

# 2021 White Paper on Small and Medium Enterprises in Taiwan



## **2021 White Paper on Small and Medium Enterprises in Taiwan**

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### **Edited by**

Chung-Hua Institution for Economic Research

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### **Editor in Chief**

Jiann-Chyuan Wang

### **Managing Editor**

Po-Chun Lin, Ying-Xuan Chen

### **English Translator**

Linguitronics Co., Ltd., Po-Chun Lin, Ying-Xuan Chen, Xia-Jun Wang

### **Proof Reader**

Po-Chun Lin, Ying-Xuan Chen

### **Designed and Printed by**

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# Foreword

Due to the impact of the COVID-19 epidemic, the global economy declined in 2020, with a global economic growth rate of -3.34% according to IHS Markit. Taiwan's overall economy benefited from its exceptional performance in disease prevention and increased investments from returning Taiwanese businesses. The Directorate-General of Budget, Accounting and Statistics of the Executive Yuan announced that the economic growth rate was 3.12%. The development of vaccines and vaccination have proven to be successful and the major countries have made improvements in fighting the epidemic. The global economy is expected to improve in 2021 and the global economic growth rate is expected to reach 5.74%. Taiwan's economic growth rate is expected to reach 5.88% with spectacular performance due to the strong global economic recovery, improved international trade, and continuous growth in domestic investments.

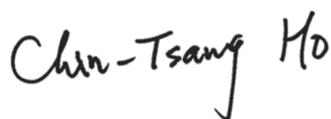
As of 2020, there were 1,548,835 small and medium enterprises in Taiwan, which accounted for 98.93% of all enterprises. The number of people employed in small and medium enterprises amounted to 9.311 million people, which accounted for 80.94% of the total number of people employed. The revenue of small and medium enterprises amounted to NT\$23,555,513 million, which was more than 50% of the revenue of all businesses (53.99%). Revenue from domestic sales amounted to NT\$20,861,339 million, equivalent to 62.50% of all revenue. Revenue from export sales amounted to NT\$2,694,174 million, or 26.28% of total revenue. These figures demonstrate that Taiwan's small and medium enterprises are the pillars of the economy and important foundations for creating employment.

In response to the trends toward capital-intensive development, the blurring of the boundaries of industries, and simplified identification, the Ministry of Economic Affairs revised and published the "Standards for Identifying Small and Medium-sized Enterprises" on June 24, 2020. The Standards replaced the original model that used paid-in capital, revenue, or the number of employees employed on a regular basis with a single criterion applicable to all industries by identifying small and medium enterprises as those with paid-in capital of less than NT\$100

million or fewer than 200 employees employed on a regular basis. Due to revision of the identification standards, certain enterprises with a high level of output have been included in the statistics of small and medium enterprises. As a result, related statistics of small and medium enterprises in Taiwan in 2020 including the number of enterprises, number of employees, and revenue (including domestic sales and exports) have increased significantly. Readers are advised to note the changes between the different years when using the data.

The 2021 Small and Medium Enterprise White Paper consists of two parts, “Trends in the Operations of Small and Medium Enterprises” and “Small and Medium Enterprise Policies and Measures,” as well as appendices. The first part, “Trends in the Operations of Small and Medium Enterprises,” describes the development and financial performance of SMEs and provides an overview of their financing and human resources. The second part, “Small and Medium Enterprise Policies and Measures,” describes the SME policies and measures implemented by various government departments every year. It also describes the modifications of SME development strategies in response to domestic and international economic changes.

This paper provides detailed information on trends and developments in SMEs and important policies. Apart from circulating government information and facilitating academic research and comparisons between countries, this paper also serves as a source of information for SME owners and provides additional information on SMEs in Taiwan for all sectors. Finally, we would like to thank the editors of the White Paper and all participants for their valuable input. We look forward to feedback from all parts of our society, as your feedback will help us improve future editions of this paper.



**Chin-Tsang Ho**

Director-General

Small and Medium Enterprise Administration

Ministry of Economic Affairs

November 2021

# Contents

Foreword .....	i
Contents .....	iii
Tables .....	vi
Figures .....	ix
Summary .....	xi

## Part One Trends in the Operations of SMEs

<b>Chapter 1 Major Trends in the Development of SMEs.....</b>	<b>2</b>
I General Business Performance of SMEs	3
II Female-owned SMEs	21
III Business Performance of SMEs	25
IV Overview of SMEs' Expenditure on R&D	30
<b>Chapter 2 Financial and Funding Analysis of SMEs .....</b>	<b>32</b>
I SMEs: Consolidated Financial Analysis	32
II Analysis of SMEs' Financial Ratios	36
III SME Funding and Financing	39
<b>Chapter 3 SMEs: Human Resources.....</b>	<b>43</b>
I Labor Utilization by SMEs	43
II Labor Conditions in SMEs	58

## **Part Two SME Policies and Measures**

### **Chapter 4 Improving Financial and Funding Services and Strengthening Investment in SMEs.....66**

- I Improving Financial and Funding Services 66
- II SME Financing and Credit Guarantees 68
- III Strengthening Investment in SMEs 73

### **Chapter 5 Enhancing R&D and Promoting Upgrading and Transformation for SMEs.....77**

- I Promoting the Digital Transformation of SMEs 77
- II Measures Related to Actual / Virtual Integration and Network Resource Applications for SMEs 80
- III Promoting Operational Excellence and Innovation 81
- IV Guidance to SMEs on Energy Conservation, Green Opportunities, and Carbon Emission 82
- V SMEs: R&D Enhancement and Technology Upgrading 83

### **Chapter 6 Strengthening Start-ups and Incubation & Acceleration Mechanisms.....86**

- I Incorporation of Online-Offline Systems into the Innovation Incubation Ecosystem 86
- II Strengthening the Incubation Support System 87
- III Strategy Optimization to Meet International Standards 90

### **Chapter 7 Revitalizing Local Industries by In-depth Development, Marketing and Expansion.....92**

- I Promoting the Development of Local Industrial Clusters 92
- II Helping Local Industries Build Marketing Capabilities and Regional Brands 93

III	SME Business Matchmaking and Export Expansion	94
<b>Chapter 8</b>	<b>Other Government Measures to Support SMEs</b>	<b>98</b>
I	Government Resources Allocated to SMEs	98
II	Regulatory Flexibility to Create a First-class Legal Environment for SMEs	100
III	Participating in International SME Meetings and Events	102
IV	Manpower Cultivation in SMEs	104
V	National SME Awards from the Ministry of Economic Affairs	106
<b>Appendix</b>		<b>109</b>
A	Act for Development of Small and Medium Enterprises	110
B	Standards for Identifying Small and Medium-sized Enterprises	124
C	SME Statistics by Industry	126
<b>Index</b>		<b>138</b>

