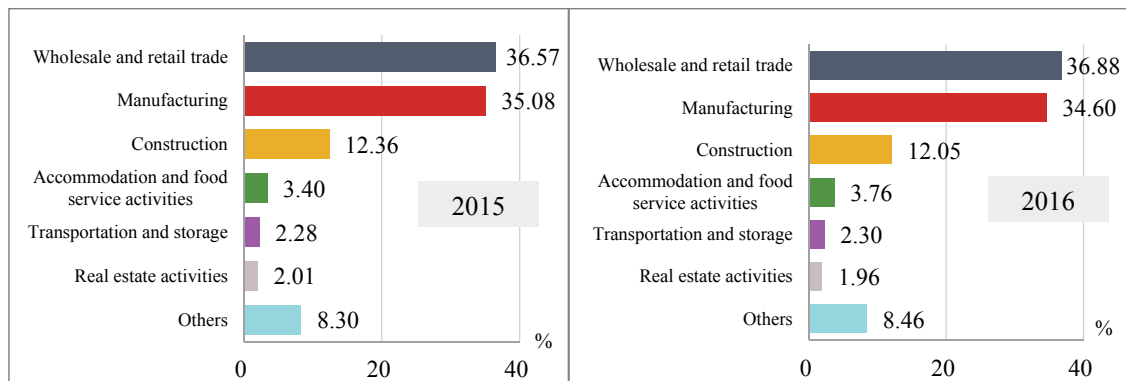
Figure 1-1-3 Comparison of SME Export Contributions by Country

Note: Export contribution = (the export value of SMEs / the export value of all enterprises) × 100%.

Source: Taiwan data from *White Paper on SMEs in Taiwan*; Japan data collected by the Japan Small and Medium Enterprise Agency; U.S. data from the U.S. Census Bureau database; Korean data collected by the Korean Statistical Information Service; the rest from OECD database.

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

In terms of shares of sales by industry, top three industries in 2016 were wholesale and retail trade with share of 36.88 percent (NT\$4,338.5 billion), followed by manufacturing share of 34.60 percent (NT\$4,070.7 billion) and construction share of 12.05 percent (NT\$1,417.2 billion). Sales of the top three industries combined accounted for 83.53 percent of total sales of SMEs (Figure 1-1-4).

Figure 1-1-4 Distribution of Sales in SMEs by Industry, 2015-2016

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2015-2016.

8. About 95 Thousand New Enterprises in 2016 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 2016, there were 95,486 newly-established SMEs in Taiwan, representing 99.83 percent of the total of 95,320 newly-established enterprises. 96.31 percent newly-established SMEs' total sales came from domestic market in 2016, slightly higher than 71.75 percent for newly-established large enterprises (Table 1-1-4).

Table 1-1-4 Number and Sales Performance of Newly-Established Enterprises, 2016

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	95,486	95,320	99.83	-	166	0.17	-
Total sales	233,403	164,545	70.50	100.00	68,858	29.50	100.00
Domestic sales	207,876	158,469	76.23	96.31	49,407	23.77	71.75
Export sales	25,527	6,076	23.80	3.69	19,451	76.20	28.25

Note: "-": not applicable. Source: Fiscal Information Agency, Ministry of Finance, VAT data (2016).

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

In terms of the sectors, the service sector accounted for the largest number of newly-established SMEs (80,213 or 84.15 percent of newly-established SMEs) in 2016, and accounted for about 78.41 percent sales and 77.40 percent exports of newly-established SMEs (Table 1-1-5).

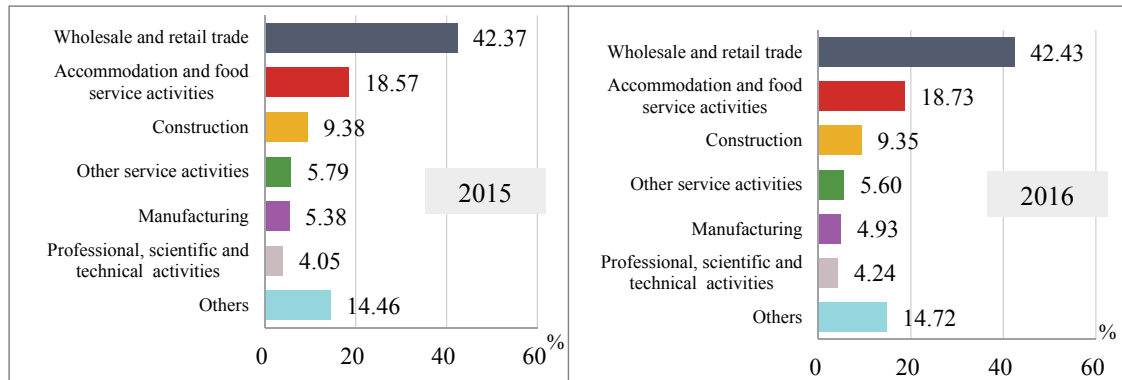
Table 1-1-5 Number and Sales Performance of Newly-Established SMEs by Sector, 2016

Unit: Enterprises; million NT\$; %

Sector	No. of enterprises	Share of total	Total sales	Share of total	Domestic sales	Share of total	Export sales	Share of total
All sectors	95,320	100.00	164,545	100.00	158,469	100.00	6,076	100.00
Agricultural sector	844	0.89	574	0.35	549	0.35	25	0.41
Industrial sector	14,263	14.96	34,952	21.24	33,604	21.21	1,348	22.19
Service sector	80,213	84.15	129,019	78.41	124,317	78.45	4,703	77.40

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2016).

In terms of the industries, 42.43 percent of newly-established SMEs were in wholesale and retail trade, followed by accommodation and food service activities at 18.73 percent, and construction at 9.35 percent in 2016 (Figure 1-1-5).

Figure 1-1-5 Distribution of Number of Newly-Established SMEs by Industry, 2015-2016

Source : Fiscal Information Agency, Ministry of Finance, VAT data, 2015-2016.

10. Newly-Established SMEs in Accommodation and Food Service Activities Showed Good Growth and Performance

In 2016, number and sales of newly-established SMEs declined by 3.05 percent (or 3,000 SMEs) and 9.89 percent respectively from 2015. Compared to 2015, the numbers of newly-established SMEs in agriculture, forestry, fishing and animal husbandry, electricity and gas supply, water supply and remediation activities, transportation and storage, information and communication, professional, scientific and technical activities, supporting service activities and education grew in 2016; the sales of newly-established SMEs in electricity and gas supply, transportation and storage, accommodation and food service activities, information and communication, financial and insurance activities, professional, scientific and technical activities, supporting service activities, human health and social work activities and arts, entertainment and recreation grew. Especially, there were double-digit and above growth in both firm numbers and sales of newly-established SMEs in electricity and gas supply (12.72 percent and 12.47 percent), showed relatively excellent industry prospects. In contrast, manufacturing industry decreased in both firm numbers and sales of newly-established SMEs, down 10.99 percent and down 46.52 percent respectively, implied the business environment was not friendly to newly-established SMEs in manufacturing. Also, both firm numbers and sales of newly-established SMEs in real estate industry showed two-digit decrease, implied the industrial recession under the influence of economic depression and policies made newly-established SMEs hard to enter those markets.

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

As of 2016, 6.77 percent of SMEs had been in existence for less than one year. 30.51 percent of SMEs had been operating within five years, and 48.82 percent within 10 years. The corresponding shares for large enterprises were only 0.51 percent, 9.01 percent and 22.29 percent, respectively. 77.72 percent large enterprises had been in existence for 10 years or more. These figures show that, in terms of market entry and exit, SMEs display more flexibility than large enterprises.

However, share of SMEs in existence for 20 years or more was 25.37 percent, far below 44.47 percent of large enterprises in 2016 (similar comparison seen in previous years). This shows the business succession / transition remains a major challenge to SMEs as going concerns. Further, compared to large enterprises, SMEs in existence for 20 years or more suffered significant sales decline and “the crisis of the elderly age” as their first-generation entrepreneurs got into old age and lost their vitality and creativity. It has become an important issue for sustainable development of SMEs to rediscover and activate the entrepreneurial spirit, combined with sound “second-generation succession” and business transformation strategy. To upgrade SMEs with high potential to Mittelstand, government has launched programs recently to offer guidance and assistance to 50 SMEs with high potential per year, by effectively using talent, technology, intellectual property and brand marketing guidance resources, in combination with alliance companies to build a supply chain ecosystem (Table 1-1-6).

Table 1-1-6 Shares of SMEs by Particular Ages, 2011-2016

Unit: Enterprises; %

Age \ Year	2011	2012	2013	2014	2015	2016	
						SMEs	Large enterprises
Total no. of SMEs	1,279,784	1,306,729	1,331,182	1,353,049	1,383,981	1,408,313	32,645
Less than 1 year	7.78	7.34	7.42	6.94	7.10	6.77	0.51
1 - 2 years	7.20	7.44	7.12	7.59	6.86	7.04	1.82
2 - 3 years	5.88	6.15	6.37	6.16	6.62	5.92	2.06
3 - 4 years	5.04	5.14	5.39	5.61	5.46	5.85	2.35
4 - 5 years	4.79	4.51	4.59	4.80	5.03	4.93	2.27
5 - 10 years	22.30	21.53	20.43	19.57	18.50	18.31	13.28
10 - 20 years	25.05	24.93	25.17	25.03	25.47	25.81	33.25
20 years or more	21.96	22.95	23.52	24.30	24.96	25.37	44.47

Source : Fiscal Information Agency, Ministry of Finance, VAT data (2010-2015).

12. Over 55 Percent SMEs Are Sole Proprietorships

Sole proprietorships constituted the largest group of SMEs, with 756,439 firms or 53.71 percent of the total, followed by limited corporations, with 429,707 firms (30.51 percent of the total), and corporations limited, with 119,474 firms (8.48 percent). These three types accounted for a combined total of 92.70 percent of all SMEs in Taiwan. On the other hand, corporations limited constituted the largest group of larger enterprises, at 55.29 percent of the total, followed by limited corporations at 22.62 percent and subsidiaries of domestic company at 10.86 percent. These three types accounted for a combined total of 88.77 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, 2016

Unit: Enterprises; %

Enterprise size Organization	SMEs		Large enterprises	
	Number of enterprises	Share of total	Number of enterprises	Share of total
Total	1,408,313	100.00	32,645	100.00
Corporation limited	119,474	8.48	18,050	55.29
Limited corporation	429,707	30.51	7,383	22.62
Unlimited corporation	100	0.01	0	0.00
Unlimited corporation with limited liability shareholders	27	0.00	0	0.00
Partnership	28,878	2.05	95	0.29
Sole proprietorship	756,439	53.71	130	0.40
Subsidiary of domestic company	33,693	2.39	3,545	10.86
Subsidiary of foreign company	4,449	0.32	863	2.64
Others	35,546	2.52	2,579	7.90

Note:

1. Representative office of foreign company (82 representative offices in 2014) in the form of organization is excluded from the data since 2014.
2. Others in the form of organization denote business entities not in the form of any type of companies, partnership or sole proprietorship. Majority of business entities in this form is the offices, branches or retail shops of domestic companies, not counted as subsidiaries of those companies. Besides, the share of total business entities in others for wholesale and retail trade is 53.74%.
3. “-” represents no data available.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2016).

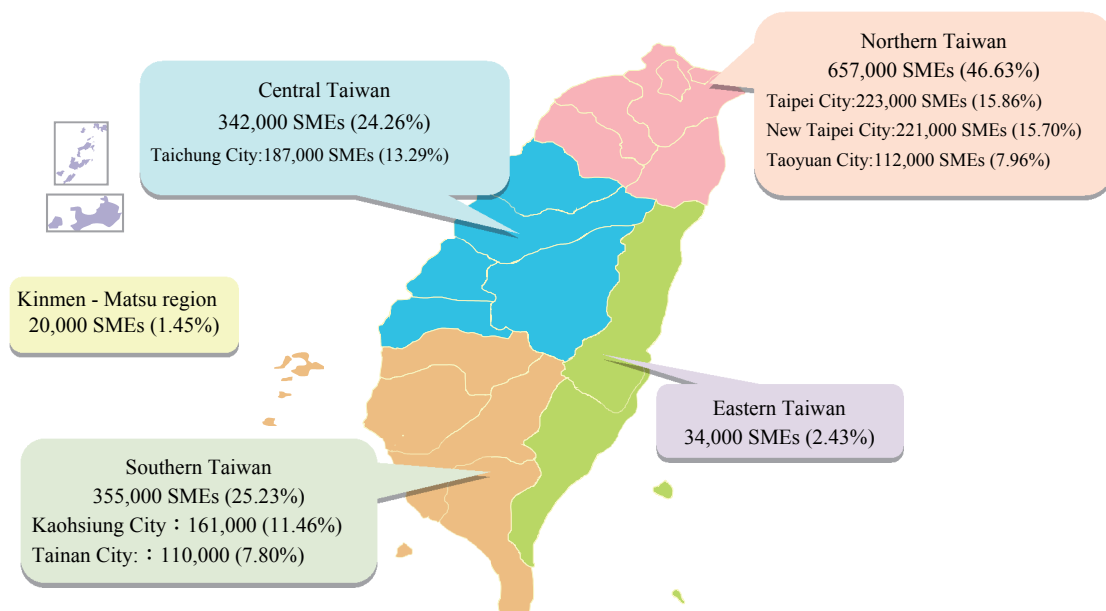
II SMEs and the Regional Development

1. About 47 Percent SMEs Are Concentrated in Northern Taiwan

In regional terms, in 2016, 46.60 percent (657 thousand) of SMEs were concentrated in Northern Taiwan; 24.26 percent (342 thousand) were located in Central Taiwan and 25.23 percent (355 thousand) in Southern Taiwan (Figure 1-2-1).

Taiwan's Six Special Municipalities are the top six with largest number of SMEs: 1,015 thousand or 72.06 percent of total SMEs combined in 2016. 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: 223 thousand or 15.86 percent of all SMEs, followed by 221 thousand or 15.70 percent in 2nd ranked New Taipei City, 13.29 percent in 3rd ranked Taichung City, 11.46 percent in 4th ranked Kaohsiung City, 7.96 percent in 5th ranked Taoyuan City, and 7.80 percent in 6th ranked Tainan City. Compared to 2015, the Six Special Municipalities reported rising numbers of SMEs. Taichung City showed the largest growth (2.60 percent) in number of SMEs (Table 1-2-1).

Figure 1-2-1 The Distribution of SMEs by Region in 2016



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, 2016.

Table 1-2-1 Number and Total Sales of SMEs in Taiwan's Six Special Municipalities by Size of Enterprise, 2016

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	1,440,958	1,041,983	233,720	226,133	114,888	190,829	111,733	164,680
SMEs	1,408,313	1,014,819	223,300	221,040	112,083	187,112	109,849	161,435
Share of total	100.00	72.06	15.86	15.70	7.96	13.29	7.80	11.46
Annual growth rate	1.76	1.87	1.39	1.93	2.59	2.60	1.70	1.24
Large enterprise	32,645	27,164	10,420	5,093	2,805	3,717	1,884	3,245
Total sales								
All enterprises	38,312,768	30,082,001	12,048,958	4,468,150	3,384,878	3,759,269	2,189,079	4,231,667
SMEs	11,764,677	9,060,974	1,931,312	1,937,034	1,232,510	1,726,263	909,878	1,323,977
Share of total	100.00	77.02	16.42	16.46	10.48	14.67	7.73	11.25
Annual growth rate	-0.33	-0.34	0.03	-1.08	0.49	0.12	-2.22	0.16
Large enterprise	26,548,092	20,911,980	10,117,646	2,510,701	2,052,013	2,033,007	1,306,759	2,891,855

Note: Figures in total include 22 cities in Northern, Central, Southern, Eastern Taiwan and the Kinmen-Matsu region.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2016).

Examination of the distribution of SMEs by sectors in 2016 shows that, Kaohsiung City had the largest share of agricultural SMEs at 29.57 percent, followed by Ilan County (11.17 percent), and New Taipei City (7.12 percent); New Taipei City had the largest share of industrial SMEs, especially, while Taipei City, the commercial and financial center of Taiwan, had the largest share of service SMEs.

Industry clusters or concentration usually lead to positive economic benefits but at the same time widens the gap between urban and rural areas. However, a more feasible development strategy is not to reverse the rural-urban gap, but to take deep dive into the characteristics of rural counties and help local SMEs develop products of local specialties.

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

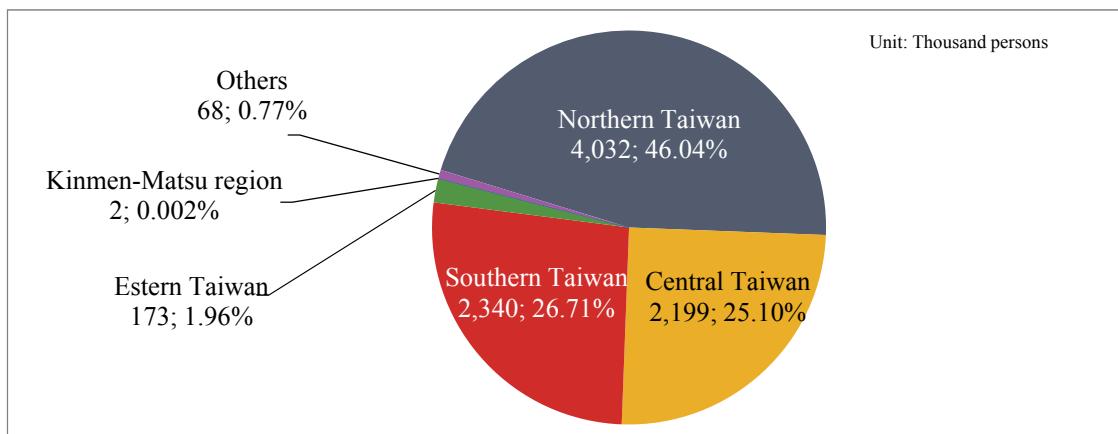
Examination of SME sales in 2016 by city shows that about 77 percent of all SME sales came from the Six Special Municipalities, of which the largest share of overall SME sales was held by those SMEs located in New Taipei City with 16.46 percent of total sales, followed by Taipei City in the second place with 16.42 percent, Taichung City (14.67 percent), Kaohsiung City (11.25 percent), Taoyuan City (10.48 percent), and Tainan City (7.73 percent).

Compared to 2015, two of the Six Special Municipalities saw rising sales in 2016 (Taipei City, Taoyuan City, Taichung City and Kaohsiung City, up 0.03 percent, 0.49 percent, 0.12 percent and 0.16 percent respectively), while two of the Six Special Municipalities saw falling sales in 2016 (New Taipei City and Tainan City, down 1.08 percent and 2.22 percent (Table 1-2-1).

3. Northern Region Had about 46 Percent of Employed Persons by SMEs

As can be seen from the 2016 data presented in Figure 1-2-2, of the four regions, Northern Taiwan had the largest number of employed persons by SMEs (4,032 thousand or 46.04 percent), followed by Southern Taiwan (2,340 thousand or 26.71 percent), and Central Taiwan (2,199 thousand or 25.10 percent).

Figure 1-2-2 Distribution of SME Employment by Region, 2016



Notes: Others denote domicile record of an employed person is in Taiwan but works for SMEs overseas in 2016.

Source: DGBAS, Manpower Survey data, 2016.

4. New Taipei and Taipei City Combined Had over 31 Percent of Employed Persons by SMEs

Of the Six Special Municipalities, New Taipei City had the largest number of employed persons by SMEs (1,375 thousand or 15.60 percent), followed by Taipei City (1,342 thousand or 15.23 percent), and Taichung City (1,191 thousand or 13.52 percent). The Six Special Municipalities had combined employment of 6,442 thousand or 73.12 percent of all people employed by SMEs (Table 1-2-2).

Table 1-2-2 Number of Employed Persons in Taiwan's Six Special Municipalities, 2016

Unit: Thousand persons; %

Enterprise size \ Major cities	Total	Combined total for the Six Special Municipalities	Taipei City	New Taipei City	Taoyuan City	Taichung City	Tainan City	Kaohsiung City
All enterprises	11,267	8,235	1,893	1,618	1,073	1,413	940	1,298
SMEs	8,810	6,442	1,342	1,375	753	1,191	756	1,025
Share of total	100.00	73.12	15.23	15.60	8.55	13.52	8.58	11.64
Large enterprises	1,432	1,078	301	133	246	123	116	159
Share of total	100.00	75.29	21.05	9.29	17.16	8.58	8.10	11.11
Government employees	1,025	715	250	110	74	99	68	114

Note: Share of total in the table represents the percentage of employed persons in certain city (or cities) of all employed persons.

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

III Female-Owned SMEs

Based on data from Fiscal Information Agency, Ministry of Finance, the gender of a person is determined 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. In addition, it is not possible to eliminate those enterprises where a woman is the nominal owner but is not actually running the business, or where the female “owner” actually controls only a minority of the firm’s shares. 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 Account for over 30 Percent of All Enterprises; about 99 Percent Female-Owned Enterprises Are SMEs

In 2016, there were 1,440,958 enterprises in Taiwan for which the sex of the business owner could be determined. Of these, 516,249 (35.83 percent of the total) were owned by women. Female-owned enterprises increased by 7,548 or 1.48 percent from 2015. 99.22 percent (512,214) of female-owned enterprises were SMEs (Table 1-3-1).

Table 1-3-1 Number and Sales Performance of Enterprises by Sex of Business Owner, 2016

Unit: Enterprises; million NT\$; %

Indicator \ Enterprise size	All enterprises	SMEs	Large enterprises
No. of enterprises	1,440,958	1,408,313	32,645
Female-owned enterprises	516,249	512,214	4,035
Share of total ¹	100.00	99.22	0.78
Share of total ²	35.83	36.37	12.36
Male-owned enterprises	907,363	883,344	24,019
Total sales	38,312,770	11,764,678	26,548,092
Female-owned enterprises	5,546,873	2,917,560	2,629,313
Share of total ¹	100.00	52.60	47.40
Share of total ²	14.48	24.80	9.90
Male-owned enterprises	28,162,848	8,430,769	19,732,079
Domestic sales	28,848,507	10,340,886	18,507,621
Female-owned enterprises	4,761,819	2,654,816	2,107,003
Share of total ¹	100.00	55.75	44.25
Share of total ²	16.51	25.67	11.38
Male-owned enterprises	21,407,443	7,419,993	13,987,450
Export sales	9,464,261	1,423,791	8,040,470
Female-owned enterprises	785,053	262,744	522,309
Share of total ¹	100.00	33.47	66.53
Share of total ²	8.29	18.45	6.50
Male-owned enterprises	6,755,404	1,010,775	5,744,629

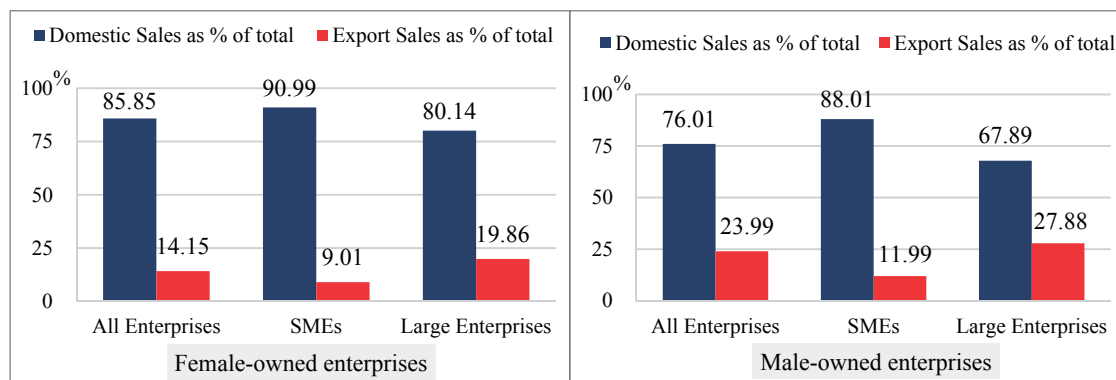
Note:

1. Whether an enterprise should be classified as male-owned or female-owned was determined using the registered identity of the business owner.
2. 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.
3. Share of total 1 in the table represents the percentages of SMEs (large enterprises) in all female-owned enterprises; share of total 2 represents the percentage of female-owned enterprises in all enterprises.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2016).

2. Female-Owned Enterprises Are More Oriented toward Domestic Market, Female-Owned SMEs in Particular

In 2016, domestic sales accounted for a dominant 90.99 percent of the total sales of female-owned SMEs, with export sales accounting for only 9.01 percent, (giving a disparity of 81.98 percentage points). For male-owned SMEs, export sales accounted for 11.99 percent and domestic sales accounted for 88.01 percent, giving a disparity of 79.02 percentage points (Figure 1-3-1).

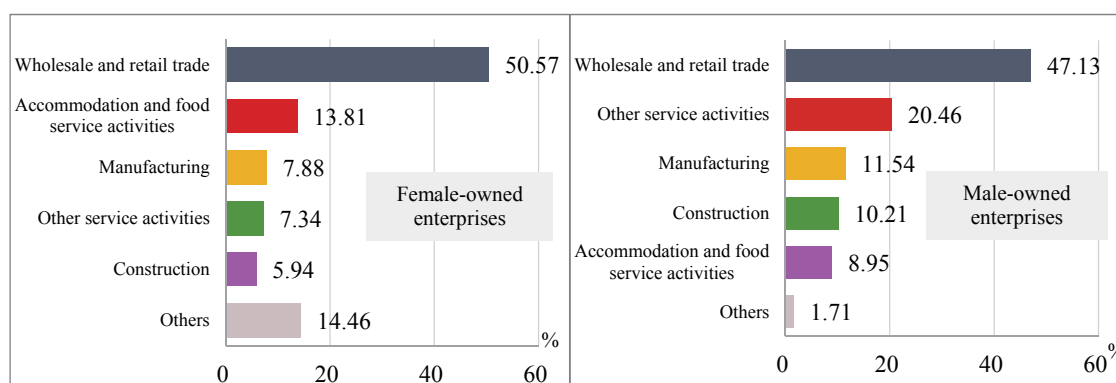
Figure 1-3-1 Shares of Domestic Sales and Export Sales by Sex of Business Owner, 2016


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

3. Female-Owned SMEs Are Heavily Concentrated in the Wholesale and Retail Trade

The service sector accounts for the largest share of the total number of female-owned enterprises at 85 percent, compared to 76 percent share of male-owned enterprises (Appendix C Table C-8).

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, and domestic sales, at 50.57 percent, 43.70 percent, and 43.30 percent in 2016. Manufacturing industry accounted for the largest share of female-owned SMEs in export sales, at 49.29 percent in 2016 (Appendix C Table C-8).

Figure 1-3-2 Industry Distribution of SMEs by Sex of Business Owner, 2016


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

The same top five industries accounts for the largest share of the total number of both male and female-owned SMEs with slightly different order. For female-owned SMEs in 2016, the order is wholesale and retail trade at 50.57 percent, followed by accommodation and food service activities at 13.81 percent, construction at 7.88 percent, other service activities at 7.34 percent, and manufacturing at 5.94 percent. For male-owned SMEs, the order is wholesale and retail trade at 47.13

percent, followed by other service activities at 20.46 percent, manufacturing at 11.54 percent, construction at 10.21 percent, and accommodation and food service activities at 8.95 percent (Figure 1-3-2).

4. 61 Percent of Female-Owned Enterprises Are Sole Proprietorships

Sole proprietorships were the most common form of organization for both female-owned enterprises (60.79 percent) and male-owned enterprises (50.31 percent), followed by limited corporations at 28.04 percent and 31.81 percent, and corporation limited at 6.01 percent and 9.75 percent respectively (Table 1-3-2).

Table 1-3-2 Number of Different Form of Enterprises by Sex of Business Owner, 2016

Unit: Enterprises; %

Indicator \ Sex of owner	All enterprises		Female-owned enterprises		Male-owned enterprises	
	No. of enterprises	Share of total	No. of enterprises	Share of total	No. of enterprises	Share of total
Total	1,408,313	100.00	512,214	100.00	883,344	100.00
Corporation limited	119,474	8.48	30,776	6.01	86,141	9.75
Limited corporation	429,707	30.51	143,634	28.04	281,011	31.81
Unlimited corporation	100	0.01	37	0.01	58	0.01
Unlimited corporation with limited liability shareholders	27	0.00	5	0.00	20	0.00
Partnership	28,878	2.05	10,464	2.04	18,389	2.08
Sole proprietorship	756,439	53.71	311,367	60.79	444,399	50.31
Subsidiary of domestic company	4,449	0.32	973	0.19	1,568	0.18
Subsidiary of foreign company	33,693	2.39	6,432	1.26	26,110	2.96
Others	35,546	2.52	8,526	1.66	25,648	2.90

Note:

1. Representative office of foreign company in the form of organization is excluded from the data since 2014..
2. Others in the form of organization denote business entities not in the form of any type of companies, partnership or sole proprietorship. Majority of business entities in this form is the offices, branches or retail shops of domestic companies, not counted as subsidiaries of those companies. Besides, the share of total business entities in others for wholesale and retail trade is 53.74%.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2016).

5. 50.48 Percent of Female-Owned SMEs Had Been in Existence within 10 Years, Higher Than That of Male-Owned SMEs

In 2016, there were 36,001 newly-established female-owned SMEs, less than 57,680 newly-established male-owned SMEs. In terms of longevity, 50.48 percent of female-owned SMEs had been in existence within 10 years, higher than 47.48 percent of male-owned SMEs in the same category; 52.52 percent of male-owned SMEs had been in existence for 10 years or longer, high than 49.52 percent of female-owned SMEs in the same category (Table 1-3-3).

These figures show that, in terms of market entry and exit, female-owned SMEs display more flexibility than male-owned SMEs, or male-owned SMEs are more resilient.

Table 1-3-3 Shares of SMEs in Particular Ages by Sex of Business Owner, 2016

Unit: Enterprises; %

Sex of owner Age	All enterprises		Female-owned enterprises		Male-owned enterprises	
	No. of enterprises	Share of total	No. of enterprises	Share of total	No. of enterprises	Share of total
Total no. of SMEs	1,408,313	100.00	512,214	100.00	883,344	100.00
Less than 1 year	95,320	6.77	36,001	7.03	57,680	6.53
1 - 2 years	99,208	7.04	37,206	7.26	60,177	6.81
2 - 3 years	83,376	5.92	30,600	5.97	51,367	5.82
3 - 4 years	82,393	5.85	31,127	6.08	50,104	5.67
4 - 5 years	69,483	4.93	26,339	5.14	42,150	4.77
5 - 10 years	257,824	18.31	97,283	18.99	157,932	17.88
10 - 20 years	363,436	25.81	131,067	25.59	230,229	26.06
20 years or more	357,273	25.37	122,591	23.93	233,705	26.46

Source : Fiscal Information Agency, Ministry of Finance, VAT data (2016).

IV Business Performance for SMEs

To provide a clear picture of the current state of Taiwanese SMEs in wholesale, retail and food service activities industry, 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* conducted in June 2016 by the Department of Statistics, Ministry of Economic Affairs (an SME is defined as a business entity with less than 100 regular employees; a large enterprise is defined as a business entity with 100 or more regular employees).

1. SMEs in Wholesale: Business Performance

(1) SMEs in Wholesale: Basic Operation Types

Most SMEs in wholesale operated as wholesalers (51.9 percent) and importers and exporters (43.9 percent). Only 2.1 percent of SMEs in wholesale had foreign subsidiaries. Large enterprises in wholesale business showed similar structure except the share of agents was significantly higher than SMEs (Table 1-4-1).

(2) SMEs in Wholesale: Business Predicaments

The main business predicaments facing wholesale in both SMEs and large enterprises were “intensified industrial competition and diminished profits”, which share 70.7 percent and 65.6 percent respectively. The second to the fourth difficulty in both SMEs and large enterprises were “difficulty to develop new markets”, “exchange rate risk”, and “increased purchase cost and personnel expense”, but the ranking in SMEs and large enterprises is somewhat different (Table 1-4-2).

Table 1-4-1 Basic Operation Types in Wholesale, 2016

Unit: Enterprises; %

Basic operation types	Total	SMEs	Large enterprises
Sample size	1,913	1,663	250
Operations	100.0	100.0	100.0
Wholesalers	51.1	51.9	45.6
Importers and exporters	43.3	43.9	39.5
Dealers	18.7	18.6	19.4
Agents	11.5	9.8	23.0
General agent	6.1	5.2	11.7
With or without foreign subsidiary	100.0	100.0	100.0
No	97.1	97.9	92.0
Yes	2.9	2.1	8.0

Source: Department of Statistics, Ministry of Economic Affairs, *Business Survey Report of Wholesale, Retail and Food Service Activities* (October 2016).

Table 1-4-2 Operation Dilemmas Facing Wholesale, 2016

Unit: %

Items	Total	SMEs	Large enterprises
Intensified industrial competition and diminished profits	70.1	70.7	65.6
Difficulty to develop new markets	36.7	37.0	34.8
Exchange rate risk	34.1	33.3	39.6
Increased purchase cost and personnel expense	30.6	30.0	34.8
Diverse customer needs	23.7	22.7	30.4
Lack of talent	14.1	13.4	18.8
Small operation scale	10.3	11.7	1.2
Short product life cycle	8.8	8.1	13.6
Tariff barriers	7.3	6.9	9.6
Difficulties in financing	4.5	4.8	2.8
Right of agency is not easy to hold long	6.0	5.7	8.0
Other	11.3	11.1	13.2

Source: Department of Statistics, Ministry of Economic Affairs, *Business Survey Report of Wholesale, Retail and Food Service Activities* (October 2016).

2. SMEs in Retail: Business Performance

(1) SMEs in Retail: Basic Operation Types

Most (88.6 percent) SMEs in retail operate as company store, higher than 56.1 percent for large enterprises in retail. Only 11.4 percent of SMEs in retail as franchise, lower than 43.9 percent for large enterprises (Table 1-4-3).

Table 1-4-3 Basic Operation Types in Retail, 2016

Unit: Enterprises; %

Basic operation types	Total	SMEs	Large enterprises
Sample size (number)	1,075	804	271
Operation types	100.0	100.0	100.0
Company store	60.5	88.6	56.1
Franchise	39.5	11.4	43.9

Source: Department of Statistics, Ministry of Economic Affairs, *Business Survey Report of Wholesale, Retail and Food Service Activities* (October 2016).

(2) SMEs in Retail: Business Predicaments

The first three business predicaments facing retail in SMEs and large enterprises were “fierce price competition and low gross margin”, “increased personnel expense” and “diverse customer needs”; In SMEs, the main difficulty was “fierce price competition and low gross margin” with the share of 69.7 percent, higher than that in large enterprises (57.4 percent); the second and the third predicaments in SMEs were “increased personnel expense” and “diverse customer needs”, occupying 38.8 and 35.8 percent respectively which were lower than each in large enterprises (49.4 and 47.2 percent respectively) (Table 1-4-4).

Table 1-4-4 Operation Dilemmas Facing Retail, 2016

Unit: %

Items	Total	SMEs	Large enterprises
Fierce price competition and low gross margin	66.7	69.7	57.4
Increased personnel expense	41.4	38.8	49.4
Diverse customer needs	38.6	35.8	47.2
Turnover rate of personnel is too high	30.1	27.0	39.9
High product homogeneity and substitutability	26.8	26.2	28.9
Rising rent	24.6	22.1	31.6
Electricity business catching a share of market	13.8	11.8	19.8
Cross industries competition	11.4	11.3	11.8
Other	8.7	8.8	8.4

Source: Department of Statistics, Ministry of Economic Affairs, *Business Survey Report of Wholesale, Retail and Food Service Activities* (October 2016).

3. SMEs in Food Service Activities: Business Performance

(1) SMEs in Food Service Activities: Basic Operation Types

Regardless of the size of the enterprise, the closed days of enterprises in food service activities mainly were “open all year round”, and the business hours mainly were “more than 8 hours and within 12 hours” (Table 1-4-5).

Table 1-4-5 Basic Operation Types in Food Service Activities, 2016

Unit: %

Items	Total	SMEs	Large enterprises
Sample size (number)	268	181	87
Closed days	100.0	100.0	100.0
Open all year round	59.0	51.4	74.7
2 days per week	12.7	13.8	10.3
1 day per week	8.6	12.2	1.2
1 day per month	0.8	0.6	1.2
Other	19.0	22.1	12.6
Business hours	100.0	100.0	100.0
More than 8 hours and within 12 hours	57.5	57.5	57.5
Within 8 hours	23.5	27.1	16.1
More than 12 hours and within 16 hours	14.6	11.6	20.7
Open round-the-clock	3.7	2.8	5.8
Other	0.8	1.1	0.0

Source: Department of Statistics, Ministry of Economic Affairs, *Business Survey Report of Wholesale, Retail and Food Service Activities* (October 2016).

(2) SMEs in Food Service Activities: Provided Services

Overall, the shares of provided services in food service activities in SMEs were all lower than those in large enterprises, except for "parking services or parking lots" which is higher than those in large enterprises. Especially, the shares of "POS system (dining card)" and "operating network communities and Line" in SME were more than 20 percent lower than those in large enterprises (Table 1-4-6).

Table 1-4-6 Share of Provided Services in Food Service Activities, 2016

Unit: %

Items	Total	SMEs	Large enterprises
Credit card (or stored value card) payment	73.1	71.8	75.9
Parking services or parking lots	50.4	52.5	46.0
POS system (dining card)	59.3	51.9	74.7
Operating network communities and Line	47.8	40.9	62.1
Online booking service	17.9	15.5	23.0
Online ordering service	10.1	6.1	18.4
Mobile payment	6.7	6.1	8.1

Source: Department of Statistics, Ministry of Economic Affairs, *Business Survey Report of Wholesale, Retail and Food Service Activities* (October 2016).

(3) SMEs in Food Service Activities: Future expand plan and priority locations

In food service activities, the share of SMEs having a future expand plan was 21.6 percent, much lower than 63.2 percent of large enterprises. In term of priority locations, the first three in SMEs were “commercial area”, “department store business district” and “MRT business district”; for large enterprises, the first was “department store business district”, followed by “commercial area” and “MRT business district” (Table 1-4-7).

Table 1-4-7 Future Expand Plan and Priority Locations in Food Service Activities, 2016

Unit: %

Items	Total	SMEs	Large enterprises
Future Expand Plan	100.0	100.0	100.0
Yes	35.1	21.6	63.2
No	64.9	78.5	36.8
Priority Locations			
Commercial area	51.1	46.2	54.6
Department store business district	56.4	38.5	69.1
MRT business district	46.8	38.5	52.7
Scenic area	8.5	12.8	5.5
Campus business district	7.5	5.1	9.1
Industrial area	2.1	5.1	0.0
Night market business district	1.1	0.0	1.8
Other	5.3	2.6	7.3

Source: Department of Statistics, Ministry of Economic Affairs, *Business Survey Report of Wholesale, Retail and Food Service Activities* (October 2016).

(4) SMEs in Food Service Activities: Operation Development Plan

Regardless of the size of enterprise, the main operation development plan in food service activities were “improving food safety control”, followed by “reducing raw material and personnel cost” and “inventing new brands or new type of shops”; for large enterprises, “new product development” was more emphasized, and “reducing raw material and personnel cost” ranked third (Table 1-4-8).

(5) SMEs in Food Service Activities: Business Predicaments

The main business predicament facing food service activities in SMEs was “fluctuations in food prices” which was 64.1 percent, followed by “high turnover rate of personnel” and “fierce inter-industry competition”; for large enterprises, the main difficulty facing food service activities was “high turnover rate of personnel” which was 66.7 percent, followed by “fluctuations in food prices”, and “fierce inter-industry competition” (Table 1-4-9).

Table 1-4-8 Operation Development Plan in Food Service Activities, 2016

Unit: %

Items	Total	SMEs	Large enterprises
Improving food safety control	61.9	61.9	62.1
Reducing raw material and personnel cost	47.0	48.1	44.8
New product development	43.3	36.5	57.5
Inventing new brands or new type of shops	22.4	17.1	33.3
Developing or expanding network sales	15.7	11.1	25.3
Strategic alliance with distributor	11.6	10.5	13.8
Accelerating domestic expansion	10.5	5.5	20.7
Offering home delivery service	3.7	3.3	4.6
Overseas territory expansion	3.7	2.8	5.8
Other	8.2	8.3	8.1

Source: Department of Statistics, Ministry of Economic Affairs, *Business Survey Report of Wholesale, Retail and Food Service Activities* (October 2016).

Table 1-4-9 Operation Dilemmas Facing Food Service Activities, 2016

Unit: %

Items	Total	SMEs	Large enterprises
Fluctuations in food prices	61.9	64.1	57.5
High turnover rate of personnel	61.2	58.6	66.7
Fierce inter-industry competition	54.1	54.7	52.9
Rising cost and hard cost shift	43.3	46.4	36.8
High rent	41.8	39.8	46.0
Cheap pricing and low gross margin	29.1	30.9	25.3
Customer preference changing fast	29.1	28.2	31.0
Food quality control is difficult	17.9	18.2	17.2
No proper location	10.5	8.3	14.9
Competition with other industries (includes non-store)	5.2	3.3	9.2
Other	5.2	6.1	3.5

Source: Department of Statistics, Ministry of Economic Affairs, *Business Survey Report of Wholesale, Retail and Food Service Activities* (October 2016).

V Overview of SMEs' Expenditure on R&D

Expenditure on R&D is very important for enterprises' upgrade and transformation to remain competitive and profitable. To measure enterprises' innovation and R&D impact, 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 of the corporate sector. At the same time, in order 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 2016 Edition Highlights* published by Ministry of Science and Technology.

1. R&D Expenditure of SMEs Grew Slower than Large Enterprises

In terms of size, total R&D expenditure by SMEs (defined as enterprises with fewer than 200 employees) had risen consistently for four years in row from 2011 to 2014 and turned into decline in 2015 which is 1.6 percent lower than in 2014, probably influenced by the bad business environment in both domestic and overseas markets; total R&D expenditure by large enterprises had also risen from 2011 to 2015 and rose 7.8 percent in 2015. All in all, R&D expenditure of business sector showed stable growth (Table 1-5-1).

Table 1-5-1 Business Sector R&D Expenditure by Enterprise Size, 2011-2015

Unit: Million NT\$, %

Item	2011	2012	2013	2014	2015	Share of	Growth
						total	rate
Total	300,358	319,906	343,455	373,019	397,163	100.0	6.5
SME sub-total	43,865	45,213	47,361	52,709	51,873	13.1	-1.6
0 - 99 employees	23,431	24,725	24,701	26,462	27,574	6.9	4.2
100 - 199 employees	20,434	20,488	22,660	26,247	24,299	6.1	-7.4
Large enterprises sub-total	256,493	274,693	296,094	320,310	345,290	86.9	7.8
200 - 499 employees	40,889	45,561	46,593	50,210	49,984	12.6	-0.5
500 employees or above	215,604	229,132	249,501	270,100	295,306	74.4	9.3

Source: Ministry of Science and Technology, *Science and Technology Statistics 2015 Edition Highlights* (December 2016).

CHAPTER 2

Financial and Funding Analysis of SMEs

Financial analysis has a vital role to play in understanding of the current state of Taiwan's SMEs and the outlook for their future development. The first two sections of this chapter presents an overview of the financial status of Taiwan's SMEs as well as ratio analysis, using Business Income Tax Return data for 2015 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 balance sheet and percentages of net operating revenue for 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 Up More Than 10 Percentage Point

As can be seen from Table 2-1-1, for SMEs in 2015, the share of total assets accounted for by current assets was up 11.21 percentage points, mainly driven by increased shares of cash (up 3.04 percentage points) and inventories (up 5.69 percentage points), followed by accounts receivable (up 1.31 percentage points), advance payments (up 0.51 percentage points) and share of other current assets was up 0.66 percentage points. The share of current liabilities was up 10.04 percentage points, similar to the change of current assets. Moreover, the share of liabilities was up by 8.19 percentage points.

In terms of cash ratio, 2015 saw increased share of cash in over half of the 18 industries, showing increasing short-term liquidity in 2015 from 2014. These industries were agriculture, forestry, fishing and animal husbandry, mining and quarrying, manufacturing, water supply and remediation activities, construction, wholesale and retail, trade transportation and storage, accommodation and food service activities, information and communication, financial and insurance activities, education, arts, entertainment and recreation, and other service activities (Table 2-1-2).

Table 2-1-1 Consolidated Balance Sheet for Taiwanese Enterprises, 2014-2015

Unit: %

Enterprise size / year Item	SMEs		Large enterprises	
	2014	2015	2014	2015
Current assets	42.84	54.05	39.68	45.66
Cash	15.09	18.13	16.23	16.81
Accounts receivable	11.49	12.80	14.56	15.35
Inventories	13.12	18.81	6.95	10.69
Advance payments	1.21	1.72	0.74	1.00
Other current assets	1.93	2.59	1.20	1.80
Non-current assets	57.16	45.95	60.32	54.34
Long-term investment	31.34	18.50	35.98	24.33
Fund	-	-	-	-
Fixed asset	22.46	23.07	15.92	22.50
Land and buildings	12.21	15.34	47.22	11.53
Machinery	5.59	6.33	7.22	9.23
Other fixed assets	4.66	1.41	0.96	1.75
Intangible and other assets	3.36	4.37	8.42	7.51
Total assets = Liabilities + Net worth	100.00	100.00	100.00	100.00
Liabilities	54.03	62.22	66.68	52.18
Current liabilities	41.62	51.66	35.88	37.00
Short-term loans	12.52	15.37	19.80	14.83
Accounts payable	10.95	13.65	11.44	14.21
Income received in advance	3.64	4.17	2.15	3.21
Other current liabilities	14.52	18.48	2.49	4.74
Non-current liabilities	12.10	10.56	30.80	15.18
Net worth	45.97	37.78	33.32	47.82

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data (2014-2015).

(2) Long-Term Investment Decreased

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 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, 2015 saw the long-term investments share of total assets decreased for both large enterprises and SMEs. For SMEs, the long-term investments share decreased hugely by 12.84 percentage points (vs. a significant 11.65 percentage points for large enterprises) in 2015, likely indicating conservatism facing challenging business environment with high degree of uncertainty (Table 2-1-1).

(3) SMEs' Fixed Assets Increased Modestly

Fixed assets share of total rose modestly by 0.61 percentage points in 2015 for SMEs, driven by increase in land and buildings (up 3.13 percentage points) and machinery (up 0.74 percentage points), as well decrease in Other fixed assets (Table 2-1-1).

Table 2-1-2 Consolidated Balance Sheet for Taiwanese SMEs by Industry, 2015

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	40.03	54.11	57.95	19.53	42.10	84.61	66.77	47.09	27.57
Cash	16.80	18.37	19.23	9.22	19.33	19.75	24.05	24.75	15.75
Accounts receivable	8.68	10.94	19.27	4.26	13.15	20.14	16.92	16.26	4.53
Inventories	5.63	19.01	16.28	3.13	5.37	40.64	21.53	0.54	3.67
Advance payments	6.72	3.50	1.82	0.87	1.95	1.92	1.98	2.95	1.51
Other current assets	2.19	2.29	1.34	2.05	2.31	2.15	2.30	2.59	2.10
Non-current assets	59.97	45.89	42.05	80.47	57.90	15.39	33.23	52.91	72.43
Long-term investment	7.53	1.62	1.58	8.53	10.11	1.18	9.17	8.32	6.18
Fixed asset	48.80	39.43	38.17	69.16	38.40	10.76	20.80	40.48	59.32
Land and buildings	15.36	18.51	23.67	11.75	19.28	4.76	14.37	10.86	42.24
Machinery	26.56	18.89	12.79	53.04	18.79	5.27	5.29	27.96	11.60
Other fixed assets	6.87	2.02	1.72	4.37	0.33	0.72	1.14	1.66	5.47
Intangible and other assets	3.64	4.84	2.30	2.79	9.39	3.45	3.27	4.11	6.94
Total assets = Liabilities + Net worth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities	72.86	64.18	66.12	64.07	54.52	68.82	66.26	44.31	70.71
Current liabilities	55.92	58.39	57.37	38.30	42.60	65.05	58.85	36.22	46.50
Short-term loans	19.76	16.70	16.95	12.45	8.46	9.22	15.11	9.41	13.23
Accounts payable	10.27	15.66	19.99	17.28	13.62	14.10	18.61	15.10	8.84
Income received in advance	0.83	0.63	2.58	0.21	1.05	29.82	0.92	0.33	1.12
Other current liabilities	25.05	25.41	17.84	8.37	19.46	11.91	24.22	11.37	23.31
Non-current liabilities	16.94	5.79	8.75	25.77	11.92	3.77	7.41	8.10	24.21
Net worth	27.14	35.82	33.88	35.93	45.48	31.18	33.74	55.69	29.29

Table 2-1-2 Consolidated Balance Sheet for Taiwanese SMEs by Industry, 2015(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	60.51	29.47	55.71	52.00	53.09	48.86	37.33	23.23	43.74
Cash	31.20	16.82	8.70	28.62	29.15	32.98	18.47	12.40	23.87
Accounts receivable	16.95	7.63	4.04	12.50	18.55	9.23	16.87	5.83	7.88
Inventories	5.00	1.15	37.17	5.18	1.04	1.73	0.81	1.32	8.49
Advance payments	3.30	0.30	2.32	2.55	1.82	2.49	0.50	2.09	1.35
Other current assets	4.06	3.56	3.48	3.15	2.54	2.43	0.69	1.59	2.13

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
Non-current assets	39.49	70.53	44.29	48.00	46.91	51.14	62.67	76.77	56.26
Long-term investment	12.52	65.41	8.46	20.97	18.52	15.21	3.28	6.65	31.61
Fixed asset	19.99	3.66	25.71	19.64	20.70	28.47	57.05	62.01	19.85
Land and buildings	12.02	3.29	21.47	13.76	6.78	18.00	44.72	45.85	14.27
Machinery	4.54	0.28	2.25	4.70	10.43	4.88	6.47	9.49	4.41
Other fixed assets	3.46	0.09	1.98	1.19	3.50	5.59	5.87	6.68	1.16
Intangible and other assets	6.99	1.47	10.12	7.39	7.69	7.46	2.34	8.11	4.80
Total assets = Liabilities + Net worth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities	65.82	39.78	77.62	53.67	44.01	75.56	45.48	77.11	45.49
Current liabilities	58.51	30.50	59.04	45.55	34.33	63.60	32.96	48.85	36.86
Short-term loans	8.89	16.49	18.58	8.79	6.96	15.16	3.86	13.14	5.21
Accounts payable	19.96	4.79	11.49	11.75	12.04	10.93	11.24	8.53	8.38
Income received in advance	2.59	0.02	3.24	2.73	0.62	8.01	2.29	1.01	2.85
Other current liabilities	27.08	9.20	25.73	22.29	14.71	29.49	15.57	26.18	20.42
Non-current liabilities	7.30	9.28	18.58	8.11	9.68	11.97	12.52	28.26	8.63
Net worth	34.18	60.22	22.38	46.33	55.99	24.44	54.52	22.89	54.51

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data (2015).

2. Analysis of SME Financial Structure

Looking at the SMEs' debt structure with 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 at Almost the Same Pace as Share of Current Assets

As can be seen from Table 2-1-1, share of current liabilities rose at almost the same pace as share of current assets in 2015 for SMEs (10.04. vs. 11.21. percentage points), showing stable short-term debt servicing capability. Moreover, share of current liabilities rose 1.12 while share of current assets for large enterprises rose 5.98.

(2) Declining Non-current Liabilities, Large Enterprises in Particular

In 2015, SMEs' non-current liabilities ratio declined by 1.54 percentage points to 10.56 percent, while large enterprises non-current liabilities declined sharply by 15.62 percentage points to 15.18 percent. Non-current liabilities represent debt that does not have to be repaid within one year, such as bonds payable and long-term bills payable. Most SMEs are family businesses that lack scale, financial transparency, and management skills. Financial institutions are often reluctant to lend to SMEs, hence low long-term liabilities ratio, reflecting inadequate capitalization. A noticeable change was the sharp decrease of long-term liabilities ratio in large enterprises that suggested a much pessimistic stance to the economy (Table 2-1-1).

3. Analysis of SMEs' Profit and Loss

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

As regards operating costs share of net revenue, operating costs of large enterprises decreased largely while operating costs of SMEs declined slightly from 2014 to 2015. As a result, SMEs' gross margin (referring to "gross operating profit" item in Table 2-1-3) increased modestly by 0.79 percentage points while large enterprises' gross margin improved obviously by 4.56 percentage points in 2015 (Table 2-1-3).

Table 2-1-3 Profit and Loss of Taiwanese Enterprises, 2014-2015

Unit: %

Item \ Enterprise size / year	SMEs		Large enterprises	
	2014	2015	2014	2015
Net operating revenue	100.00	100.00	100.00	100.00
Minus: Operating costs	78.31	77.52	88.77	84.21
Gross operating profit	21.69	22.48	11.23	15.79
Minus: Operating expenses	18.90	19.98	7.56	11.11
Net operating profit	2.79	2.49	3.68	4.68
Plus: Non-operating revenue	1.57	1.74	3.90	2.92
Minus: Interest expenses	0.58	0.63	0.35	0.49
Minus: Other non-operating expenses	0.53	0.66	2.69	1.72
Current term profit (before tax)	3.25	2.94	4.53	5.39

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data (2014-2015).

(2) Operating Expense Rose Slightly

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

In 2015, SMEs' operating expenses rose slightly by 1.08 percentage points to 19.98 percent; large enterprises' operating expenses was up by 3.55 percentage points to 11.11 percent. The pronounced disparity between the operating expenses ratio of SMEs and that of large enterprises is mainly due to SMEs' limited scale to reduce average expense and limited bargaining power to lower funding cost. Therefore, SMEs operation results often are highly sensitive to variable costs (Table 2-1-3).

(3) Net Operating Profit Reduced for SMEs

In 2015, SMEs' net operating profit reduced 0.30 percentage points to 2.49 percent with lower operating costs more than offsetting slightly higher operating expenses; large enterprises' net operating profit improved 1.00 percentage points to 4.68 percent with lower operating expenses less than offsetting obviously higher operating costs (Table 2-1-3).

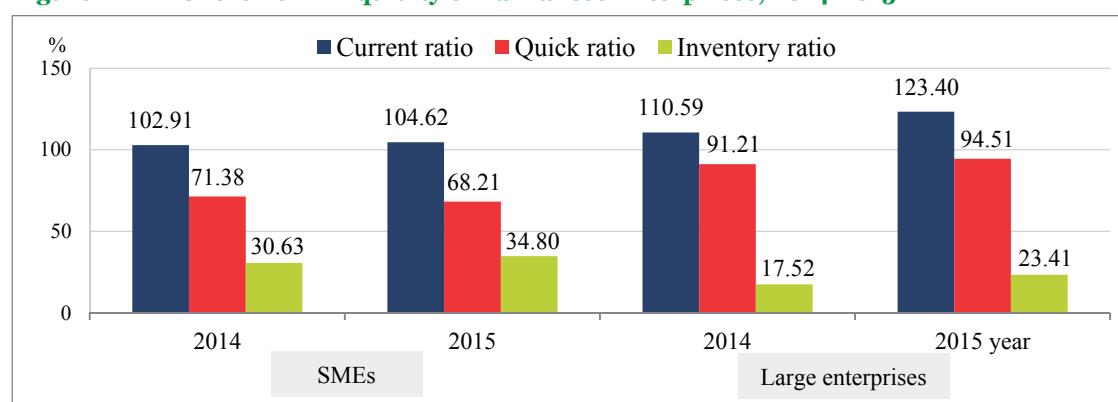
II Analysis of SMEs' Financial Ratios

1. SMEs' Short-Term Debt Servicing Ability Decreased 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 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 2015, there were little changes in the Debt-to-Net-Worth Ratio (up 1.71 percentage points) and inventory ratio (up 4.17 percentage points) of SMEs, they stood at 104.62 percent and 68.21 percent respectively, showing stable short-term debt servicing capability; the quick ratio (down 3.17 percentage points) stood at 34.80 percent, showing the ability of a company to use its near cash to extinguish its current liabilities dwindled. On the other hand, while there was a significant rise in the current ratio (up 12.81 percentage points) for large enterprises, the quick ratio of large enterprises increased slightly from 91.21 percent to 94.51 percent, an increase of 3.30 percentage points, indicating much higher short-term liquidity and debt servicing ability. 2015 also saw a rise of large enterprises' inventory ratio (up 5.89 percentage points), showing improved inventory management and / or turnover rate. However, the inventory ratio of large enterprises was still far below that of SMEs, indicating relative strength of large enterprise in inventory management (Figure 2-2-1).

Figure 2-2-1 Short-Term Liquidity of Taiwanese Enterprises, 2014-2015



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, 2014-2015.

The current ratio remained above 100 but well below 200 for both SMEs and large enterprises. The quick ratio remained below the reference value of 100 percent for both SMEs and large enterprises. However, the quick ratio of large enterprises stood at 94.51 percent in 2015, far above

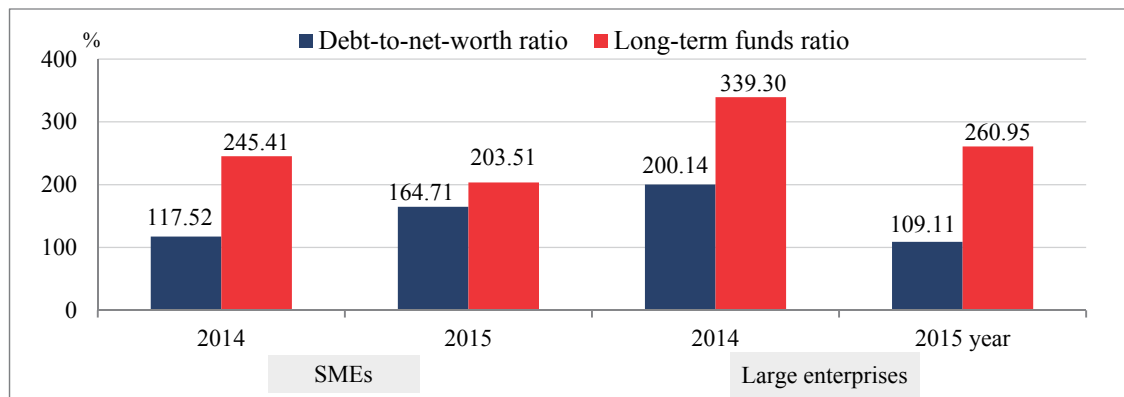
the quick ratio of SMEs at 68.21 percent, indicating relatively poor short-term debt servicing capability of SMEs.

2. SMEs: Rising Debt-to-Net-Worth Ratio and Declining 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 2014, the average debt-to-net-worth ratio of SMEs was 117.52 percent; in 2015 it rose hugely by 47.19 percentage points to 164.71 percent. For large enterprises, the debt-to-net-worth ratio in 2014 dropped sharply to 109.11 percent (Figure 2-2-2).

Figure 2-2-2 Long-Term Stability of Taiwanese Enterprises, 2014-2015



Note:

1. Debt-to-net-worth ratio = $\text{debt} \div \text{net worth} \times 100\%$ (reference value = 100; ideally, the ratio should be below the reference value).
2. Long-term funds ratio = $(\text{equity} + \text{long-term debt}) \div \text{fixed assets} \times 100\%$ (reference value = 100; ideally, the ratio should be above the reference value).

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2014-2015.

The fact that the SMEs' debt-to-net-worth ratio was higher than the reference value meant higher credit risk, and potentially declining long-term financial stability. The debt-to-net-worth ratio of large enterprises is down sharply but still higher than the reference value, indicating that large enterprises were resorting to a high level of financial leverage. In an era of low interest rates, when the economy is starting to pick up again, taking on a reasonable level of leverage through low-interest borrowing can help firms to achieve higher earnings; however, enterprises must be careful not to become over-leveraged, otherwise the firm's financial health may be threatened.

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. In 2015, the long-term funds ratio of SMEs fell hugely to 203.51 percent, down 41.90 percentage points. During the same period, the long-term funds ratio of large enterprises fell hugely to 260.95 percent, down 78.35 percentage points. Both ratios were much higher than the reference value of 100 percent. This indicated that SMEs assumed less credit risk year on year,

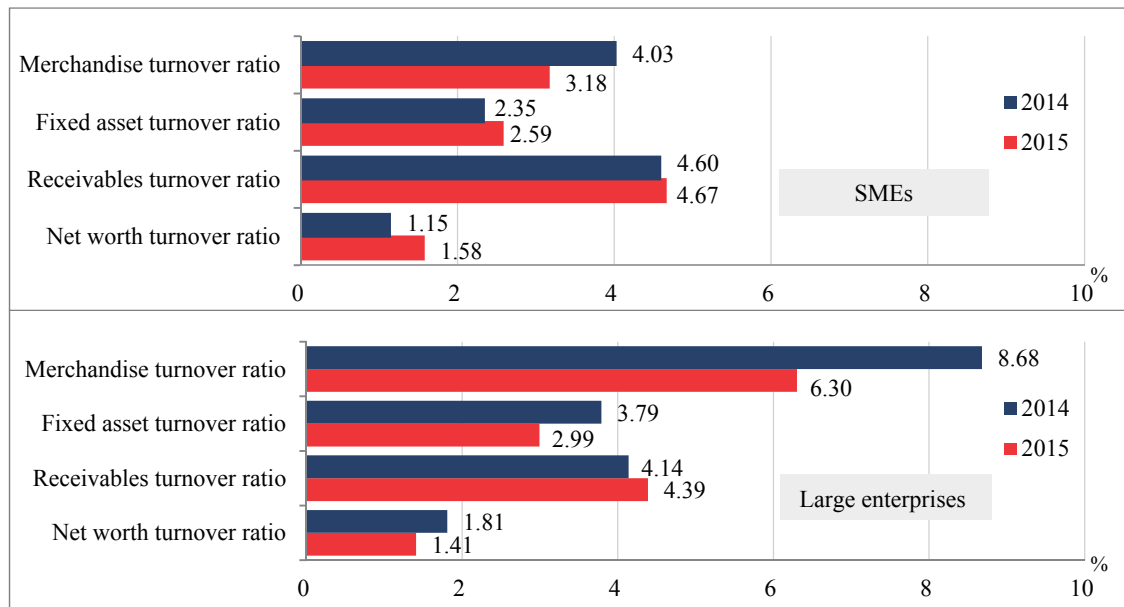
however, they were still far conservative than large enterprises which had much higher debt-to-net-worth ratio but at the same time had more resource in investment as shown by much higher long-term funds ratio (Figure 2-2-2).

3. SMEs' Operational Efficiency Down Modestly

An enterprise's operational efficiency can be gauged by examining its efficient utilization of merchandise, fixed asset, and capital, as well as 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 greater rate of income on its net worth than a company with a low turnover rate.

Examination of the data in 2015 shows that receivables turnover for SMEs rose slightly to 4.67 from 4.60 in 2014, and merchandise turnover decreased modestly from 4.03 to 3.18. In the meantime, receivables turnover for large enterprises rose mildly to 4.39 from 4.14 in 2014, and merchandise turnover also decreased modestly from 8.68 to 6.30, suggesting that the SMEs' operating efficiency was down modestly while that of the large enterprises decreased significantly in 2015 (Figure 2-2-3).

Figure 2-2-3 Operating Capability of Taiwanese Enterprises, 2014 -2015



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.

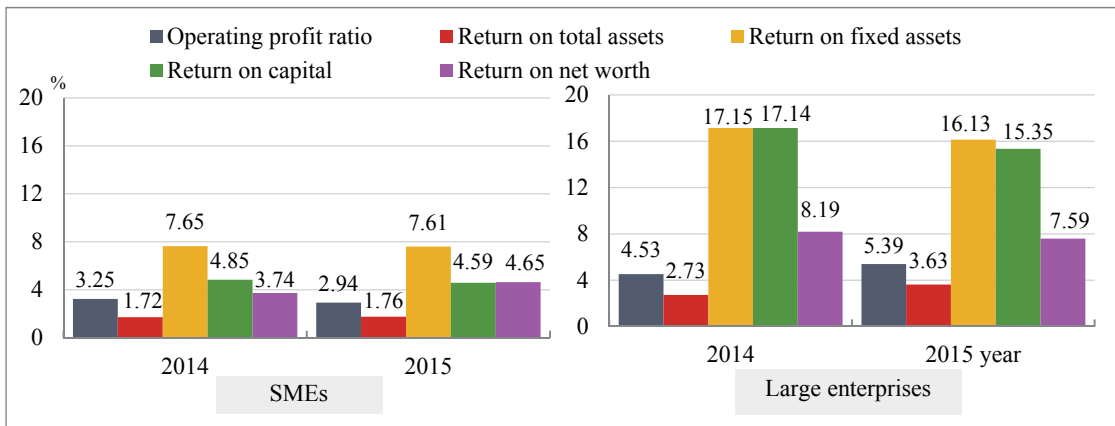
Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2014-2015.