# Tables

Table 1-1-1	Number of Enterprises, Annual Sales, Employed Persons and Paid Employees in Taiwan by Enterprise Size, 2019-2020.....	4
Table 1-1-2	Shares of SMEs in Taiwan by Sector, 2016-2020 .....	5
Table 1-1-3	Number of New SMEs and Annual Sales by Industry, 2020.....	8
Table 1-1-4	Number and Sales Performance of SMEs, 2016-2020.....	10
Table 1-1-5	Number and Sales Performance of Newly-established Enterprises, 2020 .....	13
Table 1-1-6	Number and Sales Performance of Newly-established SMEs by Sector, 2020 ....	13
Table 1-1-7	Number of Newly-established Enterprises, Sales, and Shares by Industry and Enterprise Size, 2020 .....	14
Table 1-1-8	Number and Shares of Enterprises by Particular Ages, 2020 .....	16
Table 1-1-9	Number and Shares of Enterprises by Form of Organization, 2020 .....	16
Table 1-1-10	Number and Total Sales of Enterprises in Taiwan's Regions by Enterprise Size, 2020 .....	18
Table 1-1-11	Number and Total Sales of Enterprises in Taiwan's Six Special Municipalities by Enterprise Size, 2020.....	18
Table 1-1-12	Number and Shares of SMEs in Each Region by Industry, 2020.....	19
Table 1-2-1	Number and Sales Performance of Enterprises by Sex of Business Owner, 2020	21
Table 1-2-2	Number and Shares of SMEs by Particular Ages and Sex of Business Owner, 2020 .....	23
Table 1-2-3	Number and Shares of SMEs by Form of Organization and Sex of Business Owner, 2020 .....	24
Table 1-2-4	Number and Sales Performance of Newly-established SMEs by Sex of Business Owner, 2020 .....	25

Table 2-1-1	Consolidated Balance Sheet for Taiwanese Enterprises, 2018-2019 .....	33
Table 2-1-2	Consolidated Balance Sheet for Taiwanese SMEs by Industry, 2019 .....	34
Table 2-1-3	Profit and Loss of Taiwanese Enterprises, 2018-2019.....	36
Table 2-3-1	Corporate Liability Structure as of the End of 2019 .....	40
Table 2-3-2	Top 10 Banks by Amount of Loans to SMEs in 2020 .....	42
Table 2-3-3	Top 10 Private Banks by Amount of Loans to SMEs in 2020.....	42
Table 3-1-1	Employed Persons and Paid Employees in Taiwan by Enterprise Size, 2019-2020 .....	44
Table 3-1-2	Educational Structure of Employed Persons and Paid Employees Working in SMEs, 2019-2020 .....	49
Table 3-1-3	Number of Employed Persons by Region, 2020.....	50
Table 3-1-4	Number of Paid Employees by Region, 2020.....	50
Table 3-1-5	Characteristics of Employers by Enterprise Size, 2019-2020.....	51
Table 3-1-6	Characteristics of Self-employed Persons, 2019-2020 .....	52
Table 3-1-7	Characteristics of the Unemployed by Enterprise Size, 2019-2020.....	54
Table 3-1-8	Reasons for Leaving the Previous Jobs by Enterprise Size, 2019-2020 .....	55
Table 3-1-9	Number of Foreign Workers by Enterprise Size, 2016-2020 .....	56
Table 3-1-10	Full-time and Part-time Manpower Utilization by Industry and Enterprise Size, 2020 .....	57
Table 3-1-11	Utilization of Temporary or Dispatched Labor by Industry and Enterprise Size, 2019-2020 .....	58
Table 3-2-1	Working Hours per Week and Number of Employed Workers by Enterprise Size and Industry, 2019-2020.....	59
Table 3-2-2	Number of Paid Employed Persons and Average Wage of Main Work by Enterprise Size and Industry, 2019-2020.....	61

Table 3-2-3	Anticipated Changes in the Number of Personnel Employed by Business Enterprises during the Period from April 31 to June 31, 2021 .....	63
Table 4-2-1	SMEG Guarantees - SME Fund, 2016-2020 .....	69
Table 4-2-2	SMEG Guarantees - All Cases, 2016-2020 .....	69
Table 8-1-1	Ministry of Economic Affairs Resources and Funding Allocated to SMEs, 2019-2020 .....	99
Table 8-1-2	Special Loans to SMEs Funded by the Government ,2020 .....	100

# Figures

Figure 1-1-1	Distribution of SMEs by Industry, 2020.....	6
Figure 1-1-2	Shares of Domestic and Export Sales in Total Sales by Enterprise Size, 2020.....	7
Figure 1-1-3	Distribution of Sales in SMEs by Industry, 2020.....	7
Figure 1-1-4	Distribution of Export Sales in SMEs by Industry, 2020.....	11
Figure 1-1-5	Shares of Regions in Export Sales by Enterprise Size, 2020.....	12
Figure 1-1-6	Distribution of Number of Newly-established SMEs by Industry, 2019-2020 ...	14
Figure 1-1-7	Distribution of SMEs by Region ,2020.....	17
Figure 1-1-8	Distribution of SME Employment by Region, 2020.....	20
Figure 1-2-1	Shares of Domestic Sales and Export Sales by Sex of Business Owner, 2020 ...	22
Figure 1-2-2	Industry Distribution of SMEs by Sex of Business Owner, 2020.....	23
Figure 1-3-1	Obstacles in Operations for Wholesale Trade by Enterprise Size, 2020 (Multiple Selection).....	26
Figure 1-3-2	Operational Development Plan for Wholesale Trade by Enterprise Size, 2020 (Multiple Selection).....	27
Figure 1-3-3	Obstacles in Operations for Retail Trade by Enterprise Size, 2020 (Multiple Selections).....	28
Figure 1-3-4	Operational Development Plan for Retail Trade by Enterprise Size, 2020 (Multiple Selections).....	28
Figure 1-3-5	Obstacles in Operations for Food and Beverage Service Activities by Enterprise Size, 2020 (Multiple Selections).....	29
Figure 1-3-6	Operational Development Plan for Food and Beverage Service Activities by Enterprise Size, 2020 (Multiple Selection).....	30
Figure 1-4-1	Ratio of R&D Expenditure by Sector, 2010-2019.....	31
Figure 1-4-2	Overview of SMEs' R&D Expenditure, 2010-2019.....	31

Figure 2-2-1	Short-term Liquidity of Taiwanese Enterprises, 2018-2019 .....	37
Figure 2-2-2	Long-term Stability of Taiwanese Enterprises, 2018-2019 .....	37
Figure 2-2-3	Operating Capability of Taiwanese Enterprises, 2018-2019 .....	38
Figure 2-2-4	Profitability of Taiwanese Enterprises, 2018-2019 .....	39
Figure 2-3-1	Average Interest Rate on New Loans by Taiwan's Five Largest Banks, 2004-2020 .....	40
Figure 2-3-2	Changes in Bank Loans to SMEs by Regular Banks, 2004-2020.....	41
Figure 3-1-1	Breakdown of SME Employees by Industry, 2020 .....	45
Figure 3-1-2	Breakdown of Paid SME Employees by Industry, 2020 .....	46
Figure 3-1-3	Age Structure of SME Employees, 2019-2020 .....	47
Figure 3-1-4	Age Structure of Paid SME Employees, 2019-2020 .....	47
Figure 3-1-5	Male/Female Ratio of Employed Persons and Paid Employees Working in SMEs, 2020 .....	48
Figure 3-2-1	Distribution of Employed Persons in SMEs by Industry, 2020.....	60
Figure 3-2-2	Distribution of Paid Employees in SMEs by industry, 2020.....	62

# Summary

The 2021 “Small and Medium Enterprise White Paper” includes two parts. The first part focuses on the business development of small and medium enterprises (SMEs) and describes the operations and development of SMEs. The second part focuses on policies and measures. It introduces the policies and measures provided by various government authorities to SMEs which can be used as reference for SME operations and innovation.

## Part One Trends in the Operations of SMEs

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

### Chapter 1 Major Trends in the Development of SMEs

The concentration and rapid development of capital, vanishing boundaries between industries, and simplified standards have effectively reduced operating risks and costs, and incorporated large high-productivity companies to promote industrial innovation and transformation. The Ministry of Economic Affairs (MOEA) promulgated the revised “Standards for Identifying Small and Medium-sized Enterprises” (hereinafter referred to as the “New Standards”) on June 24, 2020. Businesses in all industries with paid-in capital of no more than NT\$100 million or which have fewer than 200 regular employees are regarded as SMEs in the Standards.

As of 2020, the total number of businesses in Taiwan was 1,565,637, which was a 2.51% increase from 2019. The total number of employed was 11,504 thousand, which was a 0.15% increase from 2019. According to the definitions of the New Standards, there were 1,548,835 small and medium enterprises, which accounted for 98.93% of all enterprises. The number of people employed in small and medium enterprises amounted to 9.311 million people, which accounted for 80.94% of the total number of people employed.

The 2020 data on related operations of SMEs in Taiwan, including the number of businesses, number of employees, and sales revenue (including domestic sales and exports) showed significant growth compared to the Old Standards (as shown in the table below):

According to the definitions in the New Standards, there were 1,548,835 SMEs in 2020 (98.93% of all enterprises), which was an increase of approximately 19,620 enterprises compared to the Old Standards. The number of people employed by SMEs was 9,311 thousand (80.94% of the total employed), which was an increase of approximately 272 thousand. The total revenue was NT\$23,555,513 million (53.99%), which was an increase of approximately NT\$10.63 trillion. Total exports amounted to NT\$2,694,174 million (26.28% of the total export contribution), which was an increase of approximately NT\$1.30 trillion.

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

Indicator	Year Item	2019		2020			
		Share	New Standards		Old Standards		
			Share	Share	Share		
No. of enterprises		1,491,420	97.65	1,548,835	98.93	1,529,215	97.67
No. of employed persons		9,054	78.73	9,311	80.94	9,039	78.58
Total sales		12,712,963	29.58	23,555,513	53.99	12,921,605	29.62
Domestic sales		11,299,248	34.83	20,861,339	62.50	11,524,070	34.53
Export sales		1,413,715	13.42	2,694,174	26.28	1,397,535	13.63

Notes:

1. The data prior to 2019 in the table are defined based on the Old Standards. The SMEs specified in the Old Standards were identified based on the “Standards for Identifying Small and Medium-sized Enterprises” revised and promulgated by the Ministry of Economic Affairs on March 30, 2015. They included businesses in the “manufacturing”, “construction”, and “mining and quarrying” sectors with paid-in capital of no more than NT\$80 million or with fewer than 200 regular employees, and businesses with revenue of less than NT\$100 million or with fewer than 100 regular employees in the previous year.
2. Ratio = (number of SMEs / number of all enterprises) × 100%.
3. Number of enterprises and revenue: (1) The definitions of the scale of enterprises are based on capital and revenue, and cannot be reconciled with the relevant data for categorizing enterprises by the number of their employees. (2) Newly-incorporated SMEs include: A. Manufacturing, construction, and mining and quarrying enterprises with capital between NT\$80 million and NT\$100 million. B. Enterprises in other industries with capital of less than NT\$100 million but with revenue of NT\$100 million or more.
4. Number of employees: (1) The scale of enterprises is based on the number of employees. (2) Newly-included employees are employees from enterprises in other industries with between 100 and 200 employees.

Source: 1. Fiscal Information Agency, Ministry of Finance, Value-Added Business Tax (VAT) data, 2019-2020.

2. Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2019-2020.

The significant growth in the revenue of SMEs (including domestic sales and exports) as a proportion of all enterprises doubled the results compared to the Old Standards mainly because the newly-incorporated SMEs consisted mostly of competitive enterprises with high productivity, revenue of more than NT\$100 million, and higher average sales. The newly-incorporated SMEs increased the revenue by NT\$10.63 trillion, which accounted for 82.30% of the revenue of SMEs calculated based on the Old Standards.

The total revenue of SMEs from domestic sales in 2020 totaled NT\$20,861,339 million (62.50%) and exports totaled NT\$2,694,174 million (26.28%). Nearly nine-tenths (88.56%) of the overall revenue of SMEs was derived from domestic sales.

The top 6 industries in terms of the revenue of SMEs were wholesale and retail trade, manufacturing, construction, financial and insurance activities, real estate activities and transportation and storage.

The exports of SMEs in wholesale and retail trade accounted for 47.27% in 2020, ranking it first among all industries in relation to SMEs. The change is mainly attributed to the inclusion of 14,438 SMEs whose exports accounted for a higher ratio of sales. The export propensity was 1.89 times higher than for enterprises identified based on the Old Standards. The manufacturing industry ranked second and accounted for 40.59% of exports.

There were 108,301 new SMEs (established for less than 1 year) in 2020 and they consisted mostly of enterprises in the service sector that accounted for 85.10%, while industries accounted for 14.23%. The revenue of new SMEs was mainly derived from the domestic sales market. Their

domestic sales accounted for 90.78% of total sales.

Approximately 48.32% of SMEs were less than 10 years old in 2020. Those less than 1 year old accounted for 6.99%; those less than 5 years old accounted for 29.35%.

SMEs owned by women in 2020 totaled 565,876 in 2020, and accounted for 36.96% of all SMEs. Nearly half (48.66%) of female owners of SMEs operated wholesale and retail trade with 59.23% operating as sole proprietorships. The ratio of domestic sales was 91.27%, which was slightly higher than that of SMEs owned by men.

## **Chapter 2 Financial and Funding Analysis of SMEs**

The financial information and ratios for SMEs are a year old because the latest information from the Fiscal Information Center, Ministry of Finance on the income tax reporting of profit-seeking enterprises is for 2019. The definitions of SMEs in related statistics on financial information and ratios for 2019 were based on the “Standards for Identifying Small and Medium-sized Enterprises” revised and promulgated by the Ministry of Economic Affairs on March 30, 2015. The data on financial institutions and SME financing were from 2020.

The current assets to total assets ratio and the debt ratio of SMEs in Taiwan decreased in 2019. Cash holdings increased while receivables, inventories, and prepayment ratios decreased.

The overall debt ratio of SMEs in 2019 was lower than that in 2018. The decrease in the current liability ratio indicates a reduction in the pressure on short-term debt repayments. The non-current liability ratios of both SMEs and large enterprises increased from 2018 to 2019, but the increase was less significant for SMEs. In terms of profitability, despite a slight increase in the operating expenses of SMEs in 2019, the overall profitability of SMEs increased due to a more significant decrease in operating costs.