Examination of the net worth turnover and fixed asset turnover indicators shows that, for SMEs, fixed asset turnover rose from 2.35 in 2014 to 2.59 in 2015, while net worth turnover also rose from 1.15 to 1.58. For large enterprises, fixed asset turnover declined from 3.79 in 2014 to 2.99 in 2015, and net worth turnover also declined from 1.81 to 1.41. It shows that the funds of SMEs came from non-owned funds increased suggesting declined stability (Figure 2-2-3).

4. SMEs' Operating Profits and Return on Capital Shocked Slightly

2015 saw modestly improved return on total assets (to 1.76 percent from 1.72 percent in 2014) and return on net worth (to 4.65 percent from 3.74 percent in 2014) for SMEs. However, SMEs was down slightly in terms of operating profit ratio, return on fixed assets, and return on capital. Relatively, large enterprises performed far better in terms of return on fixed assets, return on capital, and return on net worth due to the scale advantage (Figure 2-2-4).

Figure 2-2-4 Profitability of Taiwanese Enterprises, 2014-2015



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, 2014-2015.

III SME Funding and Financing

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

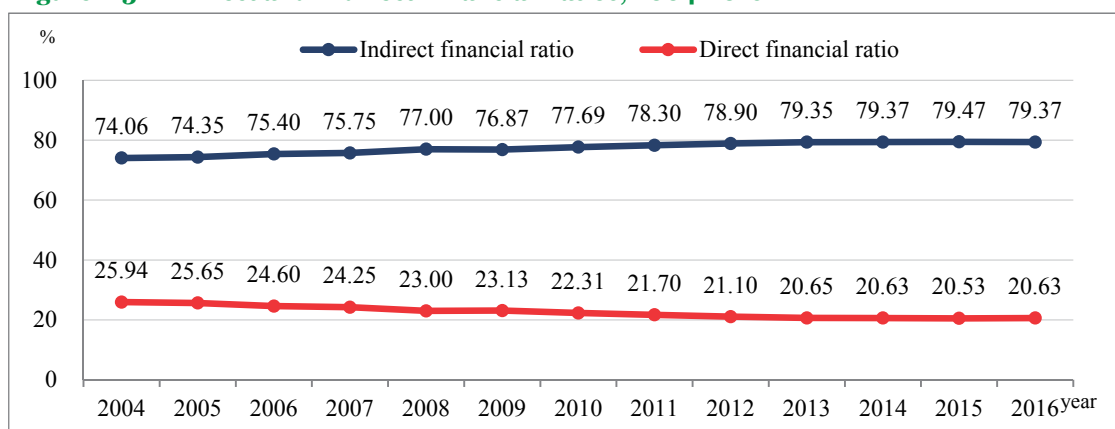
The sources of SME finance are from internal organic growth and / or external funding such as private lending, commercial loans, bond or equity financing, and government programs; the channels of finance are direct financing through financial markets (stock and bond) and indirect financing through financial 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 the help from the 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 growing pace of indirect financing slowdown in recent years. In 2016, the proportion of indirect financing accounted for 79.37 percent while the remaining 20.63 percent was direct financing (Figure 2-3-1).

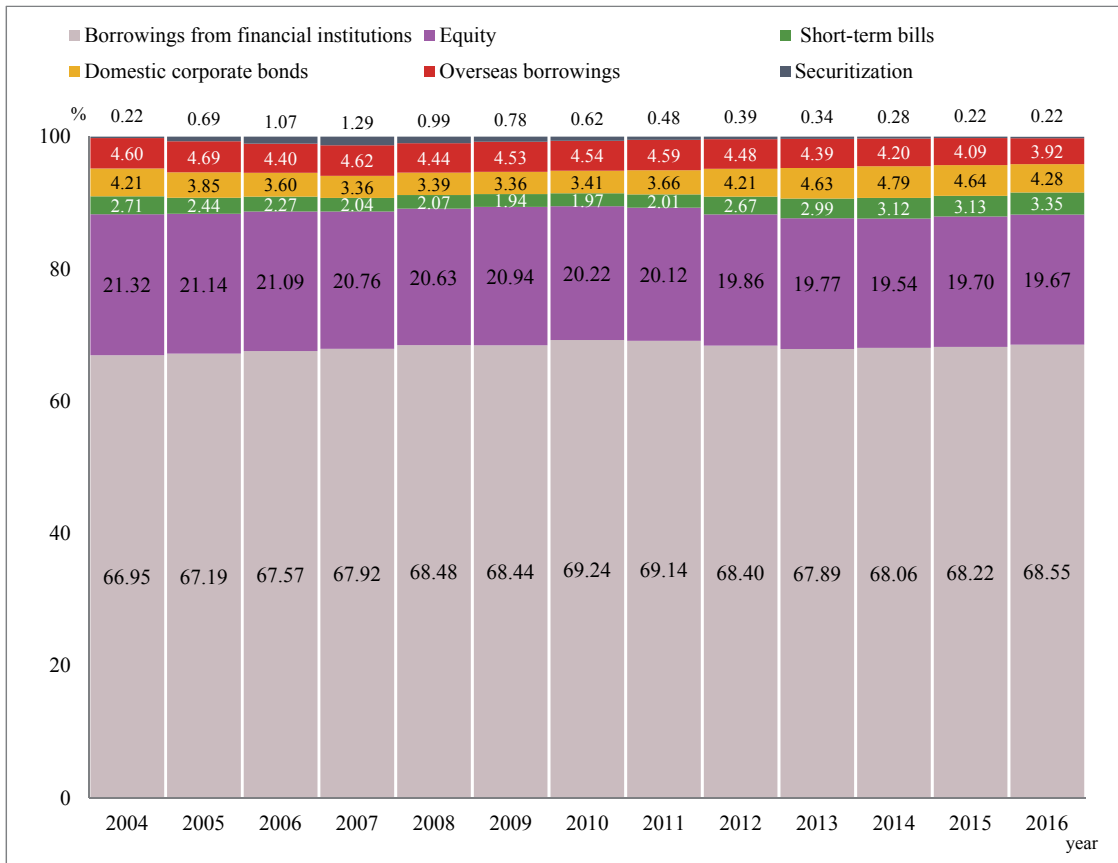
Figure 2-3-1 Direct and Indirect Financial Ratios, 2004-2016



Source: Central Bank of the Republic of China, *Direct Financial and Indirect Financial Stock Analysis*, June 2017.

In terms of the structure of their liabilities, large, medium- and small-sized enterprises in Taiwan are all heavily reliant on borrowings from financial institutions and accounting for 68.55 percent of the total debt in 2016 for all enterprises (up 0.33 percentage points from 2015). The direct financing through equity accounted for 19.67 percent in 2016, down slightly from 19.70 percent in 2015. The direct financing through securitization accounted for a mere 0.22 percent in 2016 (Figure 2-3-2).

Share of domestic corporate bonds declined modestly to 4.28 percent while share of short-term bills picked up slightly to 3.35 percent. Since 2011, share of overseas borrowings has been down from 4.09 percent to 3.92 percent in 2016 (Figure 2-3-2).

Figure 2-3-2 Comparison of Enterprise Financing Channels, 2004–2016

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

2. Financial institutions loan includes collection and bad debt write-off.

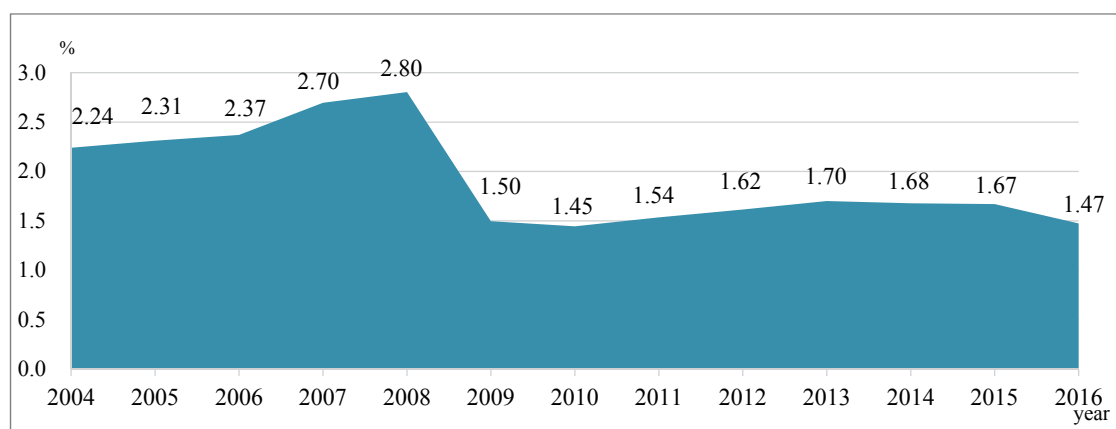
3. Enterprise financing channels do not include financial institutions investments and government bond.

Source: Central Bank of the Republic of China, *Direct Financial and Indirect Financial Stock Analysis*, June 2017.

2. Borrowing Cost Has Been Down

From June 2010 to July 2011, the Central Bank increases its benchmark discount rate five times from 1.250 percent to 1.875 percent in order to avoid economic overheating and counter rising inflation expectation. It had held the discount rate steady until 2015, during which the Central Bank cut its benchmark discount rate from 1.875 percent to 1.625 percent in order to fight economic recession in Taiwan while global economic growth slowed down. The Central Bank data show that the average interest rate on new loans (weighted averages for the month of December in each year) extended by Taiwan's five largest banks had fallen steadily from 8.26 percent in 1998 to 2.24 percent in 2004. In 2005, the rate rose to 2.31 percent, and in 2008 it climbed further to 2.80 percent. The average interest rate on new loans then fell back to 1.50 percent in 2009 due to aggressive easing of the Central Bank amid global financial crisis and recession. In 2016, the average interest rate on new loans was modestly down to 1.47 percent from 1.67 percent in 2015 (Figure 2-3-3).

Figure 2-3-3 The Average Interest Rate on New Loans Extended by Taiwan's Five Largest Banks, 2004-2016



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 2017, <http://www.pxweb.cbc.gov.tw/dialog/statfile9.asp>.

3. SMEs: Narrow Funding Sources

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 (down to 53.29 percent from 2014) and commercial credit (up to 45.91 percent from 2014), a combined share of 99.20 percent in 2015; medium-sized enterprises' funding sources were also mostly limited to borrowings from financial institutions (up to 54.61 percent from 2014) and commercial credit (down to 43.64 percent from 2014), a combined share of 98.25 percent in 2015. Large enterprises' funding sources were not as heavily reliant on indirect financing as SMEs, but still highly dependent on borrowings from financial institutions (down slightly to 39.02 percent from 2014) and commercial credit (slightly down to 48.04 percent from 2014), a combined share of 87.06 percent in 2015 (Table 2-3-1).

4. Continuous Increase in Total Bank Loans to SMEs in 2016

As of the end of 2016, 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\$5.7 trillion, a record high, representing an increase of 5.09 percent compared to the end of 2015, significantly higher than the 3.78 percent overall growth rate of outstanding loans to all enterprises from ordinary commercial banks in Taiwan, mostly driven by government measures to strengthen SME financing from domestic banks. Share of total outstanding loans for SMEs also increased to 24.79 percent from 24.48 percent in 2015 (Figure 2-3-4).

Table 2-3-1 Corporate Liability Structure as of the End of 2015

Unit: Thousand NT\$, %

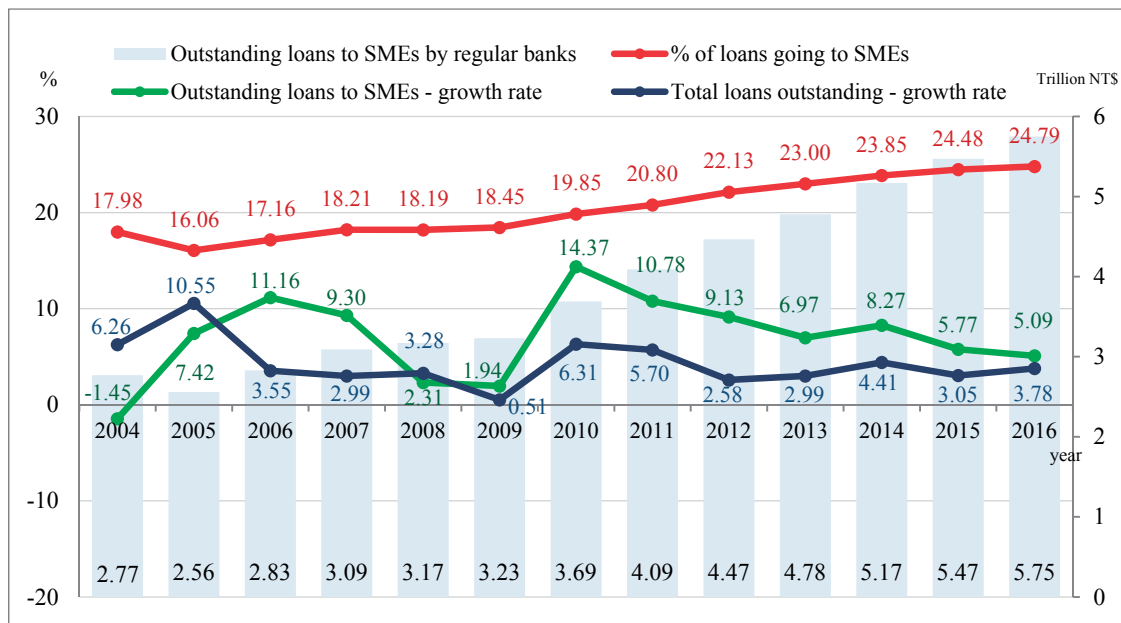
Item	Large enterprises		Medium-sized enterprises		Small-sized enterprises	
	Amount	Share	Amount	Share	Amount	Share
Total liabilities	21,168,869,897	100.00	5,089,075,217	100.00	870,423,138	100.00
Borrowings from financial institutions	8,260,295,206	39.02	2,779,273,330	54.61	463,830,631	53.29
Government loans	22,340,358	0.11	547,317	0.01	112,938	0.01
Borrowings from firms and individuals	268,133,286	1.27	64,805,850	1.27	5,381,949	0.62
Overseas borrowings	159,614,471	0.75	3,886,343	0.08	818,624	0.09
Transactions with repurchase clause	-	-	-	-	-	-
Short-term bills	538,871,272	2.55	5,268,663	0.10	18,766	0.00
Domestic corporate bonds	1,112,273,095	5.25	246,562	0.00	2,975	0.00
Overseas securities	88,349,825	0.42	-	-	-	-
Commercial credit(Trading liabilities)	10,169,272,873	48.04	2,220,907,234	43.64	399,614,629	45.91
Provisions and other liabilities	549,719,510	2.6	14,139,919	0.28	642,626	0.07

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 asset 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* (January 2016).

Figure 2-3-4 Changes in Bank Loans to SMEs by Regular Banks, 2004-2016

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*, 2004-2016.

5. The Concentration — Share of Top 10 and Top 8 Banks Was Down

The top 10 banks with loans outstanding to SMEs are half state-run banks, with the market share up to 71.53 percent in 2016, of which 63.22 percent came from the top 8 state-run banks. The concentration, share of top 10 and top 8 banks was down slightly from the previous year, at 72.45 percent and 64.46 percent, respectively (Table 2-3-2).

Table 2-3-2 Top 10 Banks by Amount of Loans to SMEs in 2016

Unit: Million NT\$; %

Bank	Loans outstanding	Market share	Loans to SMEs as percent of total loans
Total	4,112,144	71.53	-
First Commercial Bank	647,774	11.27	51.00
Taiwan Cooperative Bank	580,997	10.11	32.70
Hua Nan Commercial Bank	458,621	7.98	33.53
Taiwan Business Bank	432,831	7.53	44.46
Mega International Commercial Bank	421,410	7.33	36.37
Chang Hwa Commercial Bank	408,330	7.10	34.90
Bank of Taiwan	344,394	5.99	16.37
Land Bank of Taiwan	339,905	5.91	20.73
E. Sun Commercial Bank	295,034	5.13	30.55
The Shanghai Commercial & Savings Bank	182,848	3.18	40.41

Note: “-”: not applicable.

Source: Banking Bureau, Financial Supervisory Commission, *Statistics of Banking Business* (2017).

6. Private Banks Active in Lending to SMEs

Along with the introduction of various government measures of providing preferential loans to SMEs, private banks' SME loans increased substantially in 2015 and 2016 as shown in Financial Supervisory Commission data. In terms of annual growth rate from 2015 to 2016, the top ten private banks saw SME loans growth between 5.50 percent and 11.74 percent (except the slight drop of one bank: Taiwan Shin Kong Commercial Bank) with loan balances between NT\$107 billion and NT\$295 billion (Table 2-3-3).

Table 2-3-3 Top 10 Private Banks by Amount of Loans to SMEs in 2016

Unit: Million NT\$, %

Bank	Loans outstanding by the end of 2015	Loans outstanding by the end of 2016	Annual growth rate
E. Sun Commercial Bank	264,032	295,034	11.74
The Shanghai Commercial & Savings Bank	172,915	182,848	5.74
Taichung Commercial Bank	164,928	177,488	7.62
CTBC Bank	150,250	166,818	11.03
Bank SinoPac	131,690	143,398	8.89
Cathay United Bank	118,841	130,895	10.14
Taipei Fubon Bank	116,737	123,159	5.50
Taiwan Shin Kong Commercial Bank	121,469	121,341	-0.11
Yuanta Bank	105,114	113,035	7.54
Taishin International Bank	99,374	107,641	8.32

Source: Banking Bureau, Financial Supervisory Commission, *Statistics of Banking Business* (2017).

CHAPTER 3

SMEs: Human Resources

In 2016, the global economic growth slowed down to 2.5 percent which was lower than that in 2015 (2.8 percent). However, Taiwan's economy rebounded in 2016 and human resources in Taiwan also showed steady growth. According to Directorate-General of Budget, Accounting and Statistics of Executive Yuan, employed persons increased by about 89,000 people with a modest improved participation rate at 58.75 percent. The unemployment rate averaged 3.92 percent over the course of the year, a rise of 0.14 percentage points from 3.78 percent in 2015.

This chapter is divided into three sections. Section I examines SME human resources utilization (in terms of scales, 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 industries); Section III covers talent development in 2016 (including government's subsidized programs, various SMEs' training and counseling results, and 2017 human resource demand).

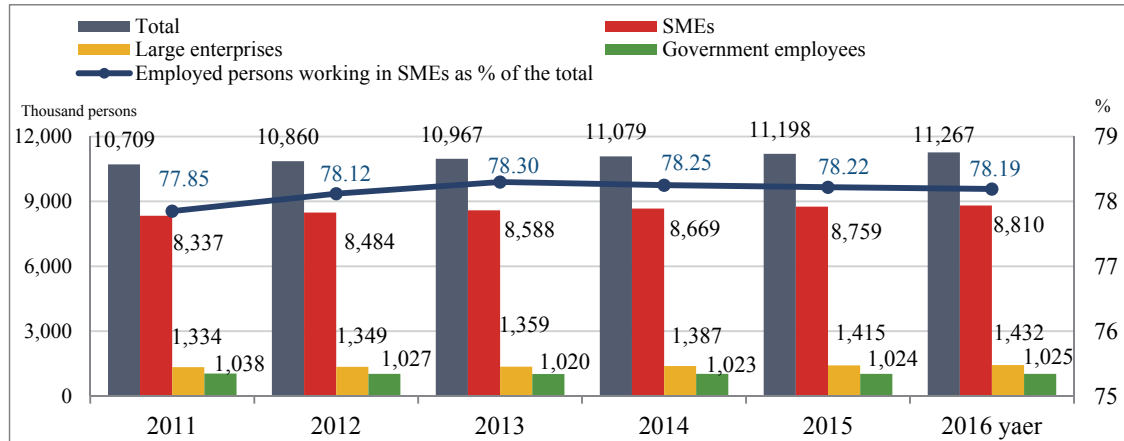
An SME is defined as an enterprise with less than 200 regular employees in mining and quarrying, manufacturing, and construction industries, or an enterprise with less than 100 regular employees in other industries.

I Labor Utilization by SMEs

1. SMEs Provided Labor Market Stability

In 2016, employed persons (including employers, own-account workers, paid employees and unpaid family workers) in Taiwan totaled 11,267,000 people. The number of employed persons working in SMEs in Taiwan totaled 8,810,000, up 0.58 percent from 2015 and accounted for 78.19 percent of all employed persons in Taiwan; large enterprises employed 1,432,000 persons and accounted for 12.71 percent, up 1.20 percent; the government employed 1,025,000 persons and accounted for 9.10 percent, up 0.09 percent.

Compared to large enterprise, SMEs have functioned as a more stabilizing force in labor market through many business and economic cycles. Since the global financial crisis in 2009, the total number of employed persons in SMEs has been rising slightly for 7 consecutive years; while the share of employed persons in SMEs fell to 78.19 percent from 78.30 percent in 2013. (Figure 3-1-1).

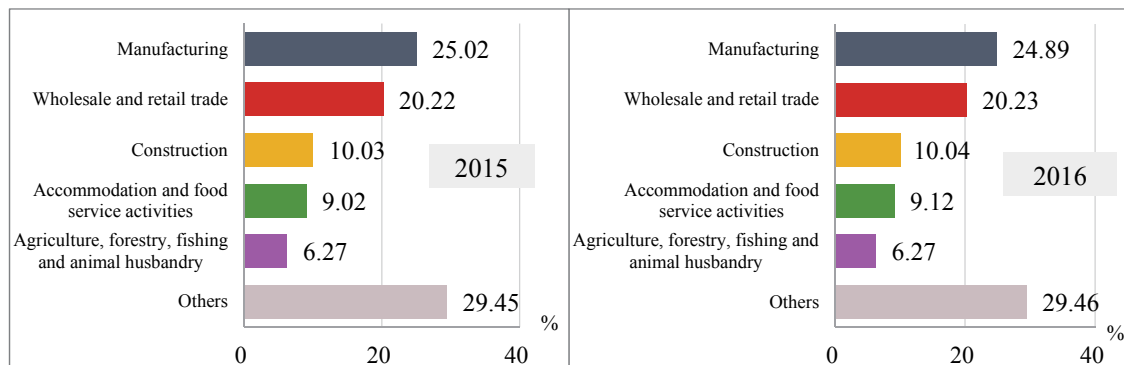
Figure 3-1-1 Number of Employed Persons in Taiwan, 2011-2016

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

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), Manpower Survey data, 2011-2016.

In terms of industries, the number of employed persons working in SMEs in the manufacturing industry in 2016 stood at 2,193,000, accounting for 24.89 percent of all SME employed persons. The wholesale and retail trade industry had the second largest number of employed persons working in SMEs, or 1,782,000 (20.23 percent), followed by the construction industry, with 884,000 employees (10.04 percent). 2016 saw employment growth in all sectors with stable distribution (Appendix C Table C-5, Figure 3-1-2).

In terms of shares of employed persons by sector, there has been a clear trend of decreased share of Industrial sector in the period from 2013 to 2016 (35.85 percent, 35.79 percent, 35.52 percent, and 35.40 percent, respectively) and increased share of Service sector in the same period (57.85 percent, 57.94 percent, 58.21, and 58.33 percent, respectively).

Figure 3-1-2 Top Five Industry Shares of Employed Persons Working in SMEs, 2015-2016

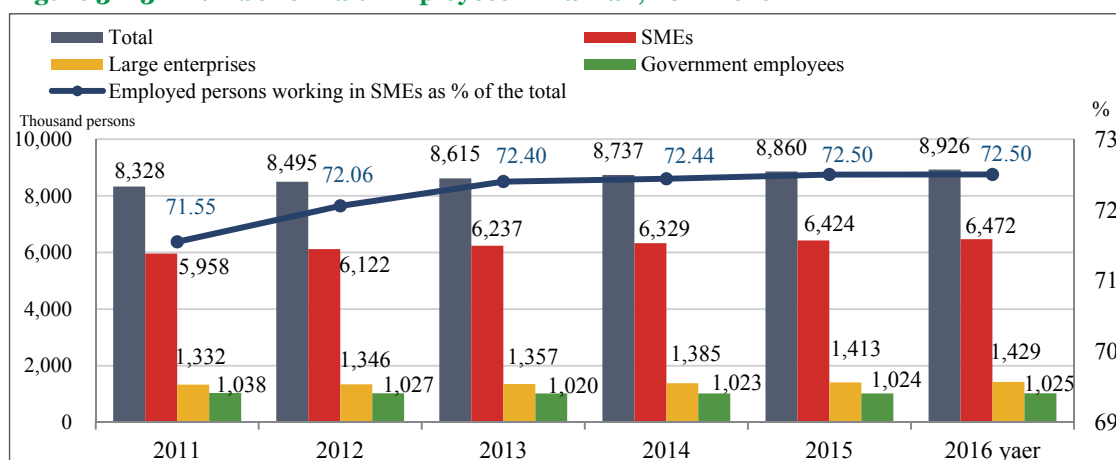
Note: An SME is defined as an enterprise with less than 200 paid employees in Mining and Quarrying, Manufacturing, and Construction industries, or an enterprise with less than 100 paid employees in other industries.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), Manpower Survey data, 2015-2016.

2. More Than 72 Percent Paid Employees Working for SMEs in 2016

The total number of paid employees in Taiwan averaged 8,926,000 in 2016 (including government employees and private company employees), representing an increase of 1.41 percent from 2015; the number of paid employees, 6,472,000 or 72.50 percent were working in SMEs, up 0.75 percent compared to 2015; paid employees working in large enterprises and government rose 1.13 percent and 0.15 percent, respectively. 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).

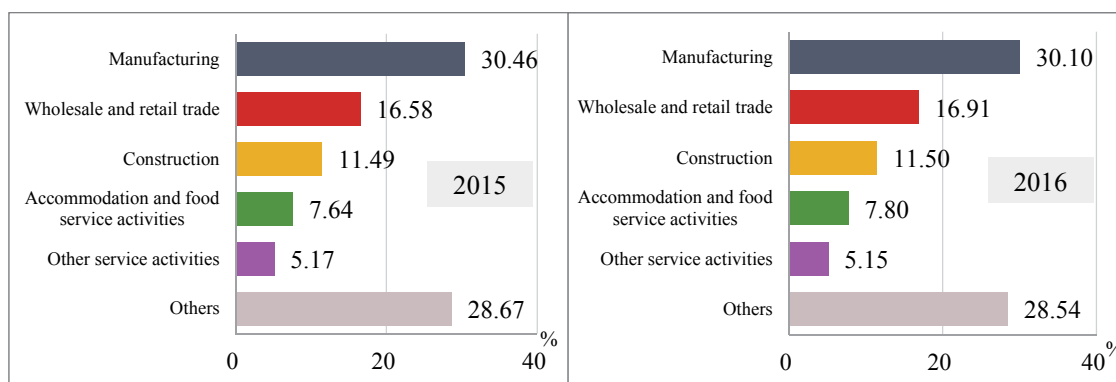
Figure 3-1-3 Number of Paid Employees in Taiwan, 2011-2016



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

In terms of industry distribution, paid employees showed the same pattern as employed persons. The number of paid employees working in SMEs in the manufacturing industry in 2016 stood at 1,948,000, accounting for 30.10 percent of all SME paid employees. The wholesale and retail trade industry had the second largest number of paid employees working in SMEs, or 1,094,000 (16.91 percent), followed by the construction industry, with 744,000 employees (11.50 percent) (Appendix C Table C-6, Figure 3-1-4).

Figure 3-1-4 Top Five Industry Shares of Paid Employees Working in SMEs, 2015-2016



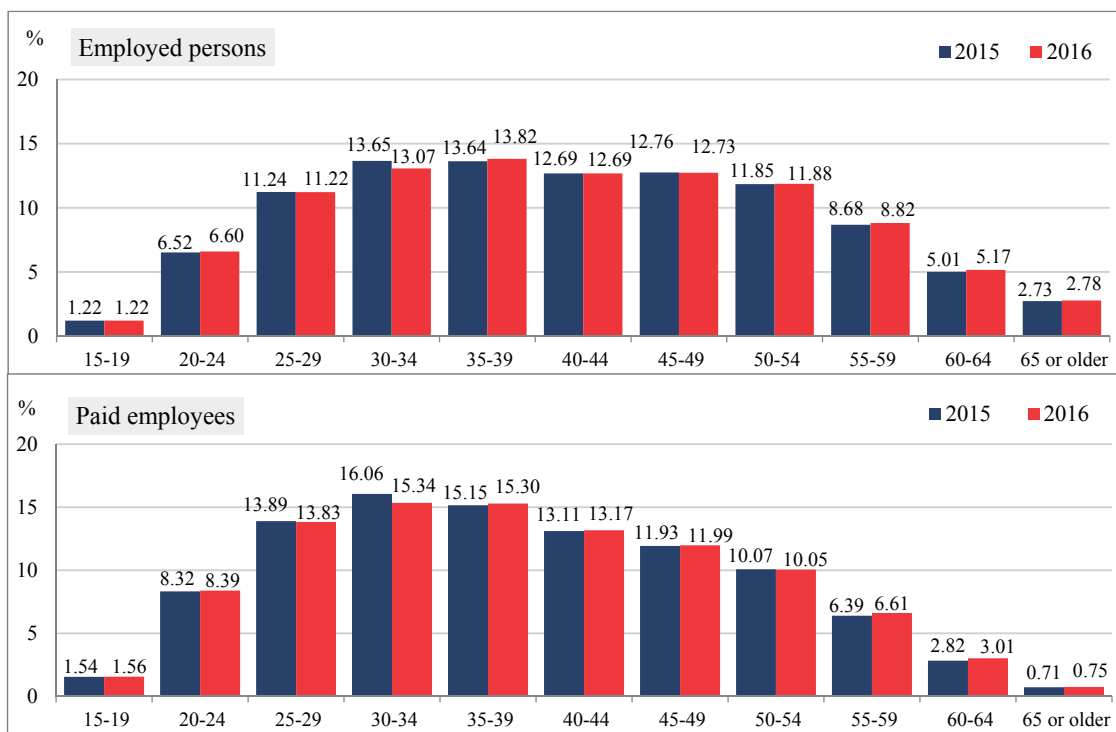
Note and source: See Figure 3-1-2.

In terms of shares of paid employees by sector, there has been a clear trend of decreased share of Industrial sector in the period from 2013 to 2016 (43.05 percent, 42.98 percent, 42.48 and 42.14 percent, respectively) and increased share of Service sector in the same period (55.59 percent, 55.71 percent, 56.17 and 56.56 percent, respectively).

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

In 2016, the proportion of employed persons working in SMEs was highest at 13.82 percent in between the ages of 35 and 39, followed by those between 30 and 34 at 13.07 percent and those between 45 and 49 at 12.73 percent; the proportion of paid employees working in SMEs was highest at 15.34 percent between the ages of 30 and 34, followed by those between 35 and 39 at 15.30 percent and those between 25 and 29 at 13.83 percent (Figure 3-1-5).

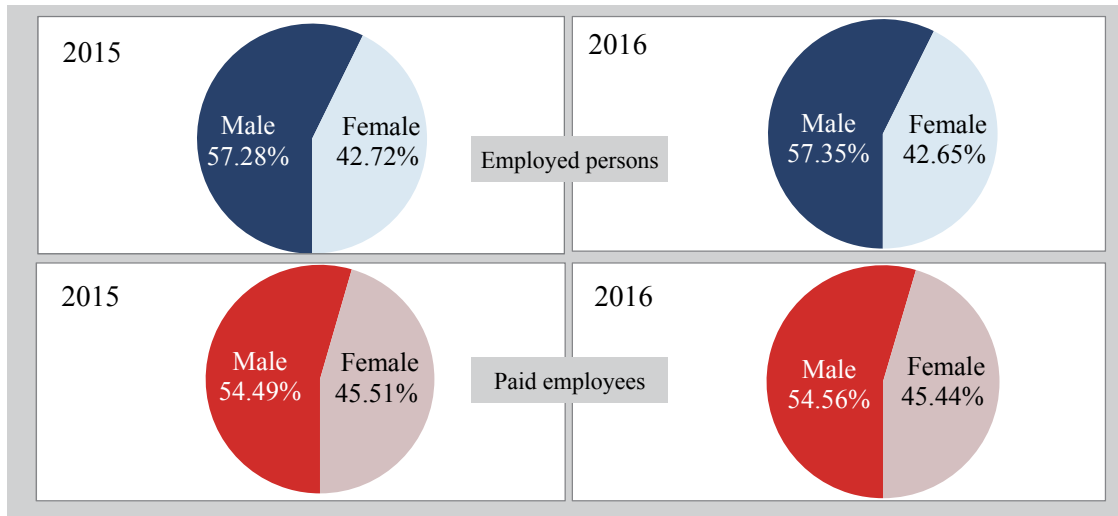
Figure 3-1-5 Age Structure of Employed Persons and Paid Employees Working in SMEs, 2015-2016



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

The male / female ratio of employed persons (57.35 percent / 42.65 percent) or paid employees (54.56 percent / 45.44 percent) in SMEs was far greater than one and more so in 2016; in 2015, the male / female ratio of employed persons (57.28 percent / 42.72 percent) or paid employees (54.49 percent / 45.51 percent) in SMEs was also greater than one, which shows that employment continues to be male-oriented and more so in 2016 (Figure 3-1-6).