In 2020, both public and private banks actively increased their lending to SMEs, and the total loan balance to SMEs continued to increase.

## **Chapter 3 SMEs: Human Resources**

The definitions of SMEs in related statistics on employment and the number of employed from 2020 are based on the “Standards for Identifying Small and Medium-sized Enterprises” revised and promulgated by the Ministry of Economic Affairs on June 24, 2020.

The number of people employed in small and medium enterprises in Taiwan in 2020 amounted to 9.311 million people which accounted for 80.94% of the total number of people employed. The number of people employed in SMEs amounted to 6.986 million people which accounted for 76.12% of the total number of people employed in Taiwan. The top 3 industries in terms of employment and number of employed were, in descending order, manufacturing, wholesale and retail trade, and construction.

Based on the education structure of SME workers and employees in 2020, the top 3 groups consisted of senior high school graduates, university graduates, and junior college graduates. The percentage of those with a college or higher education was higher than for the previous year. In addition, the proportion of older workers and employees over 45 years of age has continuously increased in recent years. It is evident that workers and employees of SMEs have become more educated and older.

The number of unemployed in Taiwan in 2020 was 460 thousand and the annual growth rate was 3.28%. For former employees of SMEs or government entities, the highest percentage of unemployed were in the 25 to 29 age group. For former employees of large companies, the highest percentage of unemployed were in the 30 to 34 age group. For people who were seeking jobs for the first time, the highest percentage of unemployed were in the 20 to 24 age group. Regardless of the scale of their former employers, those with a senior high school or college education accounted for a higher percentage of the unemployed. This shows that young people and those with college degrees accounted for a relatively higher proportion of the unemployed.

In 2020, employed workers in SMEs worked on average 40.51 hours a week. The industries with the longest working hours were other service activities and real estate activities (tied for 1st place). The average monthly income of paid workers in SMEs was NT\$38,200. The industry with the highest monthly income was electricity and gas supply, but it only accounted for 0.09% of paid workers.

## **Part Two SME Policies and Measures**

This Part provides a summary of the policies and measures for SMEs implemented by the agencies of the Ministry of Economic Affairs, Small & Medium Enterprise Credit Guarantee Fund of Taiwan (SMEG), Financial Supervisory Commission (FSC), National Development Council (NDC), Ministry of Labor, Council of Indigenous Peoples, and the Ministry of Education in 5 chapters.

### **Chapter 4 Improving Financial and Funding Services and Strengthening Investment in SMEs**

The government actively implements financing counseling and related support measures to help small and medium enterprises effectively respond to changes in the internal and external environment, facilitate their stable growth, and provide small and medium enterprises with comprehensive financing support. The Small and Medium Enterprise Administration, Ministry of Economic Affairs has actively established financing service and assistance mechanisms including the one-stop service contact for financing and assistance — Instant Solution Center (0800-056-476 service hotline) and the Small and Medium Enterprises Operations and Financing Assistance Program.

Taipei Exchange established the “Go-incubation Board for Startup and Acceleration Firms (GISA)” with the support of the competent authority to strengthen the fundraising capacity of micro and innovative enterprises. The government allows the private sector to apply for the establishment of public equity fundraising platforms, and promotes the Equity Crowdfunding Program for Securities Dealers to provide startups with diverse access to capital.

## **Chapter 5 Enhancing R&D and Promoting Upgrading and Transformation for SMEs**

In response to the development of the digital economy and international economic and trade conditions, the government seeks to assist SMEs in their digital transformation and to enhance their digital application capacity by actively promoting a diverse range of measures. They include the “Project for Assisting Small and Micro Enterprises in Digital Transformation and Innovation Service in the Cloud Era,” the “Strategic Project of Facilitating Digital Transformation of the Micro, Small and Medium Enterprises,” the “Micro-enterprises Digital Application Coaching Program,” and the “Small and Medium Manufacturing Enterprise Digital Transformation Program.”

The government has also organized multiple programs in structural innovation, environmental protection, and technological research and development. They include the “SMEs’ Circular Economy Capacity Enhancement and Application Project,” the “Small Business Innovation Research Program” (SBIR), and the “Taiwan Industry Innovation Platform Program.” These programs are implemented to strengthen SMEs, enhance their R&D capabilities, and power the overall development of SMEs.

## **Chapter 6 Strengthening Start-ups and Incubation & Acceleration Mechanisms**

The government has established a complete ecosystem in support of creativity, innovation, and entrepreneurship in order to continue to create a high-quality entrepreneurial environment in Taiwan. The ecosystem helps startups obtain resources, develop high-tech applications, and strengthen their capacity for innovation competitiveness. It also revitalizes the local economy and connects with international incubation networks to help startups achieve steady growth.

Key programs include the establishment of the “Project for a Supportive Platform of Social Innovation Enterprises” to promote social innovation development; the execution of the “Startup Terrace Connection Project” and the establishment of the “Startup Terrace” to create a world-class entrepreneurship cluster; and the continuous promotion of the “Women’s Entrepreneurship Flying Geese Program” to support female entrepreneurs.

## **Chapter 7 Revitalizing Local Industries by In-depth Development, Marketing and Expansion**

The government is committed to promoting the Project for the Development of Village Industry and the “Township Revitalization Project for Small and Medium Enterprises” to promote industry transformation in townships, create new value, and attain “township revitalization”. The One Town One Product (OTOP) program in Taiwan creates regional brands to promote channel expansion, marketing, and promotion to increase marketing effectiveness and expand economic benefits.

The government has provided diverse assistance channels and subsidies to help SMEs expand the export market and strengthen international development. They include the “Project of Digital Innovation and International Marketing for SMEs,” the “Project of Value Co-creation of Escalating SMEs Cross-domain Ecosystem,” and several trade promotion projects.

## **Chapter 8 Other Government Measures to Support SMEs**

Funding provided by the government for assisting SMEs in 2020 included NT\$27.144 billion for related units to assist SMEs, NT\$988 million in special loans to SMEs, and government procurement of NT\$499.5 billion from SMEs.

Enhancement of the legal environment for SMEs focused on the establishment of the “Regulations for Business Financial Relief by the Ministry of Economic Affairs for Businesses with Operational Difficulties Due to COVID-19” and the revised “Standards for Identifying Small and Medium-sized Enterprises.”

The government actively organizes and participates in international SME events and activities to expand the international horizons of SMEs and bilateral exchanges. They include participation in Asia Pacific Economic Cooperation conferences and organizing the New Southbound Industrial Collaboration Summit.

The government offers many training courses to develop SME talents and enhance the competitiveness of SMEs. They include special courses on SME management, manufacturing, service sector, industry-academia cooperation, international business management talent training, corporate manpower upgrades, and independent learning for workers.

The government organizes SME selection and commendation activities to enhance the product marketing campaigns and corporate image of award-winning enterprises. They include the National Award of Outstanding Small and Medium Enterprises, Rising Star Award, Innovation Research Award, Business Startup Award, and Model of Entrepreneurs Award as awards for outstanding business models.



# Part One

## Trends in the Operations of SMEs

### Chapter 1 Major Trends in the Development of SMEs

### Chapter 2 Financial and Funding Analysis of SMEs

### Chapter 3 SMEs: Human Resources

*SMEs play a pivotal role in Taiwan's economic development and its economic and social stability. They are the backbone of Taiwan's economic development and their development remains important for the country.*

*This Part uses data and results of surveys published by government agencies to observe the current conditions and development of SMEs in Taiwan. The Ministry of Economic Affairs (MOEA) revised and promulgated the "Standards for Identifying Small and Medium-sized Enterprises" on June 24, 2020 in response to changes in industry trends and to enhance the competitiveness of SMEs. The SMEs in related business statistics in 2020 are defined in accordance with the Standards.*

*As of 2020, there were 1,548,835 small and medium enterprises in Taiwan which accounted for 98.93% of all enterprises. The number of people employed in small and medium enterprises amounted to 9.311 million people which accounted for 80.94% of the total number of people employed. The revenue of small and medium enterprises amounted to NT\$23,555,513 million, which accounted for more than 50% of the revenue of all businesses (53.99%). Revenue from domestic sales amounted to NT\$20,861,339 million, equivalent to 62.50% of total revenue. Exports totaled NT\$2,694,174 million, equivalent to 26.28% of total exports.*

# CHAPTER 1

## Major Trends in the Development of SMEs

The impact of the COVID-19 pandemic and global economic decline in 2020 have created hardships for businesses. In the first half of 2020, the outbreak of the epidemic in major countries and the lockdowns and other measures taken created difficulties for Taiwanese manufacturers in terms of purchase orders, preparation of materials, workforce shift scheduling (including reduced shifts and additional leave, work in shifts, and rescheduled leave), and production line configuration. Due to adequate epidemic prevention, Taiwan's export manufacturers received urgent and large purchase orders in the second half of the year. Domestic manufacturers offered incentives to win business opportunities with the support of policies such as the Triple Stimulus Voucher. As a result, Taiwan's overall economy recovered in each quarter during the second half of 2020, and the annual economic growth rate reached 3.12%, a remarkable performance in a harsh economy.

This chapter focuses on the business management indicators to analyze the development and changes in SMEs in Taiwan in 2020. The chapter is divided into 4 sections. Section I explains the overall business environment facing Taiwan's SMEs in 2020 in order to observe the potential changes in business operations due to the impact of the epidemic based on changes in the number of enterprises, revenue, domestic sales and exports, scale, industries, and sectors. We also observe the changes in and characteristics of businesses through structural changes such as the number of years in existence, the type of business organization, and the establishment of new SMEs. Section II focuses on the gender of business leaders to identify the characteristics of business leaders of both genders and compare the differences as well as similarities. Section III provides an overview of the business operations of SMEs with the "Report of the Survey Analysis of Wholesale, Retail and Food Services in 2020" compiled by the Department of Statistics, Ministry of Economic Affairs. Section IV provides an overall description of the R&D investments of SMEs based on the "Indicators of Science and Technology 2020" published by the Ministry of Science and Technology, Executive Yuan.

The Ministry of Economic Affairs (MOEA) promulgated the revised "Standards for Identifying Small and Medium-sized Enterprises" on June 24, 2020 to account for the vanishing boundaries between industries and simplified standards, effectively reduce business risks and costs, and incorporate high-productivity companies to power industrial innovation and transformation. Businesses in all industries with paid-in capital of no more than NT\$100 million or that have fewer than 200 regular employees are regarded as SMEs.

SMEs are defined based on different criteria in accordance with the original provisions (hereinafter referred to as the Old Standards). They include businesses in the manufacturing,

construction, and mining and quarrying sectors with paid-in capital of no more than NT\$80 million or that have fewer than 200 regular employees, and businesses with a revenue of less than NT\$100 million or that had fewer than 100 regular employees in the previous year.

The definitions of the scale of enterprises used for the number of enterprises and revenue published in this chapter are based on capital and revenue, and cannot be reconciled with the relevant data for categorizing enterprises based on the number of their employees. The number of employed and the number of employees are based on the number of people hired by the enterprise. In addition, due to changes in the “Standards for Identifying Small and Medium-sized Enterprises,” if it is necessary to compare the number of enterprises, revenue, number of employed, and number of employees, the data up to and including 2019 shall be defined based on the Old Standards. The 2020 data include data based on both the New Standards and Old Standards for ease of comparison.

## I General Business Performance of SMEs

We have compiled Taiwan’s public sector statistics in 2020 and observed the indicators of business operations, including the number of companies, sales, domestic sales, exports, and the number of people employed and number of employees. The description and analysis of related information are provided below:

### 1. Number and Structure of SMEs and the Current Conditions and Changes in Employment

#### (1) 1,548,835 SMEs in 2020

As of 2020, the total number of businesses in Taiwan was 1,565,637, which was a 2.51% increase from 2019. They included 1,548,835 SMEs defined based on New Standards (98.93%) and 16,802 large enterprises (1.07%). Based on definitions using the Old Standards, there were 1,529,215 SMEs (97.67% with a 2.53% annual growth rate) and 36,422 large enterprises (2.33% with a 1.59% annual growth rate). The difference in the number of SMEs according to the New and Old Standards is 19,620 companies and the difference in the ratio is 1.26% (Table 1-1-1).

#### (2) SMEs Provided 9.311 Million Employment Opportunities in 2020

In 2020, the total number of employed in Taiwan totaled 11.504 million. Based on definitions for the New System, 9.311 million people (80.94%) were employed by SME enterprises and 6.986 million (76.12%) were employees. Based on definitions in the Old System, 9.039 million people (78.58 with an annual growth rate of -0.17%) were employed by SME enterprises and 6.716 million (73.18% with an annual growth rate of 0.21%) were employees (Table 1-1-1).

#### (3) About 80 Percent of SMEs Were in the Service Sector

In terms of the industries, the operations of SMEs in Taiwan consisted mostly of the service sector. The number of SMEs in the service sector according to the New Standards totaled 1,242,710 and accounted for 80.24%. The number of SMEs in the industrial sector totaled 294,346

and accounted for 19.00%. The SMEs defined based on the New and Old Standards are similar in terms of the composition of industries (Table 1-1-2).

**Table 1-1-1 Number of Enterprises, Annual Sales, Employed Persons and Paid Employees in Taiwan by Enterprise Size, 2019-2020** Unit: Enterprises; million NTS; thousand persons; %