Figure 3-1-6 Male / Female Ratio of Employed Persons and Paid Employees Working in SMEs, 2015-2016



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 a vocational education in 2016 at 26.93 percent, followed by those with university education (22.72 percent) and by those with junior college education (15.18 percent). The highest proportion of paid employees working in SMEs consisted of those with university education at 26.79 percent, followed by those with a vocational education (26.73 percent) and by those with junior college education (15.81 percent). Moreover, the share of employed persons and paid employees with university education and higher education increased, showed the education level 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, 2015-2016

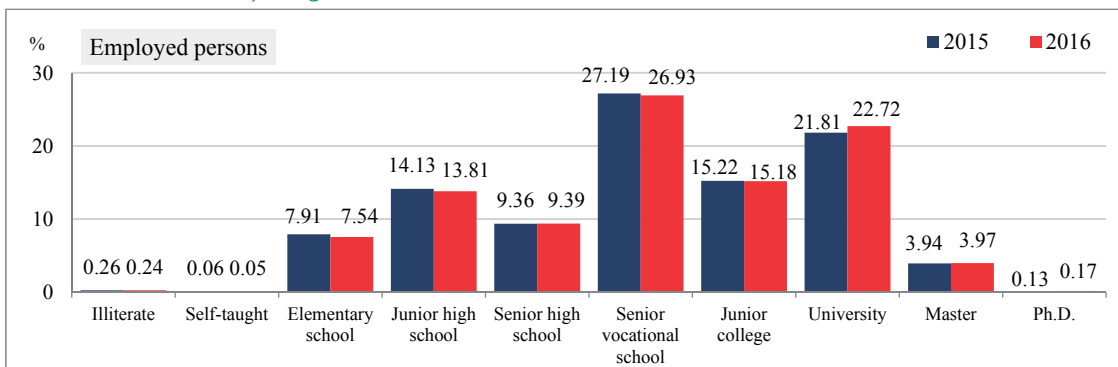
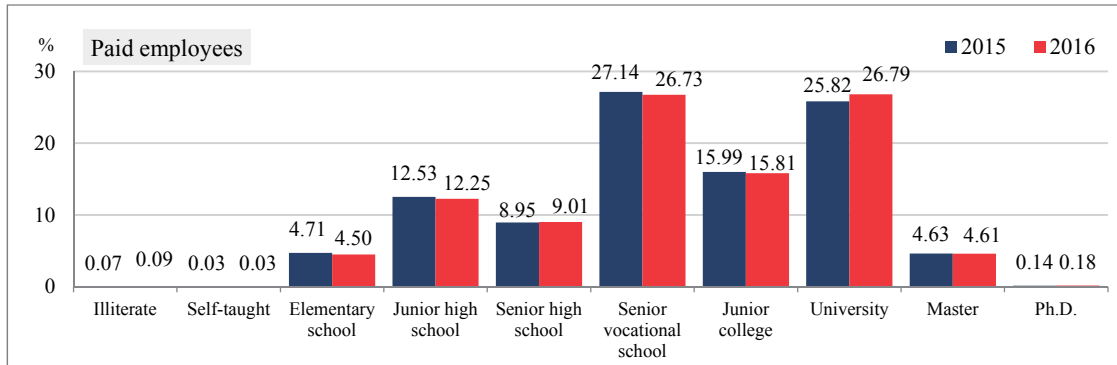


Figure 3-1-7 Educational Structure of Employed Persons and Paid Employees Working in SMEs, 2015-2016(Continued)



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

4. The Number of SME Employers Declined in 2016

There were around 443,000 SME employers and approximately 2,300 large enterprise employers in 2016. The number of SME employers declined by about 6,000 or 1.29 percent from 2015 while the number of large enterprise employers increased by about 60 or 2.68 percent. The age structures of SME employers showed that they were younger than large enterprise employers, and the educational structure distribution was broader (Table 3-1-1).

5. The Number of Self-Employed Persons Rose; the Share of Self-Employed with University and higher education Increased in 2016

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 classed as SMEs. The number of self-employed persons in Taiwan peaked in 1991-1992 at around 1,572,000, and then declined consistently, dropping to 1,310,000 in 2014. However, the number of self-employed persons in Taiwan reached 1,313,000 in 2015, as well as rose by 6,000 persons and reached 1,319,000 in 2016.

As can be seen from the age structure, the shares of self-employed in the 50-54 age group was the highest at about 17.62 percent in 2016, followed by the 55-59 age group (15.76 percent), and the 45-49 age group (14.71 percent). The share of self-employed in the 20-39 age group increased in 2016. In terms of education, the share of self-employed with senior vocational education was the highest at 25.68 percent, followed by those with junior high school education at 20.91 percent, and by those with elementary school education at 20.35 percent. Compared to 2015, the shares of self-employed with university and higher education degree which includes master and PhD education degree increased slightly in 2016 (Table 3-1-2).

Table 3-1-1 Characteristics of Employers, 2015-2016

Unit: Thousand persons; %

Item \ Year	2015		2016	
	SMEs	Large enterprises	SMEs	Large enterprises
No. of employers	448.76	2.24	442.96	2.30
Share of total	99.50	0.50	99.48	0.52
Age	100.00	100.00	100.00	100.00
15 - 19	0.02	-	0.00	-
20 - 24	0.26	-	0.37	-
25 - 29	1.61	-	1.70	-
30 - 34	5.65	-	5.26	-
35 - 39	9.52	10.61	9.40	12.01
40 - 44	13.52	1.97	12.98	3.87
45 - 49	17.65	1.45	16.95	4.80
50 - 54	19.43	9.49	19.39	8.54
55 - 59	16.37	34.95	16.79	37.53
60 - 64	10.58	16.91	11.33	8.61
65 or older	5.38	24.62	5.84	24.64
Sex	100.00	100.00	100.00	100.00
Male	80.94	81.61	79.85	82.37
Female	19.06	18.39	20.15	17.63
Education	100.00	100.00	100.00	100.00
Illiterate	0.02	-	0.09	-
Self-taught	0.08	-	0.01	-
Elementary school	7.02	-	6.62	-
Junior high school	14.32	-	14.02	1.80
Senior high school	9.96	4.63	9.78	12.52
Senior vocational school	26.91	4.56	26.24	19.09
Junior college	19.84	16.90	20.26	12.95
University	16.68	35.42	17.59	16.96
Master	4.72	35.22	4.94	32.90
Ph.D.	0.44	3.28	0.44	3.78

Note: “-” denotes no available data.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2015-2016).

Table 3-1-2 Characteristics of Self-Employed Persons, 2015-2016

Unit: Thousand persons; %

Item \ Year	2015	2016
No. of self-employed persons	1,313	1,319
Age	100.00	100.00
15 - 19	0.05	0.03
20 - 24	0.80	0.74
25 - 29	2.80	2.77
30 - 34	5.54	5.69
35 - 39	8.56	8.94
40 - 44	11.08	10.78
45 - 49	14.98	14.71
50 - 54	17.43	17.62
55 - 59	15.88	15.76
60 - 64	12.51	12.46
65 or older	10.36	10.50
Sex	100.00	100.00
Male	74.71	75.16
Female	25.29	24.84
Education	100.00	100.00
Illiterate	0.87	0.72
Self-taught	0.15	0.13
Elementary school	21.31	20.35
Junior high school	21.39	20.91
Senior high school	10.51	10.37
Senior vocational school	25.46	25.68
Junior college	10.93	11.74
University	7.91	8.46
Master	1.42	1.56
Ph.D.	0.05	0.07

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data (2015-2016).

6. Number of Unemployed Persons Previously Working for SMEs Rose in 2016

In 2016, the number of unemployed persons in Taiwan rose by approximately 20,000 (or 4.44 percent) and the unemployment rate rose to 3.92 percent from 3.78 percent in 2015. Apart from the first time job-seekers, the number of unemployed persons who had previously been working for SMEs rose significantly by 11.90 percent to 300,000 in 2016 from 268,000 in 2015; the number of unemployed who had previously been working for large enterprises rose by 14.54 percent to 36,000 in 2016 from 31,000 in 2015; the number of unemployed who had previously been working for government

declined 2.65 percent to 14,700 in 2016 from 15,500 in 2015; and the number of unemployed who were the first time job-seekers rose by 8.25 percent to 109,000 in 2016 from 101,000 in 2015 (Table 3-1-3).

Table 3-1-3 Characteristics of the Unemployed, 2015-2016

Unit: Thousand persons; %

Item \ Year	2015				2016			
	SMEs	Large enterprises	Government	First time job-seekers	SMEs	Large enterprises	Government	First time job-seekers
No. of the unemployed	267.88	31.44	15.54	101.00	299.84	36.01	14.71	109.03
Share of total	60.94	7.15	3.43	28.47	65.24	7.84	3.20	23.72
Age	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
15 - 19	1.52	0.77	0.15	4.84	1.47	0.44	-	6.08
20 - 24	12.94	9.07	8.05	52.08	10.35	8.02	10.58	60.13
25 - 29	19.49	18.82	23.51	28.34	18.56	19.93	21.22	26.30
30 - 34	17.24	24.95	30.02	8.77	14.80	23.49	19.65	5.19
35 - 39	15.06	19.68	8.75	3.99	15.46	22.10	8.30	1.87
40 - 44	9.98	11.57	8.13	1.12	11.80	8.84	9.09	0.33
45 - 49	10.43	7.84	4.15	0.54	10.54	10.07	11.74	0.10
50 - 54	7.69	5.00	9.71	0.25	8.59	4.95	6.09	-
55 - 59	4.34	1.78	4.55	0.07	5.40	2.15	10.06	-
60 - 64	1.28	0.54	2.63	-	2.87	-	3.25	-
65 or older	0.03	-	0.35	-	0.15	0.01	0.03	-
Sex	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Male	61.17	63.81	38.99	51.59	62.20	59.05	38.03	56.25
Female	38.83	36.19	61.01	48.41	37.80	40.95	61.97	43.75
Education	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Illiterate	0.04	-	-	-	0.04	-	-	0.05
Self-taught	0.01	-	-	-	0.00	-	0.28	-
Elementary school	3.12	0.45	2.88	0.12	5.52	-	1.43	-
Junior high school	12.58	2.59	5.61	1.21	14.26	5.04	4.26	1.69
Senior high school	10.04	5.51	4.36	4.69	10.14	7.24	3.08	5.55
Senior vocational school	31.21	20.18	18.03	9.70	28.43	28.51	17.14	11.25
Junior college	13.91	19.33	10.11	4.67	13.35	16.85	13.03	5.43
University	26.05	42.91	48.01	65.85	25.08	37.44	47.70	63.50
Master	2.99	9.03	11.00	13.54	3.11	4.85	12.58	12.31
Ph.D.	0.05	0.01	-	0.23	0.06	0.08	0.50	0.22

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 (2015).

In terms of age distribution of unemployed persons: those who had previously been working for SMEs or government, most (18.56 percent and 21.22 percent, respectively) were in age 25-29 group while those who had previously been working for large enterprise, most (23.49 percent) were in age 30-34 group. For first time job-seekers, most unemployed were in age 20-24 group, accounting for 60.13 percent in 2016, showing serious youth unemployment problem (Table 3-1-3).

In terms of sex distribution of unemployed persons: those who had previously been working for government, most were women while those who had previously been working for large enterprise or SMEs, most were men (Table 3-1-3).

In terms of education distribution of unemployed persons: those who had previously been working for SMEs, most were people with vocational education (28.43 percent), followed by people with university education (25.08 percent); those who had previously been working for large enterprises or government, or were first time job-seekers, most were with university education (37.44 percent, 47.70 percent, and 63.50 percent, respectively). The youth unemployment problem seemed getting worse in 2016 as 63.50 percent of first time job-seekers who were unemployed had university education, lower than the ratio in 2015 (Table 3-1-3).

In terms of the reasons for leaving the previous jobs, “Dissatisfaction with previous jobs” was the No. 1 reason for leaving SMEs (46.55 percent) or large enterprises (54.48 percent). However, the No. 1 reason for leaving government was “End of seasonal or temporary jobs” (62.18 percent) (Table 3-1-4).

Table 3-1-4 Reasons for Leaving the Previous Jobs, 2015-2016

Unit: Thousand persons; %

Item \ Year	2015			2016		
	SMEs	Large Enterprises	Government	SMEs	Large Enterprises	Government
No. of persons	302.94	31.67	17.14	267.88	31.44	15.10
Downsizing or out of business	38.07	31.57	14.93	34.37	27.84	19.10
Dissatisfaction with previous Jobs	46.22	55.96	20.84	50.90	61.38	19.81
Poor health	2.39	3.05	2.64	3.10	1.45	0.21
End of seasonal or temporary jobs	10.55	4.33	52.04	8.86	4.25	55.63
Women: marriage or giving birth	0.51	1.40	0.47	0.71	1.19	-
Retired	0.14	0.81	4.29	0.09	1.22	3.07
Housework too busy	0.76	1.09	0.16	0.61	0.97	0.17
Others	1.35	1.79	4.62	1.36	1.70	2.01

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 (2015-2016).

Besides, the number of unemployed due to “Downsizing or out of business” declined consistently from peak at 337,000 in 2009 to 121,000 in 2016.

7. Near 60 Percent Foreign Employees Worked in SMEs

2016 saw a continuous increase in both the number of applications to employ foreign laborers and the number of foreign laborers actually working in the manufacturing and the construction industries in Taiwan. The number of approvals rose to 491,987, up 72,985 from 2015, while the number of foreign laborers actually working in Taiwan increased to 376,605, up 22,919.

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 actually working in Taiwan rose in 2016. The number of foreign laborer approvals rose by 36,002 (or up 14.84 percent) for SMEs and by 36,983 (or up 20.96 percent) for large enterprises.

Similarly, the number of foreign laborers actually in Taiwan and working for SMEs rose by 14,431 (up 7.19 percent) in 2016, while the number of foreign laborers in Taiwan and working for large enterprises rose by 8,488 (up 5.55 percent). Near 60 percent of all foreign labors working in Taiwan worked for SMEs (Table 3-1-5).

Table 3-1-5 Number of Foreign Workers Introduced by Enterprise Size, 2012-2016

Unit: Persons; %

Year \ Size	Valid approved number			Number in Taiwan		
	Total	SMEs	Large enterprises	Total	SMEs	Large enterprises
2012	260,308	157,221(60.40)	103,087(39.60)	233,572	139,176(59.59)	94,396(40.41)
2013	307,278	184,008(59.88)	123,270(40.12)	269,131	159,334(59.20)	109,797(40.80)
2014	354,448	208,765(58.90)	145,683(41.10)	321,269	187,159(58.26)	134,110(41.74)
2015	419,002	242,546(57.89)	176,456(42.11)	353,686	200,714(56.75)	152,972(43.25)
2016	491,987	278,548(56.79)	213,439(43.21)	376,605	215,145(57.13)	161,460(42.87)

Note:

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

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

8. Part-Time Workers Decreased in SMEs

According to the data presented in the *2016 Manpower Utilization Survey*, the part-time workers in SMEs fell by 2,000 to 364,000, while in large enterprises the part-time manpower rose by 5,000. There was an increase of 39,000 full-time workers in SMEs, an increase of 24,000 in large enterprises and a decrease of 2,000 for government in 2016. The utilization of part-time workers is most common in the SMEs in service sector, especially in the accommodation and food service industry, followed by the wholesale and retail trade industry (Table 3-1-6).

9. A Slight decrease in the Number of SME Employees Changing Jobs

In 2016, a total of 533,000 SME employees changed jobs; this figure was down about 38,000 from 2015. The rate of those taking up a position with another SME remained high at 88.56 percent. Only 11.45 percent took a job in the government (2.44%) or a large enterprise (9.01 percent). The figure suggests that it is not easy for former SME employees to find jobs in large enterprises or public sector, but it could also mean that SMEs offer more opportunities than government or large enterprises for job seekers (Table 3-1-7).

Table 3-1-6 Full-Time and Part-Time Manpower Utilization by Industry and Enterprise Size, 2015-2016

Unit: Thousand persons

Industry \ Year / size	2015						2016					
	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	8,420	366	1,344	24	1,011	14	8,459	364	1,368	29	1,009	17
Agriculture, forestry, fishing and animal husbandry	536	11	1	-	4	-	544	11	1	0	2	-
Mining and quarrying	3	-	-	-	1	-	3	0	0	0	1	-
Manufacturing	2,189	46	762	3	21	-	2,167	50	790	1	15	-
Electricity and gas supply	4	-	4	-	22	-	2	0	5	0	23	-
Water supply and remediation activities	35	1	1	-	46	-	38	0	1	0	42	-
Construction	844	31	8	-	8	-	857	30	8	0	4	-
Wholesale and retail trade	1,684	84	52	12	6	1	1,690	76	65	7	7	1
Transportation and storage	313	6	66	0	52	-	319	7	63	2	50	-
Accommodation and food service activities	708	81	21	-	-	-	714	85	24	1	0	-
Information and communication	168	5	71	1	-	-	182	6	55	0	2	-
Financial and insurance activities	315	8	81	2	15	-	321	3	78	3	17	-
Real estate activities	94	-	4	-	2	-	94	0	2	0	3	-
Professional, scientific and technical activities	287	6	39	-	28	-	291	10	42	1	21	-
Supporting service activities	242	16	22	-	-	-	244	18	22	2	0	-
Public administration and defense; compulsory social security	0	-	-	-	374	0	2	0	0	0	372	1
Education	203	31	57	5	342	13	203	28	55	12	344	14
Human health and social work activities	202	11	147	1	75	-	195	12	147	0	89	2
Arts, entertainment and recreation	76	7	4	-	11	0	79	5	4	1	14	0
Other service activities	516	22	3	-	3	-	514	23	6	0	3	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 (2015-2016).

Table 3-1-7 Choice of New Employer by Former SME Employees, 2009-2016

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
2009	518	472	91.14	24	4.69	22	4.17
2010	536	471	87.80	42	7.82	23	4.38
2011	532	461	86.75	48	9.03	22	4.22
2012	507	444	87.60	46	8.98	17	3.42
2013	509	453	88.99	38	7.38	18	3.63
2014	514	460	89.46	43	8.30	11	2.24
2015	571	505	88.45	49	8.52	17	3.02
2016	533	472	88.56	48	9.01	13	2.44

Note: An SME is defined 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 (2009-2016).

II Labor Conditions in SMEs

1. SMEs in Electricity and Gas Supply Had the Longest Average Working Hours

In 2016, for SMEs, the electricity and gas supply industry had the longest average working hours at 46.76 hours per week (and employed 2,000 workers, accounting for 0.02 percent of all employed workers in SMEs), followed by the other service activities industry at 45.14 hours per week (and employed 535,000 workers, accounting for 6.09 percent of all employed workers in SMEs), and the real estate activities at 45.12 hours per week (and employed 94,000 workers, accounting for 1.07 percent of all employed workers in SMEs). The education had the shortest average working hours at 38.56 hours per week (and employed 231,000 workers, accounting for 2.62 percent of all employed workers in SMEs) (Table 3-2-1).

2. The Highest Average Salary Level for SME Employees Was in the Financial and Insurance Industry

In 2016, the highest average salary level for SME employees was in the financial and insurance industry at over NT\$47,000 per month (3.91 percent of all SMEs' paid employed persons), followed by the professional, scientific and technical activities industry at about NT\$46,000 per month (3.49 percent of all SMEs' paid employed persons), and the electricity and gas supply industry at about NT\$45,000 per month (0.04 percent of all SMEs' paid employed persons). The lowest average salary level for SME employees was in the agriculture, forestry, fishing and animal husbandry at about NT\$25,000 per month (5.16 percent of all SMEs' paid employed persons) (Table 3-2-2).

The average salary level for SME employees rose in most industries in 2016 from 2015 except for the real estate activities, the human health and social work activities and the arts, entertainment and recreation. The sharpest decline came from the real estate activities, down NT\$1,600, followed by the human health and social work activities, down NT\$810. The average salary level for SME employees rose most at around NT\$10,000 in the electricity and gas supply, followed by the mining and quarrying at NT\$3,200 (Table 3-2-2).

Table 3-2-1 Working Hours per Week and Number of Employed Workers by Enterprise Size and Industry, 2016

Unit: Thousand persons; hours / per week

Item Industry	No. of employed worker			Weekly working hours		
	SMEs	Large enterprises	Government employees	SMEs	Large enterprises	Government employees
Agriculture, forestry, fishing and animal husbandry	552.43	1.12	2.48	40.56	46.00	39.82
Mining and quarrying	3.11	-	0.62	44.69	-	40.00
Manufacturing	2,208.13	787.98	14.88	42.20	43.16	40.38
Electricity and gas supply	2.07	4.81	22.72	46.76	40.25	41.02
Water supply and remediation activities	38.41	1.03	41.24	42.31	42.55	41.29
Construction	881.43	7.73	3.93	40.75	43.19	40.19
Wholesale and retail trade	1,762.70	72.29	7.88	44.30	41.87	41.71
Transportation and storage	323.91	64.91	49.76	45.10	43.43	41.85
Accommodation and food service activities	798.75	24.70	0.20	44.74	44.57	60.00
Information and communication	187.80	54.72	2.15	41.85	43.47	40.00
Financial and insurance activities	322.31	81.46	16.80	41.84	41.78	41.40
Real estate activities	94.29	1.91	2.56	45.12	46.04	41.80
Professional, scientific and technical activities	298.73	42.15	21.31	41.56	42.26	40.64
Supporting service activities	260.33	24.05	-	44.73	45.48	-
Public administration and defense; compulsory social security	2.13	-	368.32	44.77	-	42.91
Education	230.71	66.48	356.25	38.56	35.93	39.30
Human health and social work activities	205.34	144.51	90.43	42.42	44.10	42.81
Arts, entertainment and recreation	84.07	4.94	14.20	43.59	41.10	39.93
Other service activities	535.11	6.25	3.32	45.14	45.79	40.90

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 (2016).

Table 3-2-2 Number of Paid Employed Persons and Average Wage of Main Work by Enterprise Size and Industry, 2016

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

Item Industry		No. of paid employed persons			Average wage of main work			
		SMEs	Large enterprises	Government employees	Total	SMEs	Large enterprises	Government employees
Agriculture, forestry, fishing and animal husbandry		425.53	1.12	2.48	25.44	25.36	30.54	35.84
Mining and quarrying		3.11	-	0.62	39.17	37.71	-	46.43
Manufacturing		2,141.86	791.05	14.88	37.73	36.39	41.14	48.20
Electricity and gas supply		2.07	4.81	22.83	56.09	45.87	53.78	57.50
Water supply and remediation activities		37.51	1.03	41.73	37.29	36.87	31.74	37.81
Construction		861.27	7.73	3.93	38.84	38.78	39.80	50.25
Wholesale and retail trade		1,596.09	72.29	7.88	35.85	35.73	38.57	36.59
Transportation and storage		321.63	64.91	49.86	41.35	39.10	48.44	46.65
Accommodation and food service activities		701.30	24.70	0.20	31.03	30.75	38.55	65.50
Information and communication		187.28	54.72	2.15	46.14	43.82	54.23	42.92
Financial and insurance activities		322.85	81.46	16.80	49.30	46.67	57.18	61.61
Real estate activities		93.41	1.91	2.56	38.92	38.54	62.18	35.19
Professional, scientific and technical activities		287.73	42.66	21.31	49.52	46.21	63.73	65.91
Supporting service activities		254.67	24.05	-	30.22	30.20	30.42	-
Public administration and defense; compulsory social security		2.13	-	372.28	48.07	41.77	-	48.10
Education		225.56	67.48	358.14	45.19	32.98	50.54	51.87
Human health and social work activities		201.11	146.70	90.96	45.80	39.56	40.87	67.54
Arts, entertainment and recreation		78.57	4.94	14.20	34.09	32.41	39.38	41.55
Other service activities		504.47	6.25	3.32	32.24	32.15	35.95	39.67

Note:

1. Employed persons with working hours 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 (2016).

III Manpower Cultivation in SMEs

1. Various Subsidized Programs for SMEs in Talent Cultivation

Various government agencies such as the Ministry of Labor and the Small and Medium Enterprise Administration of Ministry of Economic Affairs (SMEA, MOEA) provides subsidies for individual enterprises and organizations to arrange training programs for their employees in line with operational needs (“individual training”), while also encouraging enterprises in related industries to join forces with one another to implement employee training on a joint basis (“joint training”). A few

main programs and agencies are listed as followed covering main areas such as digital learning, incubation, professional training for various industries, R&D and technology management training, international trade, service, and executive training.

- (1) Small and Medium Enterprise Administration, MOEA: Business and management training; incubation service; cultivation of international SME talent.
- (2) Industrial Development Bureau, MOEA: Professional training by industries. In 2017, a total of 12 training courses will be offered to cover various industries, such as: smart electronics, machinery, information application, food, textile, intellectual content, smart mobile devices, smart printing and other key industries (site: <https://idbtrain.stpi.narl.org.tw/classinfo.htm>).
- (3) Department of Industrial Technology, MOEA: R&D and management cultivation.
- (4) Bureau of Foreign Trade, MOEA: International business management training.
- (5) Department of Commerce: Service talent training (242 people participated in 2016).
- (6) Ministry of Education: Industrial Master Degree Program and Industrial Academy Program.
- (7) Industry-specific Masters Degree courses are tailored to meet the needs of industry: The business enterprises and university concerned submit a joint curriculum proposal to the Ministry of Education. If the proposal is approved, the university in question can then launch an industry-specific Masters Degree program, to help cultivate the Masters-level human talent that firms need. The range of industry sectors for which industry-specific Masters Degree courses are available or planned covers: (A) mechatronics; (B) energy-saving technologies; (C) metal processing; (D) optoelectronics; (E) green industry; (F) finance (including wealth management); (G) real estate; (H) cultural and creative industries; (I) service industries; (J) other. Students need to sign the training contract that requires the students serve at least two years in sponsored enterprises when they enroll in the Industry-specific Masters Degree Program (<http://imaster-moe.iiiedu.org.tw>).
- (8) Ministry of Labor: Talent enhance and entrepreneurship incubation (maximum subsidy of NT\$70,000 per person in three years for training costs). In 2014, SME a new job training subsidy was created by the Ministry of Labor for SMEs with below 50 employees providing professional and individual counseling and training, no long requiring lengthy and costly application and expense verification process.

2. Results of Subsidized Training Programs for SMEs

(1) The Number of Individual Training and Joint Training Plans Declined Slightly in 2016

In 2014, the number of individual training and the number of joint training plans reached record high and showed falling in the following years. In 2016, the number of individual training and the number of joint training plans declined slightly to 2,651 and 134 respectively (Table 3-3-1).

Table 3-3-1 Provision of Assistance to Enhance Manpower Cultivation by Business
Enterprise, 2012-2016

Unit: Enterprises; classes; persons; projects

Year	Item	Individual training plans			Joint training plans			
		No. of firms receiving subsidies	No. of training classes	No. of training participants	No. of projects	No. of firms taking part	No. of training classes	No. of training participants
2012		1,204	27,269	600,480	127	463	1,730	58,624
2013		1,687	33,554	757,812	174	863	1,840	93,266
2014		2,802	45,151	753,720	242	966	2,766	91,412
2015		2,659	42,785	676,869	199	700	2,533	65,459
2016		2,651	37,964	605,293	134	555	1,679	54,599

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

3. Government Actively Promotes Entrepreneurship

The Ministry of Labor sponsored the staged classes for entrepreneurs. A total of 6,112 people took the class in 2016 (2,767 for introduction class; 2,309 for mid-level class; 1,036 for advanced class) (Table 3-3-2).

Table 3-3-2 Provision of Conducting Entrepreneurship Study by Ministry of Labor, 2012-2016

Unit : Persons

Year	Introduction classes	Mid-level classes	Advanced classes	Total
2012	7,700	4,252	1,232	13,184
2013	7,512	4,516	1,235	13,263
2014	7,476	3,924	1,390	12,790
2015	7,107	4,786	1,526	13,419
2016	2,767	2,309	1,036	6,112
Total	32,562	19,787	6,419	58,768

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

In 2016, the Ministry of Labor provided entrepreneurship consultation and counseling to a total of 2,583 people, and helped 1,699 people start their new businesses that created 4,097 new jobs. A total about 20,000 jobs were created through these programs from 2012 to 2016 (Table 3-3-3).

Table 3-3-3 Results of Entrepreneurship Consultation and Counseling by Ministry of Labor, 2012-2016

Units: Persons

Year	No. of participating persons	No. of persons to start up new business	No. of new jobs created
2012	4,689	2,008	5,176
2013	4,087	1,671	4,156
2014	3,944	1,321	3,366
2015	4,432	1,228	3,114
2016	2,583	1,699	4,097
Total	19,735	7,927	19,909

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

4. Manpower Demand Expected to Rise

According to the results from the *2017 Manpower Requirements Survey* (conducted over the period April 24 to May 12 by the Ministry of Labor, targeting enterprises with 30 or more employees; a total of 3,049 SMEs answered the survey), it is anticipated that net manpower demand will rise by around 40,200 net jobs (adding 47,850 while eliminating 7,631 persons) from the end of April to the end of June 2017. For the same period, 64.91 percent of enterprises will keep the same level of manpower; 24.90 percent of enterprises will add net manpower; 5.86 percent of enterprises choose “Unpredictable,” and only 4.33 percent of enterprises will reduce net manpower. The reasons may attribute to the recovering economy and strong demand from industries: semiconductors, automobile electronics, the Internet of Things (IoT) and artificial intelligence (Table 3-3-4).

Table 3-3-4 Anticipated Changes in the Number of Personnel Employed by Business Enterprises during the Period from April 31, 2016 to June 31, 2017

Unit: Persons

Item Industry	Net increase in no. of employees	Change in manpower demand			Top 3 occupational categories		
		New positions	Positions eliminate	Craftsmen, machinery operators and assembly line workers	Technicians and assistant specialists	Service and sales personnel	Professional specialists
Total	40,219	47,850	7,631	11,562	10,721	8,237	3,550
Manufacturing	16,139	18,761	2,622	9,642	40	2,611	1,113
Remediation activities	69	126	57	71	-	-	-
Construction	393	1,001	608	35	-	380	28
Wholesale and retail trade	5,572	6,385	813	606	2,742	1,024	458
Transportation and storage	1,139	1,801	662	416	-4	257	4
Accommodation and food service activities	5,815	6,363	548	75	4,903	20	42
Information and communication	1,546	1,783	237	18	209	732	322
Financial and insurance activities	1,154	1,239	85	-	40	695	257
Real estate activities	1,249	1,448	199	-180	-	1,355	13
Professional, scientific and technical activities	904	1,132	228	-	-	609	145
Support service activities	2,330	3,707	1,377	672	1,124	243	2
Human health and social work activities	1,654	1,743	89	11	303	112	1,139
Arts, entertainment and recreation	1,847	1,917	70	110	1,315	154	27
Other service activities	408	444	36	86	49	45	

Source: Ministry of Labor, *2017 Report of Manpower Requirements Survey* (April 2017).

The most increase in demand will be in the manufacturing, with a net increase of about 16,100, followed by about 5,800 in the accommodation and food service activities, and about 5,600 in the wholesale and retail trade activities. Most of the increased demand by occupation will be for craftsmen, machinery operators and assembly line workers (about 11,600), followed by services and sales (about 10,700), and technicians and assistant specialists (about 8,200).





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 Upgrade and Transformation for SMEs

Chapter 6 Strengthening Start-ups and Incubation & Acceleration Mechanism

Chapter 7 Revitalizing Local Industries by Outreach Development and Seizing Business Opportunities

Chapter 8 Other Government Measures to Support SMEs

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. The Taiwanese government has for many years been implementing policies designed to resolve the hurdles facing SMEs and provide proactive support and assistance to them.

The government's development strategy for SMEs in 2016-2017 has focused on (1) Financial Services and Investment in SMEs; (2) R&D, Upgrade and Transformation for SMEs; (3) Start-ups and Incubation & Acceleration Mechanism; (4) Local Industries and Regional Branding; and (5) Other Government Measures to Support SMEs, such as government procurement, policy loans for special projects and regulatory flexibility.