Indicator	Enterprise size		SMEs			Large enterprises		
	Year		2019	2020		2019	2020	
	2019	2020		New Standards	Old Standards		New Standards	Old Standards
<b>No. of enterprises</b>	1,527,272	1,565,637	1,491,420	1,548,835	1,529,215	35,852	16,802	36,422
Share of total	100.00	100.00	97.65	98.93	97.67	2.35	1.07	2.33
Annual growth rate	1.71	2.51	1.72	-	2.53	1.18	-	1.59
<b>Total sales</b>	42,979,088	43,629,308	12,712,963	23,555,513	12,921,605	30,266,125	20,073,796	30,707,704
Share of total	100.00	100.00	29.58	53.99	29.62	70.42	46.01	70.38
Annual growth rate	0.74	1.51	0.70	-	1.64	0.76	-	1.46
<b>Domestic sales</b>	32,443,572	33,376,329	11,299,248	20,861,339	11,524,070	21,144,324	12,514,990	21,852,259
Share of total	100.00	100.00	34.83	62.50	34.53	65.17	37.50	65.47
Annual growth rate	1.25	2.88	1.14	-	1.99	1.30	-	3.35
<b>Export sales</b>	10,535,516	10,252,980	1,413,715	2,694,174	1,397,535	9,121,801	7,558,806	8,855,445
Share of total	100.00	100.00	13.42	26.28	13.63	86.58	73.72	86.37
Annual growth rate	-0.79	-2.68	-2.70	-	-1.14	-0.49	-	-2.92
<b>No. of employed persons</b>	11,500	11,504	9,054	9,311	9,039	1,429	1,168	1,440
Share of total	100.00	100.00	78.73	80.94	78.58	12.42	10.16	12.52
Annual growth rate	0.58	0.03	0.99	-	-0.17	-1.48	-	0.77
<b>No. of paid employees</b>	9,147	9,178	6,702	6,986	6,716	1,427	1,167	1,437
Share of total	100.00	100.00	73.27	76.12	73.18	15.60	12.72	15.66
Annual growth rate	0.71	0.34	1.30	-	0.21	-1.44	-	0.70

Notes:

1. The data prior to 2019 in the table are defined based on the Old Standards. The data defined based on the New Standards in 2020 differ in scope and should not be used to calculate the annual growth rate. They are specified using “-.”
2. The number of SMEs and revenue in the table (including domestic sales and exports) are based on the New Standards in the “Standards for Identifying Small and Medium-sized Enterprises” (hereinafter referred to as the New Standards) promulgated the revised by the MOEA on June 24, 2020. As for businesses in all industries with paid-in capital of no more than NTS100 million, the Old Standards were based on Article 2 of the “Standards for Identifying Small and Medium-sized Enterprises” revised and promulgated by the Ministry of Economic Affairs on March 30, 2015. They included businesses in the manufacturing, construction, and mining and quarrying sectors with paid-in capital of no more than NTS80 million, as well as businesses with revenue of less than NTS100 million in the previous year.
3. The number of SMEs and revenue already includes data obtained from small stores. The export value in terms of revenue is the export value reported by the company in the sales tax filing, and the result of the import and export customs clearance data from the Ministry of Finance. It may vary due to changes in the exchange rate, the scope of data, and calculation methods.
4. The SMEs in terms of the number of employed and number of employees in the table are based on the New Standards established in accordance with Article 2 of the “Standards for Identifying Small and Medium-sized Enterprises” revised and promulgated by the MOEA on June 24, 2020. They include businesses in all industries that hire fewer than 200 regular employees; The Old Standards were based on Article 2 of the “Standards for Identifying Small and Medium-sized Enterprises” revised and promulgated by the Ministry of Economic Affairs on March 30, 2015. They included businesses in the manufacturing, construction, and mining and quarrying sectors that had fewer than 200 regular employees, and businesses in other industries that had fewer than 100 regular employees.
5. The number and percentage of people employed and the number of employees of “all enterprises” in the table include SMEs and large enterprises as well as 1,024 thousand people employed by the government (public sector) and the percentage (8.91% of the number of people employed by the government and 11.16% of the total number of people employed).
6. The number of people employed and the number of employees also include people whose household registration is in Taiwan and who work (are employed) in Taiwan, and are assigned to Mainland China (including Hong Kong and Macau) or a foreign country to work.

Source: 1. Fiscal Information Agency, Ministry of Finance, Value-Added Business Tax (VAT) data, 2019-2020.

2. Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2019-2020.

**Table 1-1-2 Shares of SMEs in Taiwan by Sector, 2016-2020**

Unit: Enterprises; million NT\$; %

Sector	Year	2016	2017	2018	2019	2020	
						New Standards	Old Standards
<b>All SMEs</b>		1,408,313	1,437,616	1,466,209	1,491,420	1,548,835	1,529,215
Agricultural sector		0.81	0.83	0.77	0.76	0.76	0.77
Industrial sector		19.40	19.32	19.25	19.23	19.00	19.13
Service sector		79.79	79.85	79.98	80.01	80.24	80.10
<b>Total sales</b>		11,764,677	12,139,513	12,624,472	12,712,963	23,555,513	12,921,605
Agricultural sector		0.21	0.23	0.23	0.24	0.19	0.23
Industrial sector		47.41	47.69	48.22	47.35	31.00	47.36
Service sector		52.38	52.09	51.55	52.42	68.81	52.41
<b>Domestic sales</b>		10,340,886	10,717,138	11,171,567	11,299,248	20,861,339	11,524,070
Agricultural sector		0.20	0.22	0.23	0.23	0.19	0.23
Industrial sector		44.35	44.73	45.35	44.54	29.67	44.45
Service sector		55.45	55.05	54.42	55.23	70.14	55.32
<b>Export sales</b>		1,423,791	1,422,375	1,452,905	1,413,715	2,694,174	1,397,535
Agricultural sector		0.23	0.27	0.20	0.25	0.19	0.24
Industrial sector		69.66	69.96	70.34	69.81	41.30	71.32
Service sector		30.11	29.78	29.45	29.95	58.51	28.44

## Notes:

1. The data prior to and including 2019 in the table are defined based on the Old Standards.
2. Sector: (1) The agricultural sector refers to farming, forestry, fishing, and animal husbandry. (2) The industrial sector includes mining and quarrying, manufacturing, electricity and gas supply, water supply and remediation activities, and construction. (3) The service sector includes wholesale and retail trade, transportation and storage, accommodation and food service activities, 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, the arts, entertainment and recreation, and other service activities.
3. The export value in terms of revenue is the export value reported by the company in the sales tax filing, and the result of the import and export customs clearance data from the Ministry of Finance. It may vary due to changes in the exchange rate, the scope of data, and calculation methods.

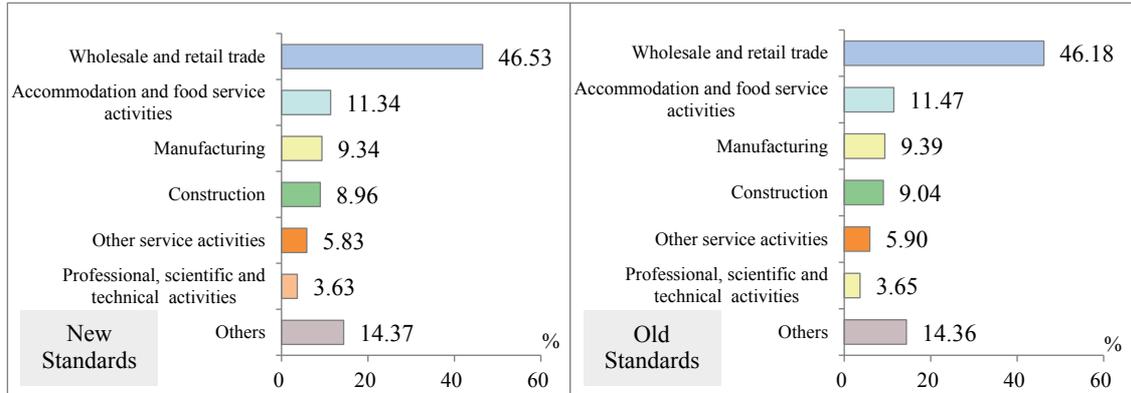
Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2016-2020.