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 guidance and measures recently instituted by the government include helping SMEs acquire financing guarantees for investments in new southbound countries, "Project for Promoting Smart Commercial Services in the Asian Silicon Valley Project," and the Amendments to the Article 36-2 of the Act for Development of Small and Medium Enterprises to increase the rate of employment among young people and increase the salaries of basic personnel.

CHAPTER 4

Improving Financial and Funding Services and Strengthening Investment in SMEs

Many SMEs in Taiwan possess unique technology and innovative products, but generally find it very difficult to obtain funding either from the capital market or venture capital due to unproven business models and lack of track records, or from banks due to unstable financial performance, volatile cash flow and lack of tangible assets that could be used as collateral. This situation has a direct negative impact on the SMEs' ability to survive and grow, and there is thus a clear need for the government to provide financing guidance and credit guarantees.

In order to provide comprehensive assistance for SME development, and achieve a further strengthening of financing channels, the Small and Medium Enterprise Administration, Ministry of Economic Affairs (SMEA, MOEA) has been working actively to provide financial and funding services such as credit guarantees, short-term financing, and funding guidance. These measures are aimed at helping SMEs obtain financing; arrange the provision of direct credit guarantees by the SME Credit Guarantee Fund; provide assistance to business startup; launch the Phoenix Loan scheme for micro-enterprises; use the Firefly Mutual Guarantee scheme to help SMEs in the upstream, midstream and downstream segments of particular industries to obtain loans at preferential interest rates; and organize SME investment plans, thereby giving SMEs a wider range of financing channels to choose from.

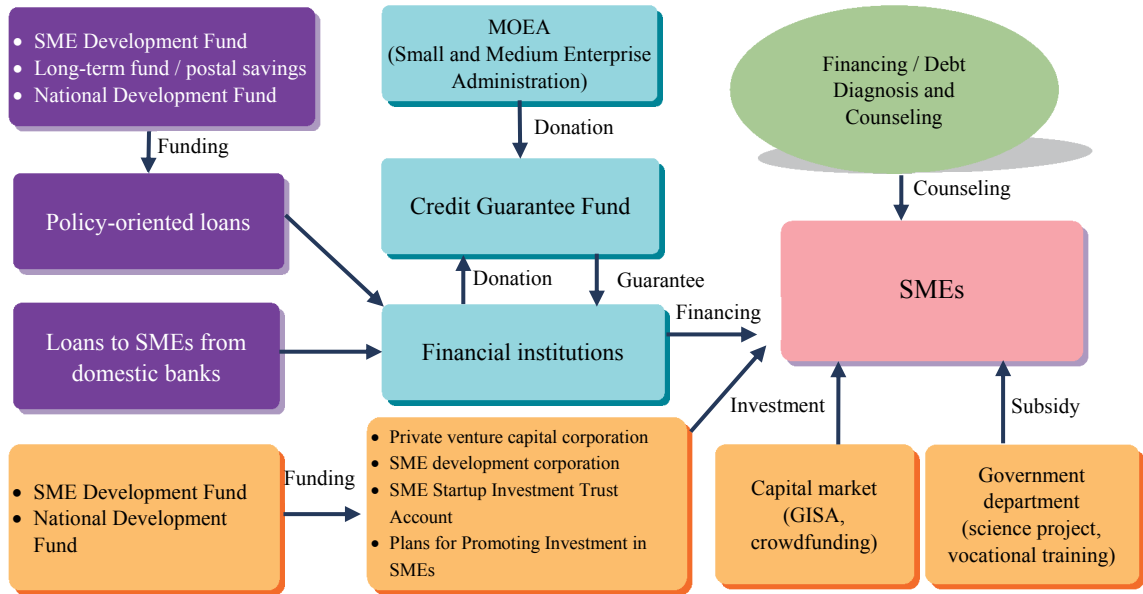
This chapter is divided into three sections. Section I discusses measures to improve financial and funding services. Section II focuses on SME credit guarantees. Section III covers government's measures to strengthen investment in SMEs. Figure 4-0-1 outlines the general framework to strengthen financing for SMEs in Taiwan.

I Improving Financial and Funding Services

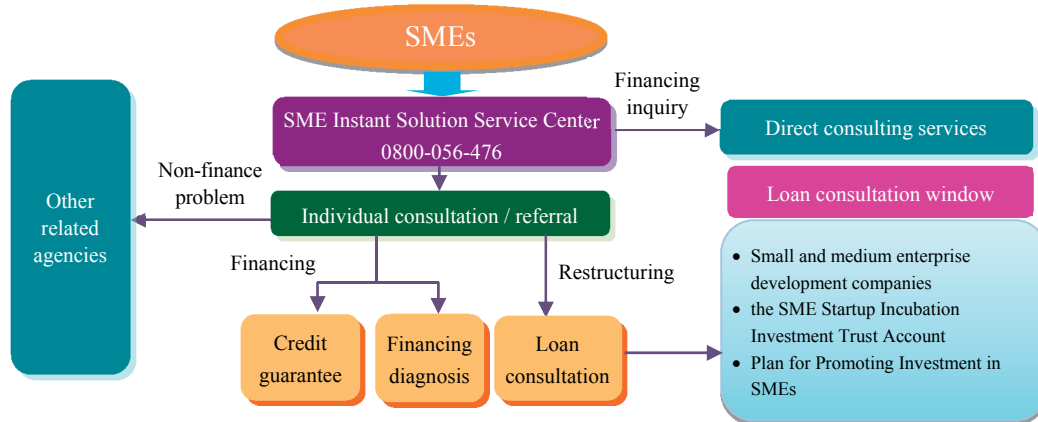
1. Providing SME Financing Counseling and Value Added Service

(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 loans related referral, guidance, refinance, extension, line of credit, and so on for both borrowers and creditors to enhance SMEs' financing capacity and risk management.

Figure 4-0-1 Framework to Strengthen Financing for SMEs

Source: Small and Medium Enterprise Administration, Ministry of Economic Affairs (2017).

Figure 4-1-1 Financial and Funding Consultation Mechanism

Source: Small and Medium Enterprise Administration, Ministry of Economic Affairs (2017).

(2) SME Financing Diagnostic Service Plan

SME Financing Diagnostic Service was set up through the SME Financing Services Platform to improve SMEs' condition, provide financing, and offer financial diagnosis and counseling service. 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, debt restructuring and/or refinance, and accounting and business management counseling (plan site: <http://smefinance.moeasmea.gov.tw/>).

(3) SMEs' Value and Innovation Application Plan

In order to improve the matchmaking process for connecting startups with the financial resources of investors, provide financing services needed for business development, and help newly-established companies become globally-connected, in 2016 this project utilized the Platform for Financing Data and Innovative Trends (“FinDIT”) along with big data analytics techniques through a customizable search service to provide more than one hundred news articles and early stage capital monitoring, research reports on the latest trends in the most popular fields, as well as leadership seminars and promotional seminars. In addition, the Global Angel & Early Stage Investment Summit was held, which featured a panel of international experts who shared their experiences with participants (plan site: <http://findit.org.tw>).

(4) Enhance SMEs' Financial Autonomy Plan

Enhance SMEs' Financial Autonomy Plan was set up to help SMEs cultivate good financial habit and establish sound accounting management system. The Plan's three main work items are: (1) joint counseling: simple money management and bookkeeping, and on-site visits / individual counseling; (2) CPA advisory services; and (3) promoting the new version of the business accounting (plan site: <http://www.careernet.org.tw/accounting/index.php>).

2. SME Financing Services Platform

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.

3. 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 eleventh stage in 2017 with the plan target of NT\$240 billion. In 2016 (eleventh stage), domestic banks made loans to SMEs amounting to net increase of NT\$279.2 billion from 2015. As of December 2016, domestic banks' total outstanding loan balance to SMEs reached NT\$5.735 trillion (plan site: <http://www.banking.gov.tw/>).

4. Special Award for Financing Innovative Industries by Domestic Banks

To encourage the development of a long-term partnership relationship between innovative industries and banks, the Financial Supervisory Commission (FSC) decided to launch the Award Plan for Increasing Loans to Innovative Industries by Domestic Banks starting from 2014. As of December 2016, domestic banks' total outstanding loan balance to innovative industries reached NT\$483.5

billion, up NT\$127.9 billion from the balance by the end of 2015, or reaching 182.7 percent of the target growth of NT\$70.0 billion in 2016 (plan site: <http://www.banking.gov.tw/>).

5. 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 loans is that the loans are granted for specific purposes, and have preferential interest rates. In 2017, altogether, 19 different types of policy loan are available in 8 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.

II SME Financing and Credit Guarantees

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

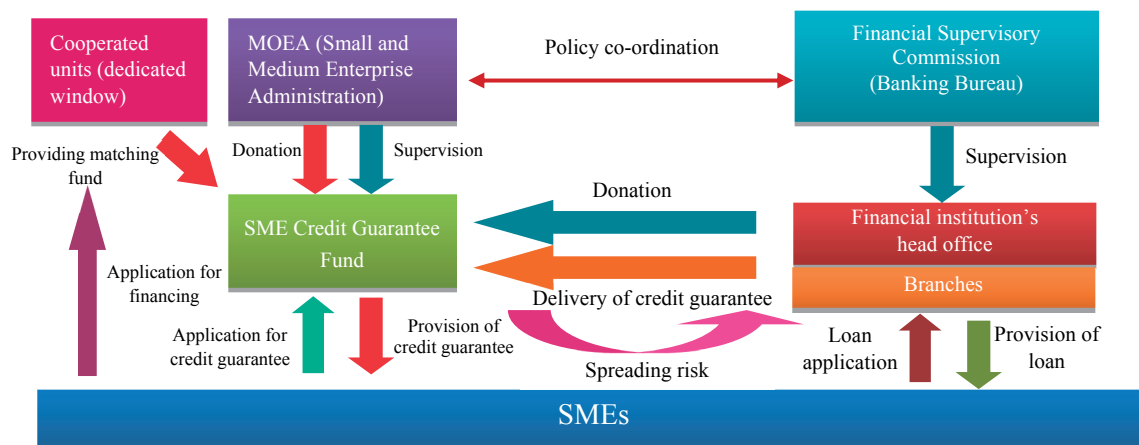
To help strengthen the provision of credit guarantees to SMEs, the government established the SME Credit Guarantee Fund in 1974. The main purpose that the SME Credit Guarantee Fund was established to provide credit guarantees to SMEs, and to work closely with financial institutions in the development 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) To make financial institutions more willing to provide loans to SMEs.
- (3) To maximize 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 (Figure 4-2-1), thereby enabling the Fund to continue providing guarantees and helping SMEs that have significant development potential but lack sufficient collateral 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.

Figure 4-2-1 Establishment and Operation of the SME Credit Guarantee Fund



Source: SME Credit Guarantee Fund (2017).

(1) Application via a Financial Institution

The SME Credit Guarantee Fund has signed credit guarantee agreements with 60 leading Taiwanese financial institutions. Business enterprises can submit their application for a credit guarantee at any of over 3,200 branches; Furthermore, applications to transfer credit guarantees filed by financial institutions through the “Credit Guarantee Network Operating System”, which is operated by the Small and Medium Enterprise Guarantee Fund (SMEG), have enabled enterprises to utilize the credit guarantee mechanism to obtain capital needed to maintain operations in a faster and more convenient way.

(2) Application Made Directly to the SME Credit Guarantee Fund

In line with government policy regarding industrial development and the strengthening of SME financing, SMEs with significant R&D, operational or market development potential and SMEs recommended by government agencies or cultivation units may now apply directly to the SME Credit Guarantee Fund for credit guarantees, which they can then use to secure financing from financial institutions.

(3) Application via a Dedicated Window

SMEG also works with relevant departments in the central government as well as local county and city governments and enterprises to jointly provide preferential financing and credit guarantees through the use of specially earmarked funds and other corresponding methods for providing guarantees. These participating government bodies and enterprises have furthermore set up dedicated teams to coordinate and arrange numerous services including consultations, training courses, assistance on financing and securing guarantees, and outreach guidance. Companies and potential entrepreneurs are able to directly apply for such services through the respective coordinating office.

2. The Benefits Achieved through Credit Guarantee Fund

After 43 years of hard work, the Credit Guarantee Fund has achieved impressive results, and the total volume of credit guarantees provided has grown rapidly and reached record high.

(1) Help SMEs Secure Funding

As of the end of June 2017, the SME Credit Guarantee Fund had helped a total of 392,210 enterprises. The total number of credit guarantees provided through financial institutions was over 6.6 million with a cumulative credit guarantee volume of NT\$11,819.6 billion for loans of NT\$16,023.3 billion. The performance of the SMES Credit Guarantee Fund in the last 5 years is outlined in Table 4-2-1.

Table 4-2-1 The Performance of the Credit Guarantee Fund in Credit Guarantee Provision, 2013-June 2017

Unit: Recipients; items; million NT\$

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
2013	145,648	394,645	1,056,065	1,312,363	681,357	851,181
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(Jan.-June)	110,219	173,070	474,307	632,582	604,528	810,350

Note: After the global financial crisis in 2008, the Credit Guarantee Fund launched multiple measures to step up its support for economy, helping mitigate the negative impact that enterprises experienced during the downturn and in the stages of the recovery by raising the amount of credit guarantees each year; in the period of 2013 to 2015, the annual amount of credit guarantees was above NT\$1 trillion for three consecutive years.

Source: Credit Guarantee Fund (2017).

(2) Reducing the Negative Impact of the External Economic Downturn on SMEs

The downturn in the global economy often leads financial institutions to adopt cautious lending policies. Over the years, whenever Taiwan's economy was depressed, the SME Credit Guarantee Fund stepped up its support for SMEs, helping mitigate the negative impact that SMEs experienced during a downturn and in the early stages of the recovery.

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

The vast majority of SMEs that received credit guarantees from the SME Credit Guarantee Fund find that, within a few years, they were able to raise money on the capital markets or obtain loans directly from banks. Furthermore, As of June 2017, 2,720 of the SMEs that have been granted credit guarantees in the past have since grown sufficiently large to be classed as "large enterprises," and 884 have secured a stock market, OTC, or GISA listing.

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

Complying with the government policy of promoting enterprises' innovation and R&D, the Taiwan SMEG (Small and Medium Enterprise Credit Guarantee Fund) launches the Counterpart Guarantee Project, which aims to help raise the enterprises' production value and competitiveness. Under this mechanism, the Taiwan SMEG joins the leading companies of various industry sectors in appropriating counterpart funds for providing credit guarantees for SMEs.

For "Credit Guarantee Programs Supported by Separate Funds," the Taiwan SME Credit Guarantee Fund's credit guarantee is provided on a risk-sharing basis. The credit risk beyond the Fund's guarantee coverage percentage shall be assumed by related financial institutions. Examples of "Credit Guarantee Programs Supported by Separate Funds" are: Firefly Counterpart Fund (Eligible Client: SMEs recommended by the donating enterprises), Micro/Women Start-up Loans, Micro Loans and Strategic Industry Loans Sponsored by Kaohsiung City Government, Strategic Industry Loans Sponsored by Taipei City Government, and Youth Business Start-up Loans Sponsored by Taipei City Government (Eligible Client: Individuals aged 20-45 approved by Taipei City Government; Maximum Guarantee Coverage of 95% with Annual Guarantee Fee of 0.5%).

(1) Young Entrepreneur Start-up Financing Loans

The MOEA launched the Young Entrepreneur Dream Building Financing Loans in August 2012 and later merged with the Young Entrepreneur Financing Loans in 2014 into Young Entrepreneur Start-up Financing Loans. Young entrepreneurs aged between 26 and 45 who are eligible for the Young Entrepreneur Start-up Financing Loans can apply for this start-up loans at preferential interest rates when they are getting their new businesses off the ground, and benefit from the provision of direct credit guarantees to the 80%-95% range by the SME Credit Guarantee Fund with the maximum loan amount at NT\$18 million.

(2) SME Innovation Development Project Loan

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" on January 27, 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.

(3) 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.

(4) 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. In turn, this collectively enabled a total of NT\$50 billion in financing guarantees to be provided. The scope of eligible financing options for the financing guarantees was also expanded to allow domestic businesses to apply for capital financing guarantees for making overseas investments.

(5) 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 which 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 June 2017, the SME Credit Guarantee Fund had helped (1) collaborated with central government, a total of 14,153 loans, amounted to a total of NT10,704 million; (2) collaborated with local government, a total of 6,280 loans, amounted to a total of NT4,346 million; and (3) collaborated with companies, a total of 33,284 loans, amounted to a total of NT27,085 million.

III Strengthening Investment in the SMEs

1. Establishment of the 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, production, channel development, marketing, branding, and joint ventures, as well as to facilitate the stable development of enterprises through cooperation with participating management consultant firms and guidance units, 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. The 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, on April 17, 2007 the National Development Fund approved the Plan for Promoting Investment in SMEs; the Fund allocated NT\$10 billion for investment in SMEs. As of the end of March 2016, investment had been secured for a total of 234 enterprises, with the National Development Fund providing a total of NT\$7.529 billion in investment and venture capital and investment firms providing matching fund over NT\$7.065 billion.

(plan site: <http://www.moeasmea.gov.tw/ct.asp?xItem=1283&ctNode=609&mp=1>)

3. The 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. This is a mutual investment of government and private venture capital firms, in 2013 this plan has picked up 15 qualified private venture capital firms and has invested 55 domestic companies in the service sector (plan site: <http://www.issip.org.tw/ctrl?PRO=Index>).

4. Go Incubation Board for Startup and Acceleration Firms (GISA)

Meanwhile, to increase the willingness and likelihood of innovative domestic micro-enterprises with growth potential to consider raising capital through an initial public offering, have more chances to obtain financing, expand their business operations, and in turn boost economic growth, TPEx launched the Go-incubation Board for Startup and Acceleration Firms (GISA) in 2014. GISA offers innovative micro-enterprises with creative ideas that have not yet gone public entrepreneurship counseling and mechanisms for raising capital, including equity fundraising, thereby providing

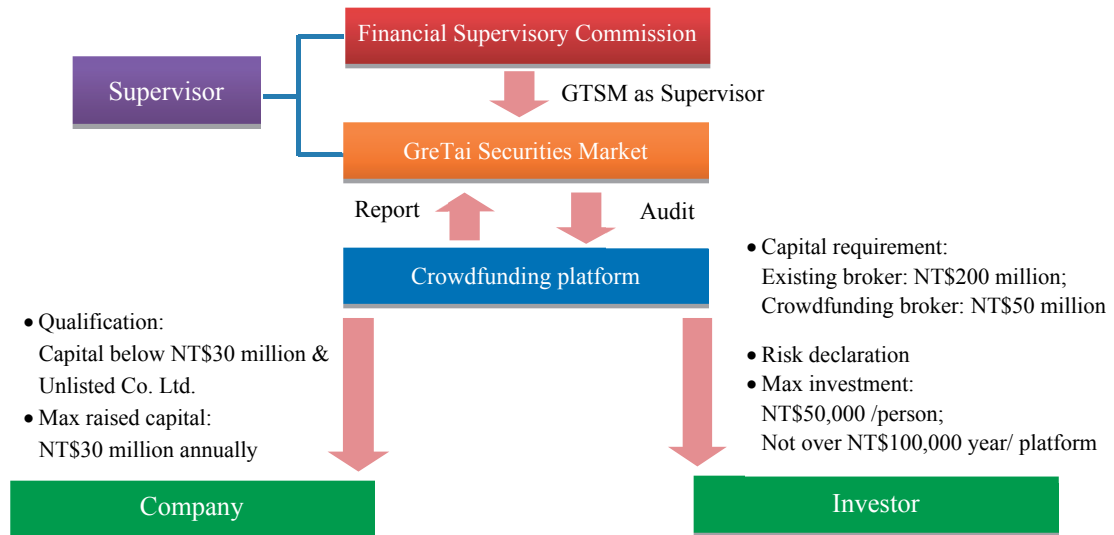
micro-enterprises a low-cost method for raising the funds they need to sustain and grow their operations. In contrast to the listing requirement of needing paid-up capital to reach a minimum threshold of NT\$50 million, any company with paid-up capital of less than NT\$50 million is eligible to apply for inclusion on the Go Incubation Board. In addition, such companies are exempted from various other requirements such as having to undergo an initial public offering or complying with profitability requirements.

(http://www.tpex.org.tw/web/regular_emerging/creative_emerging/Creative_emerging.php?l=zh-tw)

5. Equity Crowdfunding Program

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 companies limited by shares which (1) have a paid-up capital of less than NT\$30 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. Individuals who are not considered angel 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.

Figure 4-3-1 Framework for Equity Crowdfunding Program



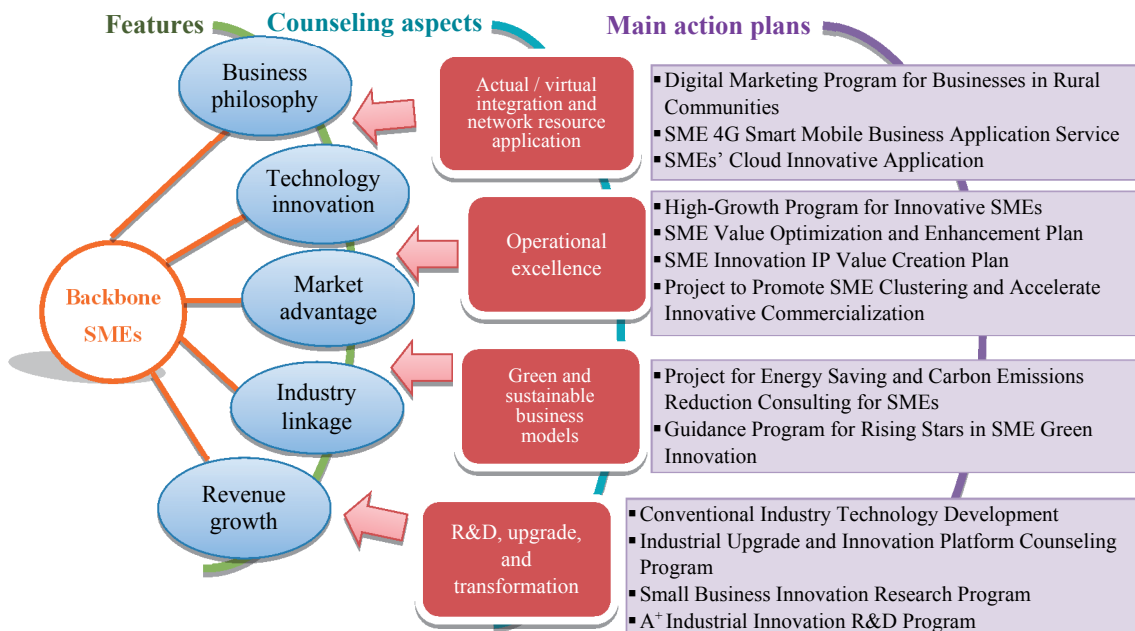
Source: Financial Supervisory Commission (2017).

CHAPTER 5

Enhancing R&D and Promoting Upgrade and Transformation for SMEs

The government has launched various measures to promote SMEs' R&D, upgrade and transformation, and in particular, to cultivate high-potential SMEs to become the "Backbone Enterprises" or "Mittelstand." These measures provide one-stop counseling services for different stages of SME development: (1) selecting potential winners (high-potential SMEs); (2) injecting customized resource for growth; (3) linking them to leading industry supply chain; and (4) helping accelerate development in emerging industries. Four main strategic focuses are: (1) actual / virtual integration and network resource application, (2) operational excellence, (3) green and sustainable business models, and (4) R&D, upgrade, and transformation (Figure 5-0-1).

Figure 5-0-1 Counseling Strategies for Backbone Enterprises



Source: Compiled by editors of this book.

This chapter is divided into four sections. Section I covers actual / 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 down-stream cooperation and innovation, in pursuit of high-value transformation and upgrade for SMEs with high growth potential.

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

1. Digital Marketing Program for Businesses in Rural Communities

In order 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, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs executed the “Digital Outreach Program for SMEs” and the “Digital Application Program for SMEs”. These two programs are aimed at helping small businesses in rural communities identify and access new markets, new distribution channels, and new business opportunities. 2017 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 upgrade, and (5) cultivating sustainable development of clusters (plan site: <http://e98.sme.gov.tw/>).

2. SME 4G Smart Mobile Business Application Service Plan

The Small and Medium Enterprise Administration, MOEA launched SME 4G Smart Mobile Business Application Service Plan. 2017 main action items are: (1) promoting 4G mobile commerce C-A-N-D integration application services; (2) in-depth development of 4G mobile business intelligence services; and (3) exploring multi-channel approach to market expansion for SMEs as Taiwan has entered the 4G mobile era with its unprecedented speed and scale (plan site: <http://www.sme4g.com.tw>).

3. SMEs’ Cloud Innovative Application Development Plan

The Small and Medium Enterprise Administration, MOEA launched SMEs’ Cloud Innovative Application Development Plan to promote business model innovation, cloud applications such as IaaS, PaaS, SaaS, DaaS at all levels, and further diffusion of innovation in cloud technologies and services.

4. Cross-Border Smart Application Integration Plan

To encourage innovation and establish smart cross-border service platform to improve agriculture and farmers’ income, the Small and Medium Enterprise Administration, MOEA launched Cross-Border Smart Application Integration Plan. 2017 main areas for counseling are (1) integration of agriculture, food processing, logistics services, e-commerce and other industrial resources through industrial clusters, and (2) improving the industrial value chain to drive innovation and development of related industries.

5. Taiwan e-Learning and Digital Archives Program (TELDAP) — SME Online University

2017 main action items are: (1) offering over 700 online courses, (2) establishing special learning areas, counseling, personalized learning recommendations, customer service line, learning community services, (3) providing electronic passport for lifelong learning for qualified SME employees, and (4) providing business forms and workflow templates.

(plan site: <http://www.smelearning.org.tw>)

6. 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 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 pro-innovation, pro-business environment. In 2017, a project was executed to provide guidance to companies on product ICT value-added services and value chain extension services with an aim to develop customer-oriented operating models for “intelligent manufacturing” and “manufacturing services” (plan site: <http://www.ecos.org.tw>).

7. Project for Increasing the Value of Commercial Services

The MOEA’s Department of Commerce continued to implement the “Project for Increasing the Value of Commercial Services” to help businesses in the R.O.C. engaged in the commercial services sector integrate value chain members. This joint development strategy can boost the efficacy of operations management of participating businesses and result in higher quality service models for improved merchandise distribution and customer service capabilities, thereby forming a high-quality service network which allows businesses to reap the benefits of economies of scale, expand their market scope, and access opportunities for new market development. Guidance is offered on two main subjects: (1) adding value by providing higher quality services and (2) adding value through the use of data analysis.

II Promote Operational Excellence and Innovation

1. High-Growth Program for Innovative SMEs

This quality-oriented program is aimed at helping to support, foster, and group together SMEs with high growth potential in a way that helps them work toward becoming well-established companies and further boosting their international competitiveness within their respective industry. Action plans for 2017: (1) knowledge innovation and knowledge proliferation; (2) provide industry-specific guidance, including high-growth guidance and consultative diagnostics services, guidance to individual companies with high growth potential and companies which can serve as a developmental model for other enterprises, as well as guidance on industry value clustering; (3)

personnel / workforce development; and (4) promotion and awareness campaigns (plan site: <http://smeq.moeasmea.gov.tw>).

2. SME Value Optimization and Enhancement Plan

The Small and Medium Enterprise Administration implemented the SME Value Optimization and Enhancement Plan with the goal of using value chain optimization, differentiated technologies, technological applications and services to strengthen SMEs' core competency, partnership, upgrade and transformation and overcome non-tariff barriers to trade. The main action items in 2017 are Business consultation and diagnostics, guidance on value innovation, guidance on obtaining international certifications, guidance on increasing the effectiveness of value chains, and promoting awareness of quality innovation (plan site: <http://smeq.moeasmea.gov.tw>).

3. SME Innovation IP Value Creation Plan

The Small and Medium Enterprise Administration has been implementing the SME Innovation IP Value Creation Plan, to help SMEs upgrade efficiency of R&D. The Plan's main work items in 2017 include (1) customized counseling and (2) operation of the SME IP Value-Added Service Center (plan site: <http://ipcc.moeasmea.gov.tw/>).

4. Project to Promote SME Clustering and Accelerate Innovative Commercialization

To promote the integration of industry clusters and application of knowledge services and operational innovation, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs executed the "Project to Promote SME Clustering and Accelerate Innovative Commercialization". Guidance offered through the program in 2017 entails providing assistance to SMEs on utilizing a clustering approach to facilitate economies of scale, providing integrated guidance on adding value through technical, technological, and knowledge innovation approaches which can be incorporated into product and brand operations, operating models, and service innovation. This in turn facilitates cooperation on joint innovation for products, service models, and operating models, thereby boosting overall industry value.
(plan site: <http://www.smecluster.org.tw/>)

5. Promoting Projects for SME Cross-Industry Innovation and Value-Adding Strategies

The Small and Medium Enterprise Administration (SMEA) under the Ministry of Economic Affairs (MOEA), in order to implement the three major strategic "connections" outlined in the "Asia Silicon Valley Promotion Plan", namely "future connections", "global connections", and "local connections", primarily utilizes digital innovation to help 5+2 industries and SMEs undergo transformation and upgrade. In 2017, the plan will promote 5 innovative ecosystems for SMEs, enable 250 participating SMEs to achieve further innovation and development, and help establish 2 new business entities.

6. Productivity 4.0 Pilot Project for Commercial Services

In 2016, the MOEA's Department of Commerce launched the "Productivity 4.0 Pilot Project for Commercial Services". Targeting the retail, logistics, and integrated technology service sectors, the project aims to help companies incorporate automation and intelligent hardware and software tools and make use of intelligent technologies such as big data applications, Internet of Things (IoT), and cloud computing to provide consumers with faster and more convenient service experiences.

7. 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 2017: (1) provide guidance to 22 retailers and integrated service providers on making investments that incorporate innovative solutions; (2) develop 3 intelligent retail business models and applications along with 2 intelligent logistics service models and applications, and establish 2 business districts to serve as empirical examples of physical locations that provide innovative services; and (3) foster and support 5 startup teams to provide intelligent commercial services.

(plan site: <http://gcis.nat.gov.tw/like/>).

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

1. Project for Energy Saving and Carbon Emissions Reduction Consulting for SMEs

In order to provide guidance for SMEs on energy conservation and reduced carbon emissions as well as to enhance the capacity of SMEs to respond to changes and explore new business opportunities, "Project for Energy Saving and Carbon Emissions Reduction Consulting for SMEs" has been initiated with the following key tasks: (1) providing consultation and recommendations on improving production efficiency, carbon footprint and energy consumption; (2) guidance for energy-saving technology and reduction management; (3) demonstration of guidance for industries, and (4) cultivating green elites. In 2017, main work items include (1) on-site diagnosis and counseling; (2) industrial cluster demo and counseling; (3) helped enterprises establish standards and obtain international certificates; and (4) green talent cultivation.

(plan site: <http://GHGinfo.moeasmea.gov.tw/>)

2. 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, business continuity management practices, and engage in corporate social responsibility. Action plans for 2017 include conducting on-site company visits to provide consultations and diagnostics services and provide guidance to selected high-quality companies, guidance on model examples of green supply chains, instilling eco-friendly practices, highlighting model green enterprises, and promoting green marketing.

3. 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 2017: (1) provide technical guidance on energy conservation and carbon reduction measures: 1. inspections for energy-saving and carbon reduction measures; 2. diagnostics for energy-saving and carbon reduction measures; and 3. guidance and testing for energy efficiency of electrical devices and equipment; (2) promote model examples of companies participating in the greenhouse gas emissions offset program; (3) promote the use of energy-saving diagnostics tools; and (4) hold orientation seminars, employee training courses, etc. (plan site: <http://www.ftis.org.tw/tigers/>)

4. 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 2017: (1) guidance to help various industries upgrade and reinforce their environmental protection policies: 1. guidance on adopting enhanced pollution prevention technologies; 2. guidance on promoting self-management practices; 3. guidance on adopting green manufacturing technologies; 4. guidance on tracking improvements made in the area of environmental protection; and 5. guidance on making improvements to industrial drainage systems and following up on improvement progress; (2) study and formulate response measures to the latest trends in environmental regulations; (3) investigate and examine relevant environmental issues; and (4) issue electronic newsletters concerning the latest technical and regulatory information, issue publications on industrial pollution prevention, and hold related seminars and conferences (plan site: <https://proj.ftis.org.tw/eta/>).

IV SMEs: R&D Enhancement and Technology Upgrade

1. Industrial Working Environment Improvement Project

In order to reduce industrial occupational hazards in the country, the IDB, MOEA has implemented the “Industrial Working Environment Improvement Project” with the following key tasks in 2017: (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>).

2. 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 Program” (SBIR) 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, city government can allocate more funds for R&D addressing the needs of industries with local characteristics (plan site: <http://www.sbir.org.tw/SBIR/Web/Default.aspx>).