In terms of the revenue, domestic sales, and exports, there is a significance difference in the composition of industries between SMEs defined based on the New and Old Standards. In terms of sales based on the definitions of the New Standards, the revenue of SMEs in 2020 totaled \$23,555,513 million. The industrial sector accounted for 31.00% and the service sector accounted for 68.81%. Based on definitions in terms of the Old Standards, the industrial sector's share would increase to 47.36% and the service sector's share would decrease to 52.41% (Table 1-1-2).

#### (4) About 47 Percent of SMEs Were in Wholesale and Retail Trade

Based on the New Standards, SMEs in the wholesale and retail sector accounted for the largest share of all SMEs in 2020. The industry had 720,674 SMEs which accounted for 46.53% of the total number of SMEs. They were followed by accommodation and food service activities with 175,580 SMEs which accounted for 11.34%. The third largest industry was manufacturing with 144,647 SMEs which accounted for 9.34%. They were followed by construction (8.96%), other service activities (maintenance, laundry, hair and beauty, funeral, and household services, which accounted for 5.83%), and professional, scientific, and technical services (3.63%) (Figure 1-1-1).

**Figure 1-1-1 Distribution of SMEs by Industry, 2020**



Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

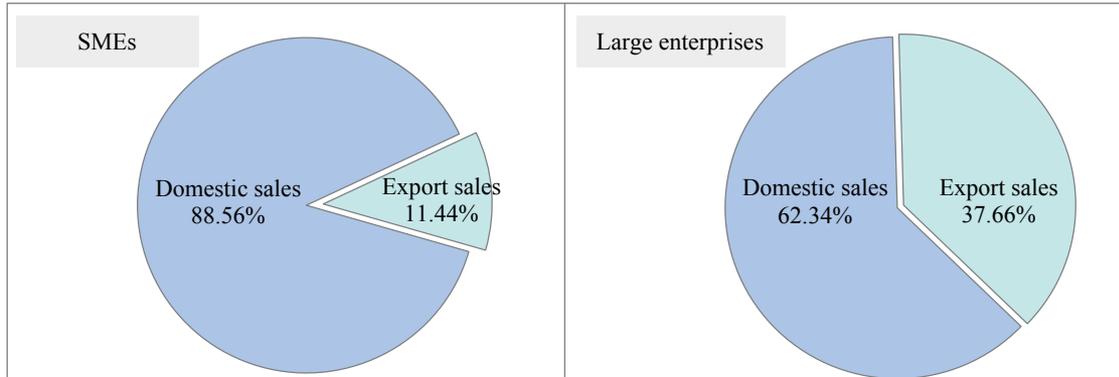
There is no significant difference between the composition of industries for SMEs based on the different definitions provided by the Old and New Standards. In terms of the ranking or relative percentage of the industries in 2020 and 2019, there were no significant changes in the top 6 industries based on the largest number of SMEs and the relative percentages (Figure 1-1-1).

## 2. Current Sales Status and Changes in SMEs

### (1) Nearly 90% of the Revenue of SMEs in 2020 Came from Domestic Sales

The total revenue of all enterprises in 2020 amounted to NT\$43,629,308 million. The revenue of small and medium-sized enterprises defined by the New Standards totaled NT\$23,555,513 million, which accounted for more than half (53.99%) of the revenue of all enterprises. Revenue from domestic sales amounted to NT\$20,861,339 million, which accounted for nearly nine tenths (88.56%) of the revenue of SMEs. The revenue of large enterprises totaled NT\$2,073,796 million. Domestic sales totaled NT\$1,251,490 million, which accounted for 62.34% of the revenue of large enterprises. The proportion of revenue shows that SMEs are relatively dependent on the domestic market (Figure 1-1-2 and Table 1-1-1).

Based on the domestic sales by industry, the top 3 industries in terms of the value of domestic sales for SMEs in 2020 were wholesale and retail trade, manufacturing, and construction. Domestic sales amounted to NT\$9,482,388 million (45.45% of total domestic sales), NT\$3,464,204 million (16.61%) and NT\$1,862,866 million (8.93%), respectively.

**Figure 1-1-2 Shares of Domestic and Export Sales in Total Sales by Enterprise Size, 2020**

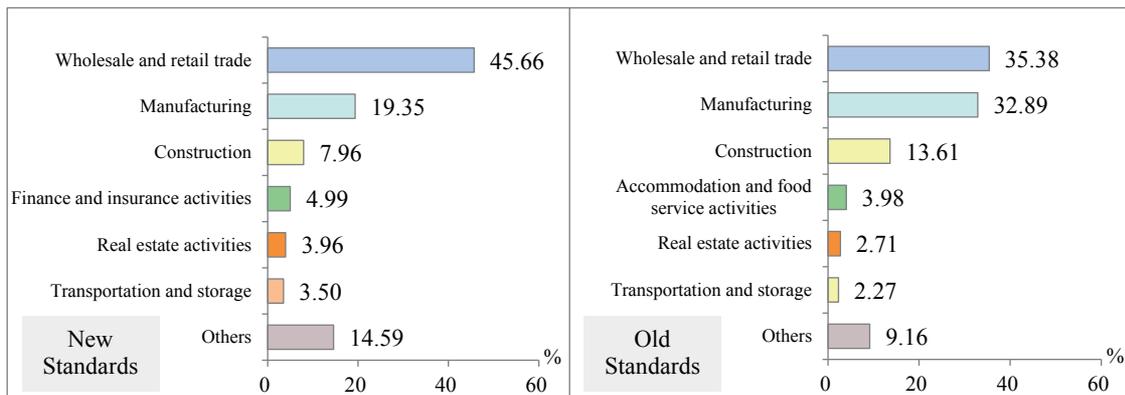
Notes:

1. The data in the figure are defined based on the New Standards.
2. Based on definitions in the Old Standards, the domestic sales and exports of SMEs accounted for 89.18% and 10.82%, respectively. The domestic sales and exports of large enterprises accounted for 71.16% and 28.84%, respectively.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

## (2) Wholesale and Retail Trade and Manufacturing Had the Highest Revenue

In terms of overall industry sales, the top 3 industries by sales volume for SMEs in 2020 based on the New Standards were wholesale and retail trade, manufacturing, and construction. Their revenue amounted to NT\$1,075,870 million (45.66%), NT\$45,557,867 million (19.35%), and NT\$1,874,204 million (7.96%), respectively. The revenue of all 3 industries exceeded NT\$1 trillion and the total revenue reached 72.97% (Figure 1-1-3).