SBIR process 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 use 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.

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 2009 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 2017 priorities are: (1) case counseling management and promotion, and (2) one on one short-term, small scale, or comprehensive counseling on technological upgrade. (plan site: <http://proj2.moeaidb.gov.tw/itap/index.php>)

4. 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 market. The main areas of 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).

5. Conventional Industry Technology Development (CITD)

Most Taiwanese exporters have traditionally engaged in OEM, under which products ordered are designed mainly by customers who usually own a brand name. Suppliers only focus on the manufacturing process, and the keys to success are low cost and high flexibility in response to customer demand. However, competition from suppliers in developing Asia, especially mainland China, has been rising, initially in terms of price, later in quality and other aspects over time. Taiwanese SMEs are therefore continually compelled to develop strategies that help them stay ahead of competitors.

CITD is a government-funded program that provides enterprises with R&D subsidies which are used to encourage conventional industries to develop new products and new technologies to expand service offerings and make R&D endeavors more prevalent in conventional industries. The 2016 priorities are: (1) product development, (2) product design, (3) R&D alliance: joint development model for industrial clusters, and (4) Industry-Academy R&D cooperation: using the model — industries ask, academics answer — to improve traditional industries' core technology capabilities (plan site: <http://www.citd.moeaidb.gov.tw/CITDweb/Web/Default.aspx>).

6. 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 2017 are:

- (1) Value Added Transformation Plan for Conventional Industry: Selecting nine industries to support for their value added transformation, including various industries ranging from eyewear, industrial energy-saving technologies, vehicle frames, filtering equipment, materials processing for thermoplastic composites, air compressors, sports/leisure/health products, etc (plan sites: <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 (6 month free) one on one counseling (plan sites: <http://sita.stars.org.tw/>).

7. A⁺ Industrial Innovation R&D Program

To lead businesses into investing potential technologies in advanced industries, the DOIT announced that it would replace “Industrial Technology Development Program (TDP)” with “A⁺ Industrial Innovation R&D Program” to constantly encourage businesses into innovation 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 demands and develop comprehensive industrial ecosystem and the maximum efficiency.

In 2017, 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 demands and develop comprehensive industrial ecosystem and the maximum efficiency), (3) Industrial Technology Innovation Center Program (R&D management system, encouraging foreign firms to set up R&D in Taiwan, intellectual property right, etc.), (4) Special Programs, and (5) Global R&D New Partnership Program (plan site: <http://aiip.tdp.org.tw/index.php>).

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 2017, there are two subsidy categories which are “innovative operations” and “integrated alliance” (plan site: <http://gcis.nat.gov.tw/neo-s/Web/Default.aspx>).

CHAPTER 6

Strengthening Start-ups and Incubation & Acceleration Mechanism

To further the development of a high-quality environment for new business creation in Taiwan, and facilitate the identification of promising early-stage start-ups so that they can be matched with “angel” investors and benefit from regional industrial resources, while at the same time putting in place a comprehensive support network, the Small and Medium Enterprise Administration, Ministry of Economic Affairs (SMEA, MOEA) launched various programs such as Emerging Industries Accelerator Program and Entrepreneur Visa, to establish a complete ecosystem for stimulating innovative ideas and strengthening the start-up function, improving incubation to speed up new business growth, and optimizing the support network for new businesses.

This chapter consists of three sections. Section I discusses in-depth entrepreneurship counseling and incubation; Section II focuses on incubation, emerging industry accelerator, and global connection; Section III covers government counseling and supporting projects for youth and female entrepreneurs.

I In-Depth Entrepreneurship Counseling and Incubation

1. Entrepreneurship Consultation Services Plan

The SMEA, MOEA launched the entrepreneurial resources and consultation service promotion program to help potential entrepreneurs to fulfill their dreams. Main services in 2017 are:

- (1) Free counseling service: Access to over 100 professional entrepreneurship consultants through “0800-589-168” toll-free entrepreneurship counseling line and “youth entrepreneurship dream building” online consultation system;
- (2) Manage the portal site — Start-up Hub — to connect the entrepreneurial counseling resources (<http://sme.moeasmea.gov.tw/startup/>),
- (3) International community link, including International Council for Small Business (ICSB), Global Entrepreneurship Week (GEW) and Global Entrepreneurship Monitor (GEM), to strengthen entrepreneurial culture and international participation.
- (4) Connect innovative and entrepreneurial activities between private entrepreneur groups to enhance the entrepreneurship.

2. The Program for Entrepreneurial Knowledge and Skill Developing

The program for entrepreneurial knowledge and skill developing offers education and training opportunities for members of the public interested in setting up their own business, and for start-up owners, through the organizing of basic entrepreneurial skills courses, industry-specific courses, entrepreneur “boot camps,” and the SME Online University digital learning portal site, as well as combines with related enterprise guidance of SMEA, MOEA, and financial intermediation etc. to assist the youth to fully build up entrepreneurial ability, inspire the creativities and creative thinking, and complete entrepreneurial dreams. The content of 2017 annual program includes starting entrepreneurship-related courses and tracking and caring end training members.

3. Value Co-Creation Program for Startups

The Small and Medium Enterprise Administration under the Ministry of Economic Affairs launched the “Value Co-Creation Program for Startups” which primarily targets startups that are less than 5 years old as well as enterprises which have received a Business Startup Award. At present, the program’s primary action plans for 2017 are divided into 3 categories: (1) guidance services for coordinating cross-industry projects; (2) “Mix Taiwan” innovation-themed meet-ups; and (3) awards: Creation of the “Business Startup Award”, which is designed to encourage young people, women, and older entrepreneurs (aged 50 or older) to develop startups with high-quality operating models to serve as successful models for other entrepreneurs to emulate.

4. Technology Entrepreneurship Promotion Plan

The Small and Medium Enterprise Administration under the Ministry of Economic Affairs launched the “Technology Entrepreneurship Promotion Plan”; action plans for 2017 include the following: (1) monitor the latest entrepreneurial policies, laws, and regulations adopted in other countries and hold symposiums to formulate a comprehensive set of entrepreneurship policies which accommodate the early stages of the startup process; and (2) draft innovation and entrepreneurship policies and plans by studying significant entrepreneurship policies and emerging innovation topics, surveying startups, and researching the current entrepreneurial ecosystem.

5. Project for Promoting the Establishment and Development of Social Enterprise Company Environments

For the purpose of helping to foster a business environment conducive to innovation, entrepreneurship, growth, and development of social enterprises, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs implemented the “Project for Promoting the Establishment and Development of Social Enterprise Company Environments”. In 2017, this plan was transformed into the “Advanced Promotional Plan for Social Enterprise Companies”. Major components of the plan in 2017 include the following: (1) provide free consultation services to social enterprises; (2) organize professional training programs aimed at helping social enterprises cultivate and develop knowledge of how to run a business; (3) provide guidance to help social enterprises register with the program, and create a catalog featuring the products of registered enterprises; and (4) organize gatherings and matchmaking events pertaining to corporate social

responsibility (CSR) and social enterprises.

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

6. Entrepreneur Visa

In recent years, Singapore, South Korea, Chile, Canada, the United Kingdom and other countries all launched the “Entrepreneur Visa” in order to attract international talent. Taiwanese government also launched the Resident Visa for Entrepreneurs in July 2016 as part of its ongoing efforts to attract foreign talent to invest and start businesses in Taiwan. Foreign entrepreneurs and entrepreneurs from Hong Kong and Macao, who have been resident for 5 years in a row and more than 183 days per year, can apply for Permanent Residence and settling down here respectively. The goal is to build an innovation and entrepreneurship ecosystem, increase incentives for retaining and recruiting talent, and introduce foreign startup capital and technology.

II Incubation and Acceleration Programs

1. SME Incubation Center

To help SMEs get established, undertake innovation 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) Incubation Centers: Current State

There were over 140 incubation centers in Taiwan. Performance of all Incubation Centers: in 2016, 72 incubation centers received subsidy of NT\$157.5 million from SMEA which successfully induced incremental capital investment of NT\$10 billion. The ratio of increased capital over subsidy was 64.13. 9 of the 1,921 firms that had been cultivated in incubation centers had secured stock market or OTC listing.

By the end of 2016, SMEA had provided subsidy to 125 incubation centers and induced cumulated incremental capital investment of NT\$120.4 billion. 95 firms that had been cultivated in incubation centers had secured stock market or OTC listing. The total number of people working at these firms was 253,725 (Table 6-2-1) (plan site: <http://incubator.moeasmea.gov.tw>).

(2) Incubation Centers: Innovative Approach

Incubation centers facilitate various methods for achieving innovation, including helping identify and developing areas of specialization, integrating resources of government ministries and councils, and through participation in the private sector. Meanwhile, future development is oriented toward enhancing cooperation between the private sector, accelerators, and funding platforms with a particular focus on designated industry sectors (such as 5+2+2 innovative industries) while also striving to connect individuals and organizations from different fields to create an innovative

incubator service chain.

Table 6-2-1 Incubation Center Performance, 2012-2016

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

Item \ Year		2012	2013	2014	2015	2016
Input	SMEA subsidy	1.52	1.57	1.52	1.59	1.57
Output	No. of incubated SMEs	2,065	2,181	2,000	1,951	1,921
	No. of incubated startups	1,250	1,354	1,327	1,294	1,413
	Employees	34,185	29,368	27,138	26,346	24,788
	Patents secured	206	157	176	121	157
	Instances of technology transfer	84	62	71	118	120
	Ratio of increased capital over subsidy	36.43	49.32	63.16	106.91	64.13
	Increased capital	57	77	96	170	101
	No. of enterprises listed in stock market or OTC	2	5	9	9	9

Source: Small and Medium Enterprise Administration, Ministry of Economic Affairs (2017).

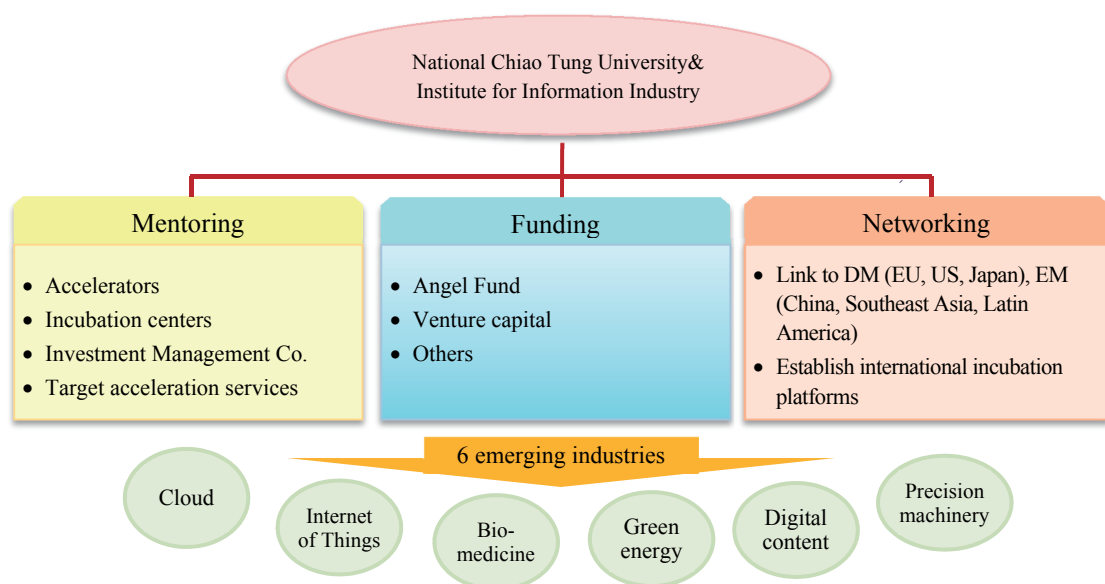
(3) Five Incubation Centers Operated Directly by SMEA

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. They are: (1) Nankang Software Incubation Center (e-commerce, embedded systems, software, and network communications), (2) Nankang Biotech Incubation Center (pharmaceuticals, medical equipment, and healthcare, agricultural biotechnology), (3) Kaohsiung Software Incubation Center (digital content, software, and technology services), (4) NCKU Incubation Center (biotechnology and health care, green energy and environmental protection, and precision machinery), and (5) the Hsinchu Biomedicine Industrial and Incubation Center, which integrates the links in the biotech industry development chain — R&D, trial production, clinical trials, patent transfer, and company incubation — within a single park, and provides “one-stop shop” support and regulatory verification services. This will deepen biotech research capabilities, accelerate the commercialization of R&D results, and enhance production efficiency. It focuses on optoelectronic imaging, information technology, biomedical chips, biomedical materials, regenerative medicine, orthopedics, and combination products. The information and communications technology (ICT) advantages of the neighboring Hsinchu Science Park will be employed to attract participation and investment and produce a biotech industry cluster effect.

2. Program for Establishing a Global Startup Incubator and Accelerator Ecosystem

This program, which is jointly implemented by the National Chiao Tung University (NCTU) and the DigiTech-Enabled Applications & Services Institute (III IDEAS), focuses on helping promising and high-quality SMEs in 6 major industries involving emerging tech applications and strategic key industries to rapidly develop adequate business models which will enable them to become a part of supply chains and value chains of medium and large enterprises or global companies. In 2017, six major emerging industries become new strategic focus: Cloud, Internet of Things, Digital Content, Bio-medicine, Green Energy, and Precision Machinery, executed jointly by National Chiao Tung University (NCTU) and Institute for Information Industry (III) (Figure 6-2-1).

Figure 6-2-1 Emerging Industries Accelerator Program



Note: EM indicates emerging market; DM indicates developed market.

Source: Small and Medium Enterprise Administration, Ministry of Economic Affairs (2017).

3. Program for Assisting SMEs with Social Innovation

In order to increase the developmental efficiency and effectiveness of social innovation and entrepreneurship, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs launched the “Program for Assisting SMEs with Social Innovation” in 2017. The program encourages SMEs, startup teams, and other organizations in the R.O.C. to utilize the latest technological trends and focus on currently prevailing key social and environmental issues to explore and identify unmet needs in society. The action plans for this program are divided into three parts: Core research on social innovation, a platform for making technology and social innovation proposals, and weaving together a social innovation network.

4. 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 2017 called the "Executive Yuan National Development Fund Startup Angel Project". Action plans for the project in 2017 include the following: (1) assist with and help review guidance/funding applications by startups which have been established for less than 3 years and entrepreneurial teams that show potential for innovation; (2) handle various matters for enterprises receiving guidance, including signing contracts, auditing, and allocation; (3) provide incubator services targeting enterprises receiving guidance, invite experts and academic scholars to carry out on-site visits with enterprises receiving guidance, and organize value-adding courses and matchmaking events; (4) at present, 125 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.

III Youth and Female Entrepreneurship Counseling

1. Online-to-Offline Integration Services for Startups

The Small and Medium Enterprise Administration under the Ministry of Economic Affairs established a physical service location to provide comprehensive "one-stop" entrepreneurial resources and support services including introducing and providing entrepreneurial resources, arranging meetings with qualified consultants and instructors who can provide industry-specific consultations and guidance services, and helping young companies prepare for entry into international markets. In addition, the one-stop services adopt an online-to-offline (O2O) integration model which integrates entrepreneurial guidance resources of government ministries and councils to provide O2O entrepreneurial services. This includes the establishment of the "Young Entrepreneurs Network" website as well as the creation of "Youth Startup Hubs" in northern, central, and southern Taiwan which serve as brick-and-mortar locations for the government to provide entrepreneurial services to a wider range of young people in more areas.

2. A⁺ Start-up Action Plan

To promote industrial upgrade and cultivate promising early-stage start-ups, the SMEA, MOEA launched A⁺ Start-up Action Plan in 2015. The Plan can be divided into two parts: (1) Start-up Diagnosis and Recommendation System offers tools to conduct real-time evaluation of the start-up teams, and (2) Start-up Action Plan (layered counseling for start-ups, including general counseling, mentorship, and mid- to long-term team assistance, closing gaps in resources and business models, partnering with the "Backbone Enterprises" or "Mittelstand" (often winners of National Award of Small and Medium Enterprises, Rising Star award, and so on) for win-win alliances. 6 partnerships has been formed in 2015 under the Plan (plan site: <http://aplus.org.tw/>).

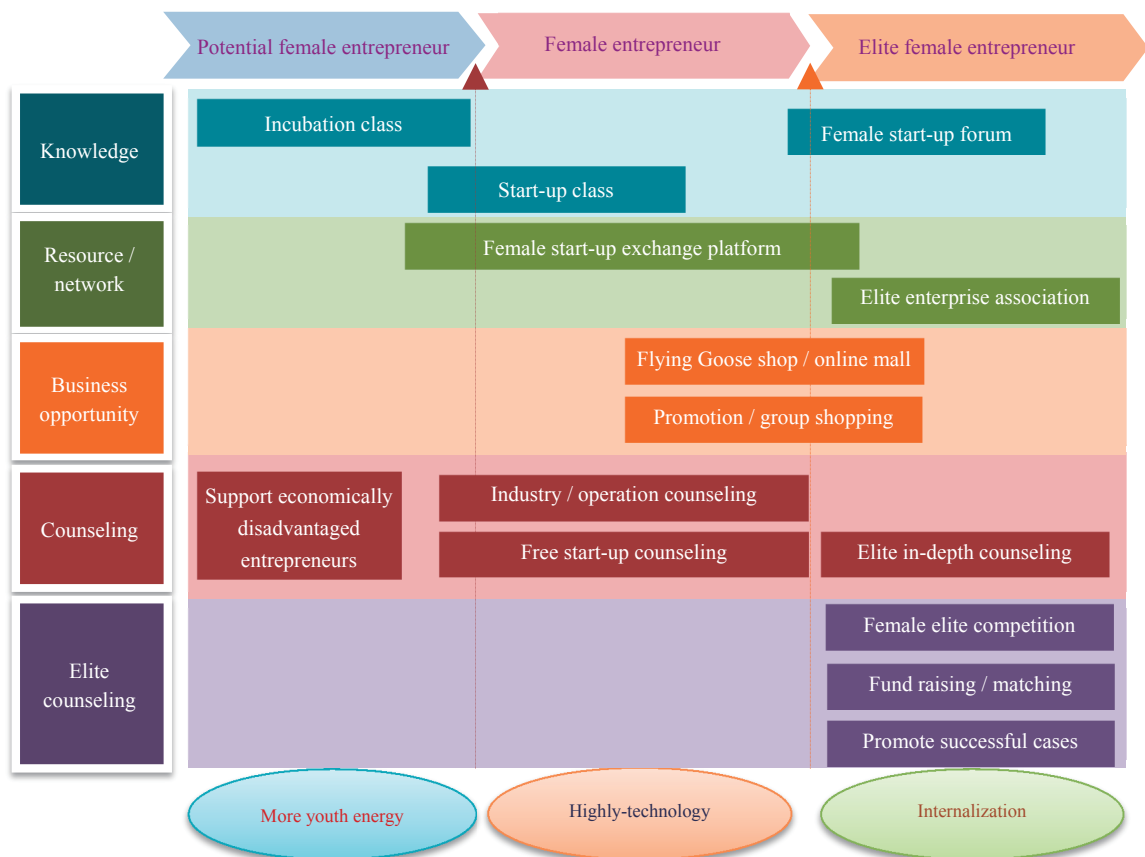
3. U-start: A College Graduate Entrepreneurship Service Program

The Ministry of Education launched “U-start” in 2009 to prepare college graduates to be entrepreneurs through industry-university cooperation mechanism. Eligible entrepreneurial teams which apply and are accepted into the 2017 program receive six months of entrepreneurial guidance from a school incubator. Expenses for the school incubator program and basic startup establishment fees are subsidized by the Ministry of Education (MOE) (plan site: <http://ustart.moe.edu.tw/>).

4. Female Entrepreneurship Flying Goose Program

In 2017 MOEA’s Flying Goose Program helps more female entrepreneurs with incubation services, such as incubation courses, team member type consultation, start-up funding, and so on to increase the success rate of female-owned start-ups, and enhance their operational efficiency and competitiveness (plan site: <http://woman.sysme.org.tw/>). The structure of the Female entrepreneurship Flying Goose Program and the implementation measures are shown in Figure 6-3-1.

Figure 6-3-1 Female Entrepreneurship Flying Goose Program — Implementation Measures

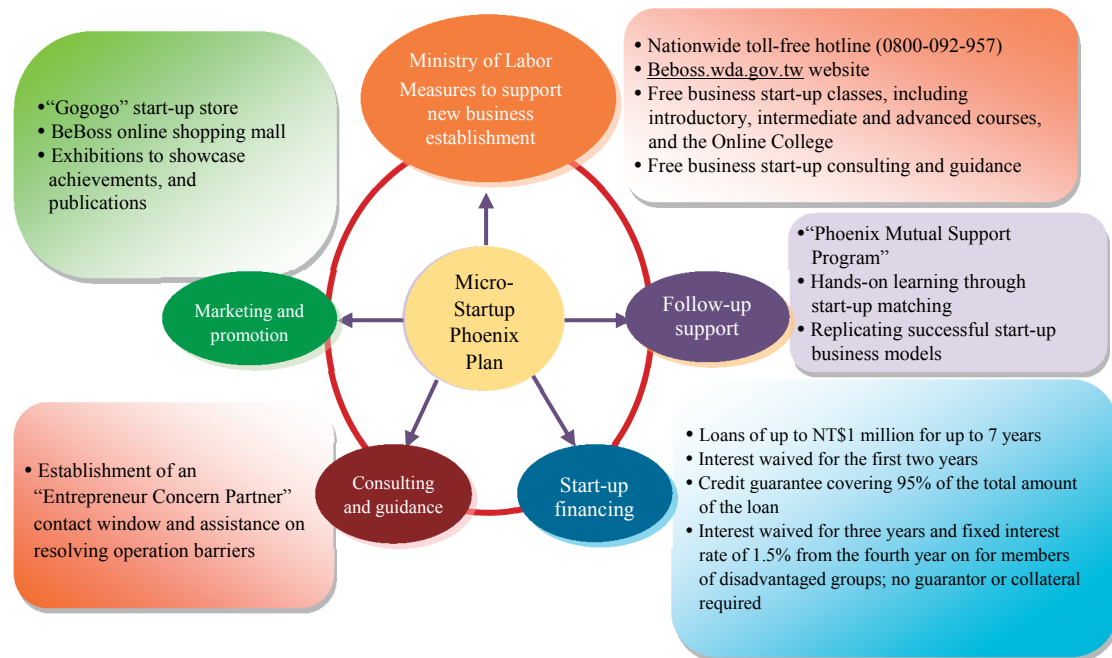


Source: Small and Medium Enterprise Administration, Ministry of Economic Affairs (2017).

5. Business Startup Phoenix Plan for Microenterprises

The Ministry of Labor launched the Micro-Startup Phoenix Plan to boost labor-force participation by women (20-65 year old), offshore islands residents and the middle-aged (45-65 year old), establish a business environment conducive to new business creation, and help women and the middle-aged to start their own microenterprises, thereby creating new jobs. The Plan also provides entrepreneurs with advisors, and help in securing credit guarantees and loans. The structure of the Business Startup Phoenix Plan and the implementation measures are shown in Figure 6-3-2.

Figure 6-3-2 Micro-Startup Phoenix Plan — Implementation Measures



Source: Ministry of Labor (2017).

CHAPTER 7

Revitalizing Local Industries by Outreach Development and Seizing Business Opportunities

In order to stimulate local economic development and create more local job opportunities, the government utilizes the “Local Industry Development Fund” to offer guidance to local SMEs on undergoing specialization, factory transformation and upgrade, and technological advancement programs. In addition to helping bridge the urban-rural divide, the Fund helps create local job opportunities. Furthermore, the One Town One Product (OTOP) program in Taiwan utilizes local design, production, and marketing to create regional brands, enhance the unique cultural characteristics of local SMEs, and expand economic benefits. Meanwhile, in light of the contribution of SMEs to R.O.C. exports and trend of declining annual exports by SMEs, the government has unveiled multiple measures aimed at developing overseas and domestic markets, with a particular emphasis on international markets, in a bid to help SMEs achieve more robust development.

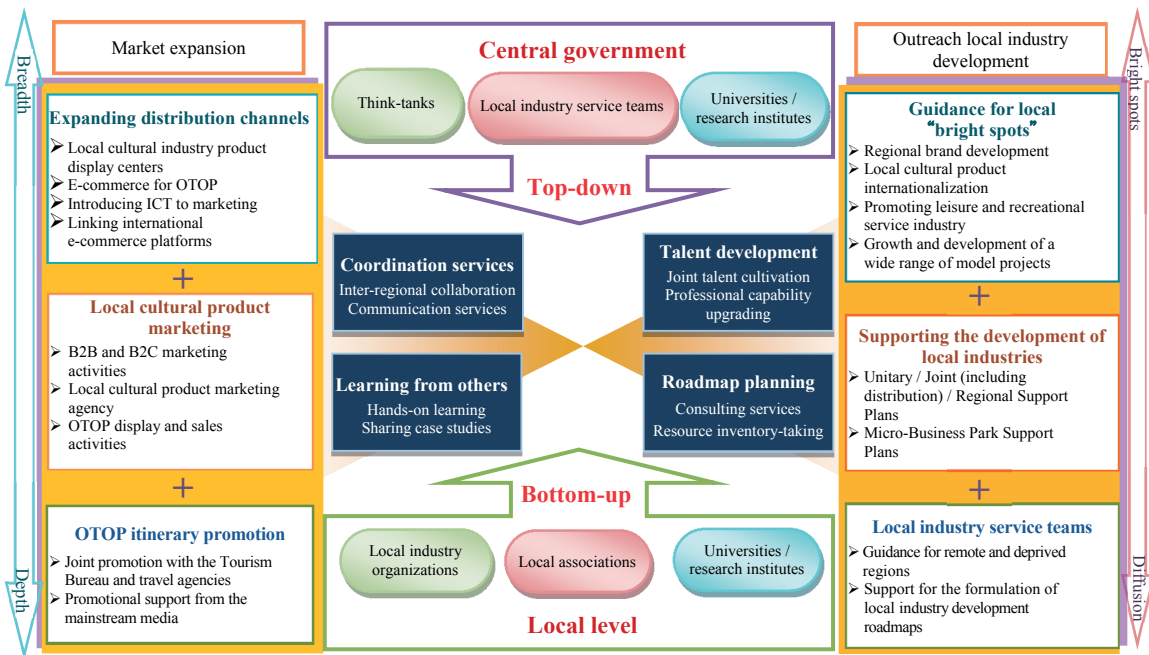
This chapter is divided into three sections. Section I discusses plans to promote development of local industrial clusters; Section II focuses on measures to help local industries build marketing capabilities; Section III covers measures promoting business matching opportunities for local SMEs.

I Promoting Development of Local Industrial Clusters

1. Development Strategy for Local Specialty Industry

The term “local specialty industries” is normally used to refer to local industry clusters that have evolved in a particular township, rural township, city or community and which are engaged in manufacturing or service provision involving special local products with particular historic or cultural significance, or uniqueness, and making use of local materials, natural resources, traditional handicraft techniques, and local labor. Various programs were launched to revitalize local economies, create jobs in local communities, and form local industrial clusters. The strategy and framework for local specialty industry development are outlined in Figures 7-1-1.

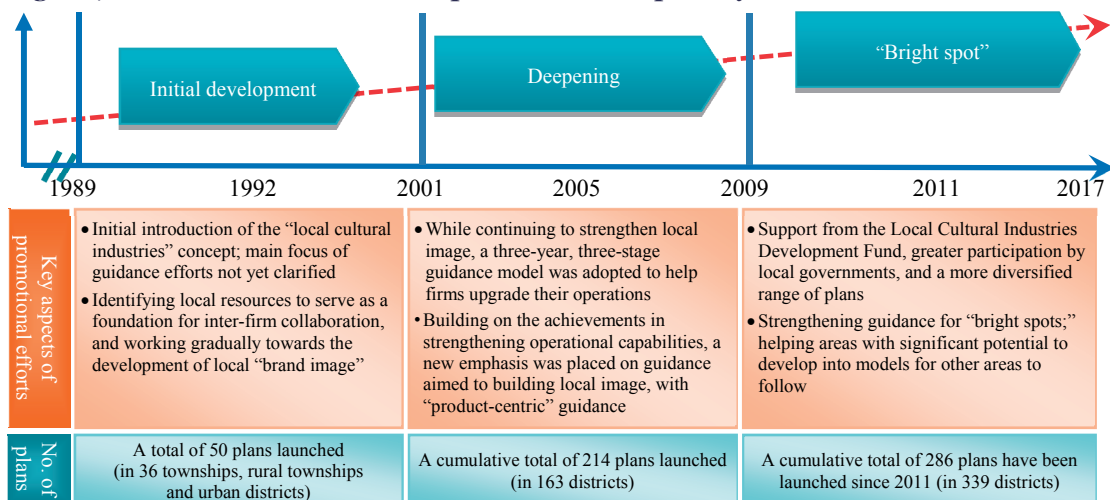
Figure 7-1-1 Framework and Strategies: Local Specialty Industry Development



Source: Small and Medium Enterprise Administration, Ministry of Economic Affairs (2017).

In 1989, the SMEA, MOEA began to allocate resources to support the development of local specialty industries. Over the years, the support and guidance measures have focused on different aspects of local specialty industry development, from "Initial Development," "Deepening," to "Bright Spot" as shown in Figure 7-1-2.

Figure 7-1-2 Timeline of the Development of Local Specialty Industries in Taiwan



Source: Small and Medium Enterprise Administration, Ministry of Economic Affairs (2017).

2. Local Industry Development Fund: Promote Local Specialty Industry Development

In 2009, the Executive Yuan established the Local Industry Development Fund to promote local economic prosperity by providing funding assistance in line with the development needs of local industries at the county and city level. It was anticipated that the Fund would help to transform the face of Taiwan's local communities, encouraging people to move back to their home areas from the big cities and from overseas, creating new job opportunities, and imbuing local economic development with new vigor (plan site: <http://fund.sme.gov.tw/index.php>). In 2016, government resource has covered 94.89% of all 339 administrative districts (vs. 17% before 2009).

The 4 types of subsidies are as follows:

- (1) Individual funding support projects: The proposals are submitted by city and county governments covering only a single urban district, city, township or rural township. The total funding per project is capped at NT\$6 million over a three-year period. Plans are to be implemented over a period of 3 years.
- (2) Integrated funding support projects: The proposals are submitted by city and county governments covering 3 or more urban districts, cities, townships or rural townships. The total funding per project is capped at NT\$15 million over a three-year period (note: for distribution channel type project — capped at NT\$20 million over a three-year period). Plans are to be implemented over a period of 3 years.
- (3) Regional funding support projects: The proposals covering the regional development plan are submitted by the central government. The total funding per project is capped at NT\$15 million over a three-year period. Plans are to be implemented over a period of 3 years.
- (4) Micro Park funding support projects: The proposals are submitted by central, city and county governments covering micro parks for low pollution local specialty SMEs. The total funding per project is capped at NT\$55.5 million over a three-year period (note: for development project — capped at NT\$50 million over a three-year period). Plans are to be implemented over a period of 3 years.

3. Program for Promoting Factory Transformation, Upgrade, and Technological Advancement

Recognizing the global trend towards “industry tourism” and the need for Taiwanese industry to upgrade itself, the Industrial Development Bureau launched Program for Promoting Factory Transformation, Upgrade, and Technological Advancement. By developing factory tourism, traditional factories would be transformed into “tourist factories” with significant cultural and educational value, giving the enterprises concerned an opportunity to restructure themselves, and giving the general public new tourism and leisure options that are both fun and educational; factories that already have distinctive local character will be able to develop new business models through tourism that enable people to learn while they are enjoying themselves. The content of the program in 2017 encompasses the following: (1) evaluate and promote tourism factories, (2)

evaluate and select high quality tourism factories and tourism factories with an international appeal, (3) provide guidance on cross-industry integration and value-adding strategies, and (4) participate in the showcasing of exhibition results (plan site:<http://taiwanplace21.org.tw/>).

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 2017 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 utilizes local resources to incorporate new technical knowhow, creative ideas, services, and brand concepts to help 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 so as to enable more companies to expand their domestic and overseas markets while also targeting local cultural industries that have potential to develop and expand into international markets. Primary action plans for the program in 2017 include expanding OTOP expo sales channels, including physical channels and implementing OTOP-themed sales events at various exhibitions as well as organizing OTOP road shows.

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

The Small and Medium Enterprise Administration under the Ministry of Economic Affairs launched the “Counseling Project for Internationalization of Local Cultural Industries in Taiwan”, which features the use of Taiwan’s joint OTOP brand and integrates relevant industry alliances, matchmaking for collaborative development of global channels, and other strategies to help enable local cultural industries in Taiwan expand into international markets. In 2017, select companies and products which offer developmental potential for expansion into international markets have targeted overseas markets including Canada, the United States, Singapore, Hong Kong, Malaysia, and the Philippines. The scope of guidance offered through the program encompasses (1)

developing and expanding international markets and global distribution channels; and (2) guidance network for personnel training and special projects; eligible applicants include those involved in the processed food products, cultural arts and crafts, and creative living sectors.

III Measures Promoting Business Matching and Exchange for SMEs

1. Project for Promoting SME Business Matchmaking

In order to help SMEs improve their ability to identify and exploit market opportunities, and to create more diverse strategic opportunities for cooperation, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs launched the “Project for Promoting SME Business Matchmaking” in 2016. The program is primarily focused on providing services to “innovative SMEs”, and the scope of matchmaking services offered through the program has been expanded to include overseas business opportunities (plan site:<http://www.technomart.org.tw/>).

In 2017, main projects include:

- (1) Business matching service platform for SMEs: Providing latest industrial business news, establishing resource network and promoting substantive, practical collaboration between Taiwanese and Japanese enterprises.
- (2) Exploring innovative products and technologies, and providing business visibility and matching opportunities: Covering domestic and international matching arrangements, such as technology and / or product launching and exhibitions, one-on-one matching and follow-up services, and promoting strategic alliances.
- (3) Enhancing SME business network contacts: Cross-border cooperation and experience sharing to strengthen Taiwan-Japan network contacts, partnership and heritage among government, industries, and academy.

2. Global Marketing Plan for SME Linkage to Industry Value Chain

In 2015, SMEA, MOEA launched the Global Marketing Plan for SME linkage to Industry Value Chain, to offer counseling and help SMEs link to global value chains, enhance value added through innovative products or services, and strengthen design, branding, marketing and service capabilities, and their international competitiveness. 2017 main projects are: (1) global value chain counseling services, including establishing global value chain promotion demos and (2) building international cooperation network between SMEs and overseas institutions (plan site: taiwanscm.sme.gov.tw).

3. Smart Marketing for SMEs’ International Market Development

Recognizing the urgent need for SMEs to develop international market through multiple marketing approaches, in 2016 SMEA, MOEA began to promote smart marketing for SMEs’ international expansion, with the aim of helping SMEs apply various technologies to smart marketing in the

international market, strengthen cross-border business cooperation, cultivate overseas' marketing talent, and promote creative business models and international expansion (plan site: <http://info.moeasmea.gov.tw>).

4. Micro-Enterprises and Sole Proprietorships Support and Counseling Plan

The Micro-Enterprises and Sole Proprietorships Support and Counseling Plan was launched by SMEA, MOEA in 2012 to provide SMEs with less than 5 employees consultation, diagnosis, knowledge sharing, resource matching, business opportunities and other counseling and support services to help them reduce operational risks, cut costs, and seize growth opportunities. 2017 major projects include: (1) providing real-time online consultation and services; (2) one-on-one and cluster counseling; (3) promoting target career training for owners of micro-enterprises and sole proprietorships; and (4) exploring business opportunities and facilitating cooperation (plan site: <http://micro.sme.gov.tw/index.php>).

5. Trade Promotion Working Plan

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

(1) Trade Promotion Working Plan

Main projects include: (1) assisting in the development of the international market; (2) providing business intelligence; (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. Advanced Project to Promote Most-Valued Products in Emerging Markets

This program aims to gain a more precise understanding of the overall market conditions and consumer and channel requirements of middle-class consumer markets in ASEAN countries and India. In addition, the program utilizes innovative marketing techniques and models to increase exports of final consumer goods to emerging markets. Promotional methods implemented in 2017 include: (1) optimization of current industry information; (2) guidance on customization for exports; and (3) innovative marketing models (plan site: <http://mvp-plan.cdri.org.tw/>).

B. The Green Trade Project

In order to respond to global green industry trends and gain a better understanding of environmental regulations in various other nations and green procurement standards of major global manufacturers, this program employs a total of 12 specific methods — namely industry and market analysis, guidance on obtaining international recognition/certifications and marketing consultation, digital marketing, expo marketing, corporate image workshops, targeted market development, ecosphere exports, consultants for environmental issues, forums and discussions, interviews with international media outlets, and global communications and channel marketing — in order to significantly help companies in the R.O.C. access more global opportunities in the green industry sector (plan site: <http://www.greentrade.org.tw/>).

C. Taiwan Industry Image Enhancement Project (IEP)

In 1992, the Ministry of Economic Affairs created the “Taiwan Excellence” mark as a way to collectively boost the brand image of domestic SMEs and promote the image of various industries in Taiwan. Since then, the Bureau of Foreign Trade has continued to implement this program by utilizing diverse marketing communications to promote premium “made in Taiwan” products in key markets and improve awareness and positive reception of high-quality products and overall industry image of Taiwan among consumers and buyers in local markets with the ultimate goal of promoting the export of R.O.C. products (plan site: <http://www.taiwanexcellence.org>).

D. Project to Secure Business Opportunities in Global Government Procurement

Launched in 2009, this program aims to help companies in the R.O.C. access business opportunities through government procurements by holding symposiums, contacting and inviting companies which have been previously awarded procurement tenders from overseas governments as well as tendering authorities to come to Taiwan, participating in international trade shows, and by participating in the EBRD Annual Meeting and Business Forum and Asian Development Bank Business Opportunities Fair (plan site: <http://gpa.taiwantrade.com.tw/web/index.aspx#&panel1-1>).

E. Integrated Marketing Program for Machine Tools and Accessories

In order to help companies in the machine tools and accessories industry strengthen their international marketing capabilities, the Bureau of Foreign Trade launched this program in 2014 with a primary goal of “enhancing the global image of R.O.C. industries”. By organizing a diverse and integrated range of marketing activities to elevate the international image of Taiwan’s machine tool industry, this program helps further cultivate more business opportunities in overseas markets for R.O.C. companies. Representatives will be attending various international trade shows throughout 2017 in various countries including Mexico, Russia, France, India, Vietnam, Germany, Thailand, and Indonesia to hold integrated marketing activities (plan site: <http://twmt.tw/ch/>).

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. 2017 subsidies included 41 cases with a total subsidies amounting to NT\$130 million (plan site: <http://www.imdp.org.tw/index.php>).

CHAPTER 8

Other Government Measures to Support SMEs

Based on the Article 4, the Act for Development of Small and Medium Enterprises, in formulating policy, the government shall aim at furtherance of improvement and development of the business operations of SMEs without unfair treatment in respect of financial and taxation systems and other related matters. The government has also tried to enhance policy effectiveness by learning and sharing internationally, to enhance the global visibility of SMEs through expanding the substantial exchange and collaboration with the international community, and to help SMEs in finance and human resource.

This chapter comprises three 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 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 national SME awards from Ministry of Economic Affairs.

I Government Resources Allocated to SMEs and National Awards Won by 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. The details are explained as follows:

1. Assistance to SMEs Totaled NT\$29.14 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. Related funds are showed on table 8-1-1

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

Unit: Thousand NT\$; %

Organizer	Annual funding	Fiscal year final accounts		Total amount allocated to SMEs		Increase (decrease) (3)=(2)-(1)
		2015	2016	2015 (1)	2016 (2)	
SMEA (SME Development Fund included)		3,123,233	5,408,121	3,123,233 (100.00)	5,408,121 (100.00)	2,284,888
IDB (Industrial technology guidance and Industrial Park Development and Management Fund included)		6,510,477	8,381,095	4,268,590 (65.56)	5,111,173 (60.99)	842,583
BOFT (Overseas marketing and marketing consultation, and Trade Promotion Fund included)		6,312,812	5,050,313	4,911,177 (77.80)	4,262,498 (84.40)	-648,679
DOC (Promotion of trade modernization and commercial technology development included)		1,009,493	1,086,276	580,121 (57.47)	632,992 (58.27)	52,871
DOIT		17,316,559	15,334,717	11,563,878 (66.78)	10,794,771 (70.39)	-769,107
Total		34,272,574	35,260,522	24,446,999 (71.33)	26,209,555 (74.33)	1,762,556

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 2016, in addition to the relevant government resources allocated to SMEs by agencies such as the MOEA, 40 financial institutions also contributed a total of NT\$2.6 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\$0.33 billion (NT\$0.471 billion for all enterprises). Therefore, government guidance resources allocated to SMEs totaled NT\$29.14 billion in 2016.

2. Providing SMEs with Special Loans Totaling NT\$5.459 Billion

Eligible SMEs in Taiwan have access to the following six types of special loans: The Free Trade Industry Revitalization and Counseling Preferential Loans, Youth Entrepreneurship Guidance Loans, SME Development Fund Special Loans, Assistance for SMEs to Take Root Special Loans, Indigenous Integrated Development Fund Loans (Indigenous Youth Business Loans, Indigenous Economic Industry Loans, and Indigenous Micro-Business Activities Loans for production purpose), and Micro-Business Start-up Phoenix Loans (Ministry of Labor). A total of NT\$5.459 billion in government-funded SMEs loans was made in 2016 (Table 8-1-2).

Table 8-1-2 Special Loans to SMEs Funded by the Government in 2016

Unit: 100 million NTS

Name of loan	Eligible applicant	Structure	Status	
			Total loan amount	Government funding
The Free Trade Industry Revitalization and Counseling Preferential Loans	To accommodate the 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 the manufacturing industry and service industry, which have distressed assets or sustained losses, or for other companies which have losses in particular industries as determined by the relevant competent authority.	Every loan comes from National Development Fund of The Executive Yuan	44.00	44.00
Youth Entrepreneurship Guidance Loan A and B	Youth aged 20-45 engaging in business start-ups	Each loan is funded by lending institution alone or lending institution along with Development Fund, Executive Yuan	23.89	0.00
SME Development Fund Special Loan	SMEs	SME Development Fund	6.30	6.30
Assistance for SMEs to Take Root Special Loan	SMEs	Earmarked funds from CEPD Long-Term Fund	35.26	0.95
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 the Council of Indigenous Peoples	3.34	3.34
Micro-Business Start-up Phoenix Loan	Women aged 20-65, offshore islands residents and women aged 45-65	Loans provided by banks' own funds and interests subsidized by the Ministry of Labor	2.49	0.00
Total			115.28	54.59

Source: Various government agencies.

3. Government Procurement from SMEs Reached NT\$726.8 Billion

According to Government Procurement System statistics on awarded contracts published in March, 2017, in 2016 the total amount of government procurement totaled NT\$1,125.9 billion, an increase of 9.7 percent from 2015; the total amount contracted or subcontracted by SMEs (including all cases over NT\$0.1 million) in government procurement totaled NT\$726.8 billion, an increase of 10 percent from 2015. Share of government procurement from SMEs in 2016 was 64.6%, down 4.1 percentage points from 68.68% in 2015.

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

Major legal and regulatory adjustments relating to SMEs undertaken in 2016-2017 are listed in Table (8-2-1).

Table 8-2-1 Major Legal and Regulatory Flexibility Relating to SMEs in 2016-2017

Major Projects	Content and action items
Amendment / revision	• Amendments to the Article 36-2 of the Act for Development of Small and Medium Enterprises • The provisions set forth under the Enforcement Rules for Tax Deductions for Expenses Arising from the Hiring of New Personnel by Small and Medium Enterprises • Additions were made to the Enforcement Rules for Tax Deductions Arising from Salary Increases Issued by Small and Medium Enterprises
	• Raising the salary cap for employees working for Proprietorship or Partnership • Encouraging TWSE / TPEx-listed companies to partner up with social enterprises • Proposed amendments to the Limited Partnership Act • Documentation scope of applying for airline ticket expense deductions and relaxing restrictions on deductions for overseas travel expenditures

Source: Compiled by editors of this book.

1. Regulatory Affairs Concerning Small and Medium Enterprises

(1) Amendments to the Article 36-2 of the Act for Development of Small and Medium Enterprises

On January 6, 2016, a presidential decree was promulgated to amend the “Act for Development of Small and Medium Enterprises” by adding a second clause to Article 36-2 with an aim to increase the positive effects of the preferential tax policies set forth under the Act. Where an eligible SME hires a new employee under the age of 24, the company may claim a tax deduction when filing the company’s income taxes as a profit-making enterprise for the current tax year equal to 50% of the salary amount of the aforesaid newly-hired employee; In addition, Paragraph 3 was also added which stipulates that where an SME raises the average monthly salary of an ROC citizen by not more than NT\$50,000, and where such raise is not due to a statutory minimum salary adjustment, the said SME may, provided that certain conditions are met, claim 30% of the salary increase as a tax credit for its taxable income as a profit-making enterprise for the current year. The intent of the two aforementioned preferential tax policies is to actively push for SMEs to increase the rate of employment among young people and increase the salaries of basic personnel.

(2) The provisions set forth under the “Enforcement Rules for Tax Deductions for Expenses Arising from the Hiring of New Personnel by Small and Medium Enterprises” were amended, and additions were made to the “Enforcement Rules for Tax Deductions Arising from Salary Increases Issued by Small and Medium Enterprises”

In order to fully implement the preferential taxation measures afforded to SMEs as set forth under the “Act for Development of Small and Medium Enterprises”, on July 25, 2016 the content of the “Preferential Tax Policies for the Hiring of New Personnel by SMEs” was amended and promulgated. In addition to incorporating the expanded preferential tax policy for hiring new personnel aged 24 or younger as stipulated in the parent law, it also relaxed restrictions on the definition of what constitutes “additional hiring” and simplified the application process. In addition, the “Enforcement Rules for Tax Deductions Arising from Salary Increases Issued by Small and Medium Enterprises” was also added on July 25, 2016.

2. Helping SMEs Adapt to Critical Regulatory Frameworks

(1) Raising the salary cap for employees working for Proprietorship or Partnership

In order to encourage sole proprietorships and partnerships to provide raises to their base level employees, the Ministry of Finance (MOF) announced the “Standards on Profit-seeking Enterprises in the 2015 Taxable Year for the Ceiling Interest Rate on Loans and Standards on General Salary of Employees”. The latest standards have increased the maximum monthly salary standards which apply to high level personnel (such as assistant managers, unit supervisors, secretaries, engineers, etc.) of sole proprietors and partnerships to NT\$82,000. In addition, the maximum salary of general personnel has been increased from NT\$50,000 to NT\$57,500, allowing sole proprietorships to declare salary raises as a tax-deductible expense starting in 2016 when declaring their taxable income as a profit-making enterprise.

(2) Encouraging TWSE / TPEx-listed Companies to Partner Up with Social Enterprises

In order to more effectively assist social enterprises to resolve issues associated with a lack of fundraising channels, after numerous rounds of meetings and negotiations between government ministries and councils, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs finally obtained support from the Taiwan Stock Exchange Corporation (TSEC) and Taipei Exchange (TPEx) to participate in relevant programs, and on July 28, 2016 the provisions stipulated under Article 27 of the “Corporate Social Responsibility Best Practice Principles for TWSE / TPEx Listed Companies” were amended and promulgated. The amendment consisted of adding language including a provision that “TWSE / TPEx listed companies are advised to, through equity investment, commercial activities, endowments, volunteering service or other charitable professional services etc., dedicate resources to organizations that commercially resolve social or environmental issues, participate in events held by citizen organizations...”, so as to fully implement the policy of encouraging the development of social enterprises.

(3) Proposed Amendments to the Limited Partnership Act

In order to yield more diversity in the types of enterprises and better meet the needs of investors through a flexible and adaptable method for selecting a corporate and organizational structure that meets the individual operational needs of enterprises, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs held industry seminars and cross-agency negotiations between government ministries and councils and worked with various representatives from industry, government, academia, and research institutions to reach an initial consensus on amending the provisions of the “Limited Partnership Act”, including, for example, simplifying the requirements that must be satisfied in order to incorporate a limited partnership and adjusting the rules a partner must follow when incorporating a company, adjusting the procedures and restrictions of a partner with regard to the amount of capital contribution under a limited partnership agreement, permitting such companies to specially engage or dismiss or reduce appointed persons’ duties and forbid such persons from engaging in work in a competing company or industry, and adding other safe harbor provisions and other related content concerning the conduct of limited partners. The proposals were reviewed and approved by the SME Policy Review Committee on December 29, 2016 and submitted for reference and adoption by the MOEA’s Department of Commerce, which is the competent authority.

(4) Documentation Scope of Applying for Airline Ticket Expense Deductions and Relaxing Restrictions on Deductions for Overseas Travel Expenditures

According to currently prevailing regulations governing overseas travel expense reimbursement, where a company engages in overseas travel on business or invites a foreign national to travel to Taiwan, in addition to having to submit an airline ticket stub and proof of ticket purchase to apply for reimbursement of airfare expenses, the individual’s boarding pass must also be submitted before travel expense reimbursement may be authorized. This is not only inconvenient for personnel (including ROC citizens and foreign nationals) who go on business trips, but also results in an undue burden on SMEs in terms of increased administrative costs. The Small and Medium Enterprise Administration under the Ministry of Economic Affairs convened cross-agency coordination meetings between government ministries and councils to help convey the problems faced by businesses in their actual operations to the relevant authorities and propose feasible solutions to the competent authority, including helping to relax the restrictions set forth under Article 74 of the “Regulations Governing Assessment of Profit-seeking Enterprise Income Tax” by reducing the restrictions in place on permissible types of substitutable documentary proof.

III Participating in International SME Meetings and Events

Taiwan has for many years been an active participant in the SME-related meetings and activities undertaken by international organizations such as Asia Pacific Economic Cooperation (APEC), the International Small Business Congress (ISBC), Organization for Economic Cooperation and Development (OECD), the International Council for Small Business (ICSB), the Asian Association of Business Incubation (AABI), International Business Innovation Association (InBIA) and National Business Incubation Association (NBIA), and uses these events and activities as an opportunity to share Taiwan's experience in SME development with other countries. In recent years, Taiwan has also been actively involved in international collaboration with regard to SME incubation and industry-university collaboration, which provide opportunities for the exchange of ideas and for collaborative growth, while also contributing to the development of a more international outlook and bilateral exchange. Followed are a list of important events Taiwan hosted or participated in 2016 and 2017.

1. Participating in APEC and Internationalizing Start-ups

(1) 44th APEC Small and Medium Enterprises Working Group, SMEWG (March 2017)

To help small and medium enterprises in the R.O.C. cultivate a more international perspective and increase Taiwan's participation in APEC, the Small and Medium Enterprise Administration under the Ministry of Economic Affairs sends a delegation representing the R.O.C. to attend the Asia-Pacific Economic Cooperation (APEC) Small and Medium Enterprises Working Group Meeting twice each year. On March 11, 2017, a delegation of representatives from the R.O.C. attended the APEC's 44th Small and Medium Enterprises Working Group Meeting in Sydney, Australia to jointly study and deliberate on key directions and issues with respect to APEC's promotion of SMEs over the upcoming 4 years in the economies of 20 other nations in the Asia-Pacific region. In addition, the R.O.C. also signed on to the third phase of APEC's online-to-offline (O2O) initiative with 4 New Southbound target countries — Malaysia, the Philippines, Thailand, and Vietnam — through APEC's "Unleash the Potential of SMEs through Digital Transformation for a Shared Future". Obtaining financial support for this APEC initiative illustrates Taiwan's tangible contributions to and active participation in APEC.

(2) O2O Events Jointly Held with Key Countries in the New Southbound Promotion Plan in 2016 and 2017

By gathering support for APEC in the Asia-Pacific region and through other associated countries and strategic partners, the following international conferences on capacity building were held in the hope of giving newly-established companies and SMEs more opportunities to work with their international counterparts and access similar resources, increase competitiveness, and boost their resilience to benefit from new business opportunities in the digital economy. A total of 6 international forums and summits on the subject of O2O were jointly held with Vietnam, Peru, and the Philippines in 2016, and these efforts were continued in 2017 by working together with

Malaysia, Vietnam, and the Philippines to hold 6 events in the Asia-Pacific region on the topic of O2O integration.

(3) 25th European Business & Innovation Center Network, EBN (October 2016)

SMEA, MOEA participated the event on September 28-30, 2016 in Portugal to develop relationship and partnership between Taiwan's Incubation Centers and Start-up Accelerators and European Start-up ecosystem and EBN.

2. Promoting SME International Exchange and Collaboration

SMEA of MOEA signed Taiwan SME Memorandum of Cooperation with Malaysia, India, Philippines, Singapore, Vietnam, Korea and European Union; participated in bilateral annual ministerial meetings with Philippines, Thailand, European Union and so on, and promoted plurilateral and multilateral cooperation, such as TPP, WTO. SMEA of MOEA also signed memorandums of understanding and letter of intent for cooperation: Helped facilitate the signing of memorandums of understanding (MOUs) on SME cooperation between the R.O.C. and India and Malaysia as well as a joint letter of intent with the Philippines concerning collaborative development of micro enterprises and SMEs.

IV National SME Awards from Ministry of Economic Affairs

Various national awards granted to SMEs offered by MOEA with the purpose of encouraging the upgrade and development of SMEs with sound management, outstanding performance according to various management criteria, as well as sustainable contribution to the society.

1. National Award of Outstanding Small and Medium Enterprises

“National Award of Outstanding Small and Medium Enterprises” was set up in 1992, through the joint efforts of the SMEA and MOEA. The National Award of Outstanding Small and Medium Enterprises were seen as the Academy Awards (Oscars) for small and medium enterprises in Taiwan, representing the highest honor of the industries. The management styles, innovations, brands, services, quality, and / or images of the award-winning small and medium enterprises form an important role model or benchmarks in each of the relevant industries, particularly for upgrade and transformation. In the past 25 years (as of the end of 2016), 269 SMEs have won the award. Among the award-winning companies, some are leaders in the global market for specific major products they manufacture, the top three in a specific industry, or holders of a significant market share. 12 SMEs are expected to win the Award in 2017.

(award site: <http://smeaward.moeasmea.gov.tw/moeasmea/wSite/mp?mp=00208>)

2. The Rising Star Award

“The Rising Star Award” was set up in 1998 and given to SMEs that display excellence in global trading. The selection and awards ceremony is organized by SMEA, MOEA and the awards are officially conferred on SMEs that have their management base rooted domestically and that have enthusiastically developed their international orientation through progressive operations and management. The award recognizes their exceptional efforts in gaining an entrance into the global community and their contribution to development of the country’s economy and trade activities. The award thus encourages more enterprises to strive together to grow the country’s economy and its global trading prospects. In the past 19 years (as of the end of 2016), 273 SMEs have been recognized as “Rising Stars” (award site: <http://award.moeasmea.gov.tw/>).

3. Taiwan SMEs Innovation Award

“Taiwan SMEs Innovation Award” was set up in 1993 and given to SMEs that exhibited excellent performances in innovation and research. The purpose of the award is to create a climate promoting innovative R&D to inspire the prosperity of SMEs. In the past 24 years (as of the end of 2016), 801 have won the award. Among the award-winning companies, 59 are publicly listed companies in Taiwan. 30 SMEs are expected to win the Award in 2017.

(award site: <http://tsia.moeasmea.gov.tw>)

4. Business Startup Awards

“Business Startup Awards” is the only SME national award given to start-ups that had been in existence for less than 5 years, and exhibited excellent innovation in technology, product / service, and / or business model. As of the end of 2016, 208 start-ups have won the award. Among the award-winning companies, 17 are publicly listed companies in Taiwan, 41 won other national awards as mentioned above, and 40 have received investment from venture capital and / or been acquired by large enterprises, showing excellent competitive advantage of these award winners (award site: <http://sme.moeasmea.gov.tw/startup/modules/funding/detail/?sId=21>).



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

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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, 2014-2016

Unit: Enterprises; %

Enterprise size Industry / year		Total	SMEs	Share	Large enterprises	Share
Total	2014	1,386,128	1,353,049	97.61	33,079	2.39
	2015	1,416,738	1,383,981	97.69	32,757	2.31
	2016	1,440,958	1,408,313	97.73	32,645	2.27
Agriculture, Forestry, Fishing and Animal Husbandry	2014	11,638	11,568	99.40	70	0.60
	2015	11,649	11,580	99.41	69	0.59
	2016	11,446	11,380	99.42	66	0.58
Mining and Quarrying	2014	1,177	1,151	97.79	26	2.21
	2015	1,157	1,130	97.67	27	2.33
	2016	1,134	1,103	97.27	31	2.73
Manufacturing	2014	147,404	141,817	96.21	5,587	3.79
	2015	148,800	143,118	96.18	5,682	3.82
	2016	148,971	143,184	96.12	5,787	3.88
Electricity and Gas Supply	2014	553	423	76.49	130	23.51
	2015	680	546	80.29	134	19.71
	2016	973	839	86.23	134	13.77
Water Supply and Remediation Activities	2014	7,480	7,155	95.66	325	4.34
	2015	7,527	7,237	96.15	290	3.85
	2016	7,545	7,250	96.09	295	3.91
Construction	2014	113,400	112,164	98.91	1,236	1.09
	2015	118,230	117,000	98.96	1,230	1.04
	2016	122,044	120,828	99.00	1,216	1.00
Wholesale and Retail Trade	2014	686,183	668,428	97.41	17,755	2.59
	2015	694,057	676,791	97.51	17,266	2.49
	2016	699,329	682,218	97.55	17,111	2.45
Transportation and Storage	2014	31,399	30,281	96.44	1,118	3.56
	2015	31,782	30,636	96.39	1,146	3.61
	2016	32,371	31,266	96.59	1,105	3.41
Accommodation and Food Service Activities	2014	134,809	134,326	99.64	483	0.36
	2015	143,692	143,177	99.64	515	0.36
	2016	151,440	150,893	99.64	547	0.36

Table C-1 Number of Enterprises by Industry and Enterprise Size, 2014-2016 (Continued)

Unit: Enterprises; %

Industry / year	Enterprise size	Total	SMEs		Large enterprises	
			Share		Share	
Information and Communication	2014	18,882	18,141	96.08	741	3.92
	2015	19,694	18,937	96.16	757	3.84
	2016	20,416	19,642	96.21	774	3.79
Financial and Insurance Activities	2014	17,989	15,490	86.11	2,499	13.89
	2015	18,650	16,107	86.36	2,543	13.64
	2016	19,328	16,850	87.18	2,478	12.82
Real Estate Activities	2014	34,318	32,766	95.48	1,552	4.52
	2015	36,114	34,614	95.85	1,500	4.15
	2016	36,603	35,157	96.05	1,446	3.95
Professional, Scientific and Technical Activities	2014	43,675	42,932	98.30	743	1.70
	2015	45,545	44,796	98.36	749	1.64
	2016	47,285	46,523	98.39	762	1.61
Support Service Activities	2014	28,857	28,376	98.33	481	1.67
	2015	29,692	29,184	98.29	508	1.71
	2016	30,651	30,126	98.29	525	1.71
Education	2014	1,866	1,852	99.25	14	0.75
	2015	2,112	2,098	99.34	14	0.66
	2016	2,433	2,417	99.34	16	0.66
Human Health and Social Work Activities	2014	683	667	97.66	16	2.34
	2015	745	731	98.12	14	1.88
	2016	785	766	97.58	19	2.42
Arts, Entertainment and Recreation	2014	26,685	26,572	99.58	113	0.42
	2015	25,425	25,304	99.52	121	0.48
	2016	25,594	25,464	99.49	130	0.51
Other Service Activities	2014	79,003	78,817	99.76	186	0.24
	2015	81,077	80,883	99.76	194	0.24
	2016	82,610	82,407	99.75	203	0.25

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).
3. Representative office of foreign company (82 representative offices in 2014) in the form of organization is excluded from the data since 2014.

Source: Fiscal Information Agency, Ministry of Finance, Value-Added Business Tax (VAT) data (2014-2016).

Table C-2 Total Sales Value by Industry and Enterprise Size, 2014-2016

Unit: Million NT\$, %

Enterprise size		Total	SMEs		Large enterprises	
Industry / year				Share		Share
Total	2014	40,240,506	11,839,868	29.42	28,400,638	70.58
	2015	38,875,300	11,803,100	30.36	27,072,200	69.64
	2016	38,312,769	11,764,677	30.71	26,548,091	69.29
Agriculture, Forestry, Fishing and Animal Husbandry	2014	47,134	23,508	49.87	23,627	50.13
	2015	46,573	23,872	51.26	22,702	48.74
	2016	46,826	24,420	52.15	22,406	47.85
Mining and Quarrying	2014	48,033	37,712	78.51	10,321	21.49
	2015	44,997	32,210	71.58	12,787	28.42
	2016	42,839	29,147	68.04	13,692	31.96
Manufacturing	2014	15,054,553	4,323,807	28.72	10,730,746	71.28
	2015	13,962,100	4,140,270	29.65	9,821,840	70.35
	2016	13,608,467	4,070,669	29.91	9,537,797	70.09
Electricity and Gas Supply	2014	1,016,077	4,557	0.45	1,011,519	99.55
	2015	895,508	5,295	0.59	890,214	99.41
	2016	794,817	6,611	0.83	788,206	99.17
Water Supply and Remediation Activities	2014	187,655	55,979	29.83	131,676	70.17
	2015	167,779	55,929	33.33	111,850	66.67
	2016	173,392	55,809	32.19	117,583	67.81
Construction	2014	2,162,496	1,411,725	65.28	750,770	34.72
	2015	2,230,250	1,459,300	65.43	770,951	34.57
	2016	2,148,502	1,417,221	65.96	731,281	34.04
Wholesale and Retail Trade	2014	14,154,603	4,266,050	30.14	9,888,553	69.86
	2015	13,686,600	4,316,500	31.54	9,370,150	68.46
	2016	13,713,916	4,338,504	31.64	9,375,411	68.36
Transportation and Storage	2014	1,098,184	269,873	24.57	828,311	75.43
	2015	1,136,500	269,441	23.71	867,056	76.29
	2016	1,141,593	270,968	23.74	870,625	76.26
Accommodation and Food Service Activities	2014	540,748	371,052	68.62	169,696	31.38
	2015	574,200	400,811	69.80	173,389	30.20
	2016	622,182	442,287	71.09	179,895	28.91

Table C-2 Total Sales Value by Industry and Enterprise Size, 2014-2016 (Continued)

Unit: Million NT\$, %

Enterprise size		Total	SMEs	Share	Large enterprises	Share
Industry / year						
Information and Communication	2014	957,248	113,244	11.83	844,004	88.17
	2015	1,069,990	117,262	10.96	952,733	89.04
	2016	1,064,855	119,942	11.26	944,914	88.74
Financial and Insurance Activities	2014	2,387,871	207,354	8.68	2,180,517	91.32
	2015	2,398,420	202,960	8.46	2,195,460	91.54
	2016	2,277,273	203,068	8.92	2,074,205	91.08
Real Estate Activities	2014	1,136,063	226,824	19.97	909,239	80.03
	2015	1,116,710	237,569	21.27	879,142	78.73
	2016	1,060,509	230,233	21.71	830,276	78.29
Professional, Scientific and Technical Activities	2014	674,048	210,774	31.27	463,274	68.73
	2015	681,936	210,016	30.80	471,920	69.20
	2016	705,177	213,510	30.28	491,667	69.72
Support Service Activities	2014	674,048	210,774	31.27	463,274	68.73
	2015	681,936	210,016	30.80	471,920	69.20
	2016	540,152	147,708	27.35	392,444	72.65
Education	2014	12,282	8,708	70.90	3,574	29.10
	2015	14,336	10,099	70.45	4,237	29.55
	2016	16,003	10,985	68.64	5,018	31.36
Human Health and Social Work Activities	2014	12,282	8,708	70.90	3,574	29.10
	2015	14,336	10,099	70.45	4,237	29.55
	2016	27,817	2,730	9.81	25,087	90.19
Arts, Entertainment and Recreation	2014	12,282	8,708	70.90	3,574	29.10
	2015	14,336	10,099	70.45	4,237	29.55
	2016	91,406	55,881	61.14	35,525	38.86
Other Service Activities	2014	227,519	118,670	52.16	108,849	47.84
	2015	234,487	121,797	51.94	112,690	48.06
	2016	237,044	124,982	52.73	112,062	47.27

Note and source: See Table C-1.

Table C-3 Domestic Sales Value by Industry and Enterprise Size, 2014-2016

Unit: Million NT\$, %

Enterprise size Industry / year		Total	SMEs	Share	Large enterprises	Share
Total	2014	30,019,115	10,345,095	34.46	19,674,021	65.54
	2015	29,158,900	10,325,300	35.41	18,833,600	64.59
	2016	28,848,507	10,340,886	35.85	18,507,621	64.15
Agriculture, Forestry, Fishing and Animal Husbandry	2014	30,019,115	10,345,095	34.46	19,674,021	65.54
	2015	29,158,900	10,325,300	35.41	18,833,600	64.59
	2016	39,310	21,152	53.81	18,158	46.19
Mining and Quarrying	2014	47,525	37,498	78.90	10,026	21.10
	2015	44,483	31,986	71.91	12,497	28.09
	2016	42,319	28,917	68.33	13,402	31.67
Manufacturing	2014	8,051,699	3,285,618	40.81	4,766,081	59.19
	2015	7,339,100	3,120,570	42.52	4,218,540	57.48
	2016	7,186,164	3,093,557	43.05	4,092,607	56.95
Electricity and Gas Supply	2014	997,862	4,425	0.44	993,436	99.56
	2015	878,433	5,239	0.60	873,194	99.40
	2016	779,125	6,469	0.83	772,655	99.17
Water Supply and Remediation Activities	2014	997,862	4,425	0.44	993,436	99.56
	2015	878,433	5,239	0.60	873,194	99.40
	2016	165,106	54,405	32.95	110,700	67.05
Construction	2014	2,129,604	1,399,939	65.74	729,665	34.26
	2015	2,184,620	1,447,110	66.24	737,506	33.76
	2016	2,085,042	1,404,354	67.35	680,688	32.65
Wholesale and Retail Trade	2014	11,594,689	3,852,488	33.23	7,742,201	66.77
	2015	11,294,900	3,902,850	34.55	7,392,010	65.45
	2016	11,377,639	3,938,119	34.61	7,439,520	65.39
Transportation and Storage	2014	778,744	260,866	33.50	517,878	66.50
	2015	795,922	261,112	32.81	534,811	67.19
	2016	816,889	262,190	32.10	554,699	67.90
Accommodation and Food Service Activities	2014	539,368	370,911	68.77	168,457	31.23
	2015	572,650	400,642	69.96	172,008	30.04
	2016	620,380	442,060	71.26	178,319	28.74

Table C-3 Domestic Sales Value by Industry and Enterprise Size, 2014-2016 (Continued)

Unit: Million NT\$, %

Enterprise size Industry / year		Total	SMEs	Share	Large enterprises	Share
Information and Communication	2014	855,122	106,414	12.44	748,708	87.56
	2015	962,043	109,778	11.41	852,265	88.59
	2016	957,200	111,914	11.69	845,285	88.31
Financial and Insurance Activities	2014	2,382,067	206,663	8.68	2,175,404	91.32
	2015	2,389,520	202,209	8.46	2,187,310	91.54
	2016	2,273,226	202,360	8.90	2,070,866	91.10
Real Estate Activities	2014	1,133,146	226,218	19.96	906,927	80.04
	2015	1,113,770	236,764	21.26	877,004	78.74
	2016	1,057,675	229,348	21.68	828,326	78.32
Professional, Scientific and Technical Activities	2014	536,299	203,699	37.98	332,600	62.02
	2015	539,817	202,360	37.49	337,457	62.51
	2016	553,952	205,336	37.07	348,616	62.93
Support Service Activities	2014	435,345	135,978	31.23	299,367	68.77
	2015	504,251	141,886	28.14	362,365	71.86
	2016	533,082	146,605	27.50	386,477	72.50
Education	2014	435,345	135,978	31.23	299,367	68.77
	2015	504,251	141,886	28.14	362,365	71.86
	2016	15,924	10,947	68.75	4,977	31.25
Human Health and Social Work Activities	2014	6,531	2,118	32.43	4,412	67.57
	2015	9,770	2,469	25.27	7,301	74.73
	2016	24,663	2,670	10.83	21,993	89.17
Arts, Entertainment and Recreation	2014	85,037	50,436	59.31	34,601	40.69
	2015	91,343	53,876	58.98	37,467	41.02
	2016	91,105	55,746	61.19	35,359	38.81
Other Service Activities	2014	216,274	118,402	54.75	97,872	45.25
	2015	224,724	121,441	54.04	103,284	45.96
	2016	229,709	124,737	54.30	104,972	45.70

Note and source: See Table C-1.

Table C-4 Export Sales Value by Industry and Enterprise Size, 2014-2016

Unit: Million NT\$, %

Enterprise size		Total	SMEs		Large enterprises	
Industry / year				Share		Share
Total	2014	10,221,390	1,494,773	14.62	8,726,617	85.38
	2015	9,716,490	1,477,860	15.21	8,238,630	84.79
	2016	9,464,262	1,423,791	15.04	8,040,471	84.96
Agriculture, Forestry, Fishing and Animal Husbandry	2014	6,435	3,309	51.42	3,126	48.58
	2015	7,094	3,450	48.63	3,644	51.37
	2016	7,516	3,269	43.49	4,247	56.51
Mining and Quarrying	2014	509	214	42.07	295	57.93
	2015	514	224	43.53	290	56.47
	2016	520	230	44.32	289	55.68
Manufacturing	2014	7,002,855	1,038,190	14.83	5,964,665	85.17
	2015	6,623,010	1,019,700	15.40	5,603,300	84.60
	2016	6,422,303	977,112	15.21	5,445,191	84.79
Electricity and Gas Supply	2014	18,215	132	0.72	18,083	99.28
	2015	17,075	55	0.32	17,019	99.68
	2016	15,692	142	0.90	15,550	99.10
Water Supply and Remediation Activities	2014	10,746	1,428	13.29	9,318	86.71
	2015	7,970	1,455	18.25	6,515	81.75
	2016	8,286	1,403	16.94	6,883	83.06
Construction	2014	32,892	11,787	35.83	21,105	64.17
	2015	45,632	12,187	26.71	33,445	73.29
	2016	63,460	12,867	20.28	50,593	79.72
Wholesale and Retail Trade	2014	2,559,914	413,562	16.16	2,146,352	83.84
	2015	2,391,790	413,650	17.29	1,978,140	82.71
	2016	2,336,277	400,386	17.14	1,935,891	82.86
Transportation and Storage	2014	319,440	9,007	2.82	310,432	97.18
	2015	340,575	8,330	2.45	332,246	97.55
	2016	324,704	8,778	2.70	315,926	97.30
Accommodation and Food Service Activities	2014	1,380	140	10.18	1,240	89.82
	2015	1,550	169	10.91	1,381	89.09
	2016	1,803	227	12.60	1,575	87.40

Table C-4 Export Sales Value by Industry and Enterprise Size, 2014-2016 (Continued)

Unit: Million NT\$, %

Enterprise size Industry / year		Total	SMEs	Share	Large enterprises	Share
Information and Communication	2014	102,126	6,829	6.69	95,296	93.31
	2015	107,952	7,484	6.93	100,468	93.07
	2016	107,656	8,027	7.46	99,628	92.54
Financial and Insurance Activities	2014	5,803	691	11.90	5,113	88.10
	2015	8,900	751	8.44	8,149	91.56
	2016	4,047	708	17.51	3,338	82.49
Real Estate Activities	2014	2,917	606	20.76	2,312	79.24
	2015	2,943	805	27.37	2,138	72.63
	2016	2,834	885	31.22	1,949	68.78
Professional, Scientific and Technical Activities	2014	137,749	7,076	5.14	130,674	94.86
	2015	142,119	7,656	5.39	134,463	94.61
	2016	151,225	8,174	5.41	143,051	94.59
Support Service Activities	2014	6,263	1,104	17.63	5,159	82.37
	2015	6,090	1,211	19.89	4,879	80.11
	2016	7,071	1,104	15.61	5,967	84.39
Education	2014	84	35	41.63	49	58.37
	2015	76	28	37.33	47	62.67
	2016	79	38	48.04	41	51.96
Human Health and Social Work Activities	2014	2,464	66	2.66	2,399	97.34
	2015	2,586	110	4.24	2,476	95.76
	2016	3,154	60	1.89	3,094	98.11
Arts, Entertainment and Recreation	2014	332	327	98.35	5	1.65
	2015	352	329	93.59	23	6.41
	2016	301	135	44.79	166	55.21
Other Service Activities	2014	11,246	268	2.39	10,977	97.61
	2015	9,763	356	3.65	9,406	96.35
	2016	7,334	246	3.35	7,092	96.70

Note and source: See Table C-1.

Table C-5 Total Employment by Industry and Enterprise Size, 2014-2016

Unit: Thousand persons; %

Enterprise size Industry / year		Total	Share	SMEs	Share	Large enterprises	Share	Government
Total	2014	11,079	100.00	8,669	78.25	1,387	12.52	1,023
	2015	11,198	100.00	8,759	78.22	1,415	12.64	1,024
	2016	11,267	100.00	8,810	78.19	1,432	12.71	1,025
Agriculture, Forestry, Fishing and Animal Husbandry	2014	548	100.00	540	98.52	1	0.27	7
	2015	555	100.00	549	98.98	1	0.26	4
	2016	557	100.00	552	99.05	2	0.28	4
Mining and Quarrying	2014	4	100.00	3	86.48	0	0.00	1
	2015	4	100.00	3	81.33	0	0.97	1
	2016	4	100.00	3	82.98	0	0.15	1
Manufacturing	2014	3,007	100.00	2,196	73.01	786	26.14	25
	2015	3,024	100.00	2,192	72.48	812	26.86	20
	2016	3,028	100.00	2,193	72.41	818	27.02	17
Electricity and Gas Supply	2014	29	100.00	4	14.05	3	8.64	22
	2015	30	100.00	4	14.12	2	8.13	23
	2016	30	100.00	4	12.31	3	8.81	24
Water Supply and Remediation Activities	2014	82	100.00	38	46.07	2	2.52	42
	2015	82	100.00	34	41.60	2	2.54	46
	2016	82	100.00	35	42.40	1	1.50	46
Construction	2014	881	100.00	865	98.08	9	1.01	8
	2015	895	100.00	878	98.10	8	0.93	9
	2016	899	100.00	884	98.37	8	0.84	7
Wholesale and Retail Trade	2014	1,825	100.00	1,756	96.19	62	3.39	8
	2015	1,842	100.00	1,771	96.13	65	3.51	7
	2016	1,853	100.00	1,782	96.17	65	3.48	6
Transportation and Storage	2014	433	100.00	316	73.16	68	15.62	49
	2015	437	100.00	323	73.94	66	15.02	48
	2016	440	100.00	318	72.32	71	16.25	50
Accommodation and Food Service Activities	2014	792	100.00	768	96.99	23	2.97	1
	2015	813	100.00	790	97.21	22	2.75	0
	2016	826	100.00	804	97.28	22	2.71	0

Table C-5 Total Employment by Industry and Enterprise Size, 2014-2016 (Continued)

Unit: Thousand persons; %

Enterprise size Industry / year		Total	Share	SMEs	Share	Large enterprises	Share	Government
Information and Communication	2014	241	100.00	170	70.49	71	29.26	1
	2015	246	100.00	171	69.53	75	30.32	0
	2016	249	100.00	182	73.24	66	26.44	1
Financial and Insurance Activities	2014	416	100.00	316	75.87	84	20.23	16
	2015	420	100.00	323	76.97	80	18.98	17
	2016	424	100.00	329	77.64	79	18.54	16
Real Estate Activities	2014	98	100.00	94	95.89	3	2.95	1
	2015	100	100.00	96	96.08	3	2.52	1
	2016	100	100.00	96	95.74	3	2.57	2
Professional, Scientific and Technical Activities	2014	354	100.00	287	81.18	44	12.35	23
	2015	362	100.00	292	80.67	44	12.28	26
	2016	368	100.00	293	79.61	49	13.28	26
Support Service Activities	2014	273	100.00	251	91.81	22	8.02	1
	2015	281	100.00	255	90.87	25	9.01	0
	2016	286	100.00	260	90.69	26	9.16	0
Public Administration and Defense; Compulsory Social Security	2014	378	100.00	1	0.16	0	0.00	377
	2015	375	100.00	1	0.16	0	0.00	374
	2016	374	100.00	1	0.21	0	0.00	373
Education	2014	645	100.00	235	36.47	63	9.82	346
	2015	650	100.00	238	36.72	59	9.14	352
	2016	652	100.00	234	35.93	65	9.97	353
Human Health and Social Work Activities	2014	432	100.00	217	50.09	136	31.45	80
	2015	438	100.00	219	50.10	139	31.70	80
	2016	444	100.00	218	49.15	143	32.29	82
Arts, Entertainment and Recreation	2014	95	100.00	76	79.82	6	5.91	14
	2015	99	100.00	80	80.83	5	5.35	14
	2016	103	100.00	83	80.25	5	5.34	15
Other Service Activities	2014	543	100.00	536	98.75	4	0.81	2
	2015	546	100.00	538	98.50	6	1.10	2
	2016	547	100.00	539	98.48	6	1.14	2

Note:

1. Since 2012, the industries are classified according to the 9th 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 (1000 persons); "-" represents no data available.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data (2014-2016).

Table C-6 Number of Paid Employees by Industry and Enterprise Size, 2014-2016

Unit: Thousand persons; %

Enterprise size Industry / year		Total	Share	SMEs	Share	Large enterprises	Share	Government
Total	2014	8,737	100.00	6,329	72.44	1,385	15.85	1,023
	2015	8,860	100.00	6,424	72.50	1,413	15.94	1,024
	2016	8,926	100.00	6,472	72.50	1,429	16.01	1,025
Agriculture, Forestry, Fishing and Animal Husbandry	2014	90	100.00	82	90.93	1	1.64	7
	2015	92	100.00	86	93.86	1	1.55	4
	2016	90	100.00	84	94.13	2	1.69	4
Mining and Quarrying	2014	4	100.00	3	85.76	0	0.00	1
	2015	4	100.00	3	80.74	0	1.00	1
	2016	4	100.00	3	82.30	0	0.16	1
Manufacturing	2014	2,763	100.00	1,952	70.67	785	28.41	25
	2015	2,787	100.00	1,956	70.20	811	29.09	20
	2016	2,782	100.00	1,948	70.01	817	29.37	17
Electricity and Gas Supply	2014	29	100.00	4	13.78	3	8.67	22
	2015	30	100.00	4	13.49	2	8.19	23
	2016	30	100.00	3	11.58	3	8.88	24
Water Supply and Remediation Activities	2014	75	100.00	31	40.79	2	2.77	42
	2015	76	100.00	28	36.60	2	2.76	46
	2016	76	100.00	29	37.77	1	1.62	46
Construction	2014	750	100.00	733	97.74	9	1.19	8
	2015	755	100.00	738	97.75	8	1.11	9
	2016	759	100.00	744	98.07	8	1.00	7
Wholesale and Retail Trade	2014	1,112	100.00	1,043	93.76	62	5.55	8
	2015	1,136	100.00	1,065	93.76	64	5.66	7
	2016	1,165	100.00	1,094	93.93	64	5.52	6
Transportation and Storage	2014	351	100.00	235	66.92	68	19.24	49
	2015	354	100.00	240	67.79	66	18.55	48
	2016	358	100.00	237	66.09	71	19.86	50
Accommodation and Food Service Activities	2014	496	100.00	472	95.20	23	4.72	1
	2015	514	100.00	491	95.58	22	4.35	0
	2016	527	100.00	505	95.79	22	4.20	0

Table C-6 Number of Paid Employees by Industry and Enterprise Size, 2014-2016
(Continued)

Units: Thousand persons; %

Enterprise size Industry / year		Total	Share	SMEs	Share	Large enterprises	Share	Government
Information and Communication	2014	228	100.00	157	68.83	70	30.91	1
	2015	232	100.00	157	67.66	75	32.19	0
	2016	234	100.00	167	71.52	66	28.14	1
Financial and Insurance Activities	2014	412	100.00	312	75.63	84	20.43	16
	2015	416	100.00	319	76.74	80	19.17	17
	2016	420	100.00	326	77.46	79	18.68	16
Real Estate Activities	2014	90	100.00	86	95.54	3	3.20	1
	2015	91	100.00	87	95.73	2	2.72	1
	2016	90	100.00	86	95.27	3	2.86	2
Professional, Scientific and Technical Activities	2014	280	100.00	214	76.29	44	15.55	23
	2015	293	100.00	223	76.13	44	15.14	26
	2016	297	100.00	222	74.82	49	16.37	26
Support Service Activities	2014	252	100.00	230	91.11	22	8.70	1
	2015	260	100.00	234	90.18	25	9.69	0
	2016	263	100.00	237	89.94	26	9.89	0
Public Administration and Defense; Compulsory Social Security	2014	378	100.00	1	0.16	0	0.00	377
	2015	375	100.00	1	0.16	0	0.00	374
	2016	374	100.00	1	0.21	0	0.00	373
Education	2014	613	100.00	203	33.12	63	10.34	346
	2015	619	100.00	208	33.65	59	9.57	352
	2016	620	100.00	202	32.63	65	10.46	353
Human Health and Social Work Activities	2014	403	100.00	188	46.52	136	33.70	80
	2015	410	100.00	192	46.79	139	33.80	80
	2016	415	100.00	189	45.62	143	34.53	82
Arts, Entertainment and Recreation	2014	73	100.00	54	73.71	6	7.70	14
	2015	79	100.00	60	75.97	5	6.70	14
	2016	81	100.00	61	75.03	5	6.75	15
Other Service Activities	2014	338	100.00	331	97.99	4	1.31	2
	2015	340	100.00	332	97.60	6	1.76	2
	2016	342	100.00	333	97.56	6	1.83	2

Note and source: See Table C-5.

Table C-7 Overview of Newly-Established Enterprises by Industry and Enterprise Size, 2016

Unit: Enterprises; million NT\$; %

Industry	Enterprise size	Total	SMEs	Share	Large enterprises	Share
Number of enterprises						
Total		95,486	95,320	100.00	166	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		844	844	0.89	0	-
Mining and Quarrying		51	51	0.05	0	-
Manufacturing		4,749	4,704	4.93	45	27.11
Electricity and Gas Supply		183	182	0.19	1	0.60
Water Supply and Remediation Activities		418	418	0.44	0	-
Construction		8,917	8,908	9.35	9	5.42
Wholesale and Retail Trade		40,524	40,447	42.43	77	46.39
Transportation and Storage		1,598	1,595	1.67	3	1.81
Accommodation and Food Service Activities		17,857	17,853	18.73	4	2.41
Information and Communication		2,050	2,050	2.15	0	-
Financial and Insurance Activities		970	961	1.01	9	5.42
Real Estate Activities		2,732	2,720	2.85	12	7.23
Professional, Scientific and Technical Activities		4,042	4,037	4.24	5	3.01
Support Service Activities		2,590	2,589	2.72	1	0.60
Education		379	379	0.40	0	-
Human Health and Social Work Activities		74	74	0.08	0	-
Arts, Entertainment and Recreation		2,171	2,171	2.28	0	-
Other Service Activities		5,337	5,337	5.60	0	-
Total sales						
Total		233,403	164,545	100.00	68,858	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		574	574	0.35	0	-
Mining and Quarrying		68	68	0.04	0	-
Manufacturing		15,990	13,601	8.27	2,389	3.47
Electricity and Gas Supply		438	251	0.15	187	0.27
Water Supply and Remediation Activities		647	647	0.39	0	-
Construction		21,569	20,385	12.39	1,184	1.72
Wholesale and Retail Trade		130,502	78,851	47.92	51,651	75.01
Transportation and Storage		4,345	3,495	2.12	850	1.23
Accommodation and Food Service Activities		24,262	23,713	14.41	549	0.80
Information and Communication		3,008	3,008	1.83	0	-
Financial and Insurance Activities		9,372	1,102	0.67	8,270	12.01
Real Estate Activities		6,951	4,431	2.69	2,520	3.66
Professional, Scientific and Technical Activities		6,258	5,424	3.30	833	1.21
Support Service Activities		3,813	3,387	2.06	425	0.62
Education		455	455	0.28	0	-
Human Health and Social Work Activities		62	62	0.04	0	-
Arts, Entertainment and Recreation		2,104	2,104	1.28	0	-
Other Service Activities		2,986	2,986	1.81	0	-

Table C-7 Overview of Newly-Established Enterprises by Industry and Enterprise Size, 2016 (Continued)

Unit: Million NT\$; %

Enterprise size		Total	SMEs		Large enterprises	
Industry				Share		Share
Domestic sales						
Total		207,876	158,469	100.00	49,407	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		549	549	0.35	0	-
Mining and Quarrying		68	68	0.04	0	-
Manufacturing		13,529	12,320	7.77	1,209	2.45
Electricity and Gas Supply		406	226	0.14	180	0.36
Water Supply and Remediation Activities		637	637	0.40	0	-
Construction		21,537	20,353	12.84	1,184	2.40
Wholesale and Retail Trade		108,902	75,082	47.38	33,821	68.45
Transportation and Storage		4,263	3,413	2.15	850	1.72
Accommodation and Food Service Activities		24,260	23,711	14.96	549	1.11
Information and Communication		2,563	2,563	1.62	0	-
Financial and Insurance Activities		9,364	1,093	0.69	8,270	16.74
Real Estate Activities		6,947	4,428	2.79	2,520	5.10
Professional, Scientific and Technical Activities		5,914	5,089	3.21	825	1.67
Support Service Activities		3,356	3,356	2.12	0	-
Education		454	454	0.29	0	-
Human Health and Social Work Activities		62	62	0.04	0	-
Arts, Entertainment and Recreation		2,080	2,080	1.31	0	-
Other Service Activities		2,986	2,986	1.88	0	-
Export sales						
Total		25,527	6,076	100.00	19,451	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		25	25	0.41	-	-
Mining and Quarrying		0	0	-	-	-
Manufacturing		2,461	1,281	21.09	1,180	6.07
Electricity and Gas Supply		33	25	0.41	8	0.04
Water Supply and Remediation Activities		10	10	0.16	-	-
Construction		32	32	0.53	0	0.00
Wholesale and Retail Trade		21,600	3,769	62.03	17,830	91.67
Transportation and Storage		83	83	1.36	0	0.00
Accommodation and Food Service Activities		2	2	0.03	0	0.00
Information and Communication		445	445	7.33	-	-
Financial and Insurance Activities		9	9	0.14	0	0.00
Real Estate Activities		4	4	0.06	0	0.00
Professional, Scientific and Technical Activities		344	336	5.52	8	0.04
Support Service Activities		457	31	0.52	425	2.19
Education		0	0	0.01	-	-
Human Health and Social Work Activities		0	0	-	-	-
Arts, Entertainment and Recreation		24	24	0.39	-	-
Other Service Activities		0	0	-	-	-

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\$); "-" represents no data available.

Source: Fiscal Information Agency, Ministry of Finance, VAT data (2016).

Table C-8 Overview of Female-Owned Enterprises by Industry and Enterprise Size, 2016

Unit: Enterprises; million NT\$; %

Industry	Enterprise size	Total	Female-owned enterprises				
			Sub-total	SMEs	Share	Large enterprises	Share
Number of enterprises							
Total		1,395,558	518,565	512,214	100.00	6,351	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		11,434	2,778	2,764	0.54	14	0.22
Mining and Quarrying		1,101	256	252	0.05	4	0.06
Manufacturing		142,304	40,956	40,366	7.88	590	9.29
Electricity and Gas Supply		817	229	217	0.04	12	0.19
Water Supply and Remediation Activities		7,237	2,211	2,147	0.42	64	1.01
Construction		120,605	30,633	30,413	5.94	220	3.46
Wholesale and Retail Trade		675,320	262,903	259,044	50.57	3,859	60.76
Transportation and Storage		30,764	8,366	8,208	1.60	158	2.49
Accommodation and Food Service Activities		149,776	70,884	70,737	13.81	147	2.31
Information and Communication		18,963	5,777	5,685	1.11	92	1.45
Financial and Insurance Activities		16,508	6,279	5,650	1.10	629	9.90
Real Estate Activities		34,833	10,941	10,667	2.08	274	4.31
Professional, Scientific and Technical Activities		45,510	16,721	16,590	3.24	131	2.06
Support Service Activities		29,926	11,624	11,512	2.25	112	1.76
Education		2,319	971	969	0.19	2	0.03
Human Health and Social Work Activities		754	205	204	0.04	1	0.02
Arts, Entertainment and Recreation		25,300	9,228	9,214	1.80	14	0.22
Other Service Activities		82,151	37,603	37,575	7.34	28	0.44
Total sales							
Total		33,709,720	5,546,872	2,917,560	100.00	2,629,313	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		46,131	9,937	5,803	0.20	4,133	0.16
Mining and Quarrying		42,696	4,520	4,079	0.14	441	0.02
Manufacturing		11,562,512	1,088,843	696,139	23.86	392,705	14.94
Electricity and Gas Supply		778,566	5,211	1,088	0.04	4,123	0.16
Water Supply and Remediation Activities		169,529	40,975	16,655	0.57	24,320	0.92
Construction		2,056,379	434,323	354,144	12.14	80,179	3.05
Wholesale and Retail Trade		11,912,090	2,635,001	1,266,123	43.40	1,368,879	52.06
Transportation and Storage		1,036,629	173,146	76,189	2.61	96,957	3.69
Accommodation and Food Service Activities		589,165	205,276	169,102	5.80	36,174	1.38
Information and Communication		964,641	107,071	29,429	1.01	77,642	2.95
Financial and Insurance Activities		2,161,752	368,899	60,262	2.07	308,637	11.74
Real Estate Activities		1,030,933	172,232	60,478	2.07	111,754	4.25
Professional, Scientific and Technical Activities		615,521	129,974	64,077	2.20	65,898	2.51
Support Service Activities		393,067	80,920	49,660	1.70	31,261	1.19
Education		15,159	3,602	2,805	0.10	797	0.03
Human Health and Social Work Activities		27,586	858	729	0.02	129	0.00
Arts, Entertainment and Recreation		85,695	19,079	15,528	0.53	3,550	0.14
Other Service Activities		221,670	67,006	45,270	1.55	21,736	0.83

Table C-8 Overview of Female-Owned Enterprises by Industry and Enterprise Size, 2016
(Continued)

Unit: Million NT\$, %

Industry	Enterprise size	Total	Female-owned enterprises				
			Sub-total	SMEs	Share	Large enterprises	Share
Domestic sales							
Total		26,169,262	4,761,819	2,654,816	100.00	2,107,003	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		38,671	8,882	5,192	0.20	3,690	0.18
Mining and Quarrying		42,266	4,488	4,047	0.15	441	0.02
Manufacturing		6,655,353	773,237	566,627	21.34	206,610	9.81
Electricity and Gas Supply		764,616	5,207	1,084	0.04	4,123	0.20
Water Supply and Remediation Activities		161,635	40,117	16,263	0.61	23,854	1.13
Construction		1,998,415	430,407	352,536	13.28	77,871	3.70
Wholesale and Retail Trade		9,886,725	2,247,436	1,141,732	43.01	1,105,704	52.48
Transportation and Storage		769,823	120,876	74,545	2.81	46,331	2.20
Accommodation and Food Service Activities		587,414	205,041	169,041	6.37	36,000	1.71
Information and Communication		869,429	103,176	27,718	1.04	75,457	3.58
Financial and Insurance Activities		2,159,186	368,475	59,995	2.26	308,480	14.64
Real Estate Activities		1,028,236	171,993	60,397	2.27	111,596	5.30
Professional, Scientific and Technical Activities		474,207	113,152	62,048	2.34	51,105	2.43
Support Service Activities		387,637	79,003	49,423	1.86	29,580	1.40
Education		15,081	3,578	2,782	0.10	797	0.04
Human Health and Social Work Activities		24,467	840	711	0.03	129	0.01
Arts, Entertainment and Recreation		85,396	19,044	15,494	0.58	3,550	0.17
Other Service Activities		220,704	66,865	45,180	1.70	21,685	1.03
Export sales							
Total		7,540,457	785,053	262,744	100.00	522,309	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		7,460	1,055	611	0.23	444	0.08
Mining and Quarrying		430	32	32	0.01	0	0.00
Manufacturing		4,907,159	315,606	129,512	49.29	186,095	35.63
Electricity and Gas Supply		13,950	4	4	0.00	0	0.00
Water Supply and Remediation Activities		7,894	858	392	0.15	466	0.09
Construction		57,964	3,916	1,607	0.61	2,309	0.44
Wholesale and Retail Trade		2,025,364	387,566	124,391	47.34	263,175	50.39
Transportation and Storage		266,805	52,270	1,644	0.63	50,625	9.69
Accommodation and Food Service Activities		1,751	235	61	0.02	173	0.03
Information and Communication		95,212	3,895	1,710	0.65	2,185	0.42
Financial and Insurance Activities		2,566	423	267	0.10	156	0.03
Real Estate Activities		2,697	238	81	0.03	157	0.03
Professional, Scientific and Technical Activities		141,314	16,822	2,029	0.77	14,793	2.83
Support Service Activities		5,430	1,917	236	0.09	1,681	0.32
Education		78	24	24	0.01	0	0.00
Human Health and Social Work Activities		3,119	18	18	0.01	0	0.00
Arts, Entertainment and Recreation		299	35	35	0.01	0	0.00
Other Service Activities		965	141	90	0.03	51	0.01

Note: 1. Whether an enterprise should be classified as male-owned or female-owned was determined using the registered identity of the business owner. 2. 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. 3. "0" represents zero or less than one unit (a million NT\$); "-" represents no data available. Source: Fiscal Information Agency, Ministry of Finance, VAT data (2016).

Table C-9 Export Sales Value of SMEs by Manufacturing Industry, 2013-2016

Unit: Million NT\$; %

Industry	Indicator	Export sales				Share of total			
		2013	2014	2015	2016	2013	2014	2015	2016
Total		973,892	1,038,190	1,019,705	977,112	100	100	100	100
Food Products and Prepared Animal Feeds Manufacturing		8,475	9,728	9,860	9,713	0.87	0.94	0.97	0.99
Beverages Manufacturing		847	763	656	602	0.09	0.07	0.06	0.06
Tobacco Products Manufacturing		0	0	0	0	0.00	0.00	0.00	0.00
Textiles Manufacturing		23,093	23,468	22,551	23,073	2.37	2.26	2.21	2.36
Wearing Apparel and Clothing Accessories		16,828	16,825	12,336	11,693	1.73	1.62	1.21	1.20
Leather, Fur and Related Products		13,805	13,597	12,307	10,773	1.42	1.31	1.21	1.10
Wood and of Products of Wood and Bamboo		3,114	3,421	3,206	2,442	0.32	0.33	0.31	0.25
Paper and Paper Products		11,693	11,900	11,237	12,178	1.20	1.15	1.10	1.25
Printing and Reproduction of Recorded Media		4,943	4,614	4,025	3,999	0.51	0.44	0.39	0.41
Petroleum and Coal Products Manufacturing		114	143	98	126	0.01	0.01	0.01	0.01
Chemical Material, Fertilizers and Nitrogen Compounds, Plastic and Rubber Materials, Man-made Fibres		22,666	23,272	22,156	23,163	2.33	2.24	2.17	2.37
Other Chemical Products Manufacturing		12,117	14,576	15,150	14,542	1.24	1.40	1.49	1.49
Pharmaceuticals and Medicinal Chemical Products Manufacturing		341	708	710	845	0.04	0.07	0.07	0.09
Rubber Products Manufacturing		10,974	12,250	11,315	11,045	1.13	1.18	1.11	1.13
Plastic Products Manufacturing		51,925	54,583	51,231	50,307	5.33	5.26	5.02	5.15
Non-metallic Mineral Products Manufacturing		31,966	25,344	19,614	17,554	3.28	2.44	1.92	1.80
Basic Metal Manufacturing		43,453	48,500	42,020	33,064	4.46	4.67	4.12	3.38
Fabricated Metal Products Manufacturing		111,827	122,381	122,349	117,110	11.48	11.79	12.00	11.99
Electronic Parts and Components Manufacturing		287,526	295,299	290,748	304,950	29.52	28.44	28.51	31.21
Computers, Electronic and Optical Products Manufacturing		36,597	47,687	60,158	35,005	3.76	4.59	5.90	3.58
Electrical Equipment Manufacturing		49,753	51,538	48,772	44,867	5.11	4.96	4.78	4.59
Machinery and Equipment Manufacturing		125,846	136,860	132,244	131,117	12.92	13.18	12.97	13.42
Motor Vehicles and Parts Manufacturing		17,773	17,795	17,870	16,482	1.82	1.71	1.75	1.69
Other Transport Equipment and Parts Manufacturing		34,193	42,358	49,154	46,681	3.51	4.08	4.82	4.78
Furniture Manufacturing		14,868	16,951	17,455	16,288	1.53	1.63	1.71	1.67
Other Manufacturing		32,813	34,061	32,900	31,156	3.37	3.28	3.23	3.19
Repair and Installation of Industrial Machinery and Equipment		6,343	9,566	9,581	8,335	0.65	0.92	0.94	0.85

Note and source: See Table C-1.

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