**Figure 1-1-3 Distribution of Sales in SMEs by Industry, 2020**

Notes: Financial and insurance activities refer to industries that provide financial intermediation and its auxiliary activities. They include financial intermediaries such as depository institutions, financial holding companies, trusts, funds and other financial instruments, as well as other financial intermediaries such as financial leasing, bills, securities, credit card and non-depository financing companies, pawnshops, life and non-life insurance companies, pension funds, insurance and pension fund auxiliary industries, securities and futures companies, other financial industries, and financial auxiliary industries such as investment advisory services, trust services, and fund management services.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

Since a significant part of the wholesale and retail trade industry consists of sales channels, the structure and business model of the industry includes SMEs or micro enterprises. When the criteria for SMEs in the Standards for Identifying Small and Medium-sized Enterprises were changed from

a revenue-based model to a capital-based model, larger companies with high revenue could be classified as SMEs because their capital investment did not reach NT\$100 million. 14,438 companies were thus added to the wholesale and retail trade industry, accounting for 73.59% of the total number of companies added based on the New Standards. As a result, there was a significant increase in the percentage of sales of SMEs in the wholesale and retail trade industry (Table 1-1-3).

**Table 1-1-3 Number of New SMEs and Annual Sales by Industry, 2020**

Unit: Enterprises; million NT\$, %

Industry	Item	New Standards		Old Standards		Number of new SMEs	Increase in total sales
		Total sales	Share	Total sales	Share		
Total		23,555,513	100.00	12,921,605	100.00	19,620	10,633,908
Agriculture, forestry, fishing and animal husbandry		45,217	0.19	30,087	0.23	2	15,130
Mining and quarrying		33,957	0.14	33,478	0.26	5	479
Manufacturing		4,557,867	19.35	4,250,423	32.89	1,071	307,444
Electricity and gas supply		681,745	2.89	12,875	0.10	29	668,870
Water supply and remediation activities		154,464	0.66	64,211	0.50	235	90,253
Construction		1,874,204	7.96	1,758,215	13.61	505	115,989
Wholesale and retail trade		10,755,870	45.66	4,571,674	35.38	14,438	6,184,196
Transportation and storage		824,114	3.50	293,740	2.27	919	530,374
Accommodation and food service activities		597,578	2.54	513,984	3.98	128	83,594
Information and communication		694,864	2.95	148,267	1.15	335	546,597
Finance and insurance activities		1,174,889	4.99	225,535	1.75	938	949,354
Real estate activities		932,865	3.96	350,227	2.71	80	582,638
Professional, scientific and technical activities		541,748	2.30	263,636	2.04	363	278,112
Support service activities		309,009	1.31	164,965	1.28	402	144,044
Education		21,001	0.09	18,338	0.14	0	2,663
Human health and social work activities		30,883	0.13	8,781	0.07	-6	22,102
Arts, entertainment and recreation		100,994	0.43	75,560	0.58	48	25,434
Other service activities		224,244	0.95	137,608	1.06	128	86,636

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

By contrast, the manufacturing and construction industries require relatively higher capital investment (similar to certain capital-intensive businesses). Due to changes in the standards, large enterprises reclassified as SMEs consisted of enterprises with a capital of between NT\$80 million and NT\$100 million including 1,071 manufacturing enterprises and 505 construction enterprises. The increase in the percentage of SMEs in the two industries was not as significant as the increase in wholesale and retail trade. The increase in revenue was also not as obvious as the increase in the revenue of wholesale and retail trade (Table 1-1-3).

The percentage of revenue of SMEs in financial and insurance activities (industries engaged in financial intermediation and auxiliary activities) was 1.75% based on definitions in the Old Standards. It rose to 4.99% based on the New Standards which was an increase of 3.24%. Its ranking rose from 8th to 4th. 938 SMEs were added to the industry due to the change in the Standards. The relative proportion of revenue increased and its ranking improved as a result of the

expansion of the industry in the economic cycle and improved sales performance (Figure 1-1-3 and Table 1-1-3).

According to the Old Standards, the revenue of SMEs under the Old Standards was NT\$513.984 billion, which increased to NT\$597.578 billion under the New Standards. 128 SMEs were added based on the New Standards, and the revenue increased by NT\$83.594 billion. Although the number of SMEs and revenue both increased based on the New Standards, the percentage of revenue was not as high as in other industries in the calculation (Figure 1-1-3 and Table 1-1-3).

### **(3) The Export Contribution of SMEs Compared to Large Enterprises Increased in 2020**

According to the definitions in the New Standards, the export value of SMEs in 2020 was NT\$2,694.174 billion. The export propensity (the export value of SMEs as a percentage of their revenue) was 11.44% and the export contribution (the ratio of the export value of SMEs to the exports of all enterprises) was 26.28%. According to the definitions in the Old Standards, the export propensity of SMEs in 2020 was 10.82% and their contribution to total exports was 13.63%. According to the definitions in the New Standards, the export propensity of SMEs and their contributions to exports increased by 0.62% and 12.65% when compared with definitions in the Old Standards (Table 1-1-1 and Table 1-1-4).

To observe the dynamic changes in the export contribution of SMEs and large enterprises (a comparison of growth performance over time), we compared the scale of enterprises in 2020 based on the definitions in the Old Standards with the scale of exports in 2019. Although the export value of SMEs fell in 2020 with an annual growth rate of -1.14%, the export contribution increased slightly from 13.42% in 2019 to 13.63%, which was a 0.21% increase. The annual growth rate of large enterprise exports in 2020 was -2.92%. As the decline was more significant, the contribution from large enterprises decreased by 0.21% compared to the previous year (Table 1-1-4).

Exports of SMEs declined in 2020, but their export contribution increased mainly because exports of large enterprises declined more than those of SMEs, resulting in a relative increase in the contributions of SMEs. Regardless of whether SMEs or large enterprises were involved, it is remarkable that Taiwan's overall exports only declined by 2.68% in 2020 when the annual growth rate of global exports fell by 7.49%. In addition, starting from the second half of 2020, production and sales have gradually recovered due to the adequate control of the epidemic in Taiwan. With the competitive advantages of international products, both SMEs and large enterprises caught up with the export shortages caused by the epidemic in the first half of the year, and powered the growth in Taiwan's economy.

If the definitions in the Old Standards were to be adopted to analyze the changes in the export value of SMEs over the years, a decline would be observed in each year except for 2018 during which there was positive growth. In view of the international division of professional labor and the volatility in the rise and fall of industry cycles, the impact of global economic fluctuations on SMEs has become increasingly prominent. In the wake of the financial crisis, the global economy continues to be plagued by the European debt crisis, the US-China trade disputes, and the COVID-19 pandemic. The result has been the creation of domestic industrial clusters. In addition to the industrial clustering and division of labor, SMEs have responded to the global industrial

changes by establishing close connections with large enterprises or becoming satellites or links in the supply chain of large enterprises. As a result, the total sales of domestic SMEs continue to grow, and domestic sales continue to rise despite a decrease in international export sales.

**Table 1-1-4 Number and Sales Performance of SMEs, 2016-2020**

Unit: Enterprises; million NT\$; %

Indicator	Year	2016	2017	2018	2019	2020	
						New Standards	Old Standards
<b>No. of SMEs</b>		1,408,313	1,437,616	1,466,209	1,491,420	1,548,835	1,529,215
Ratio		97.73	97.70	97.64	97.65	98.93	97.67
Annual growth rate		1.76	2.08	1.99	1.72	-	2.53
<b>SME total sales</b>		11,764,677	12,139,513	12,624,472	12,712,963	23,555,513	12,921,605
Ratio		30.71	30.22	29.59	29.58	53.99	29.62
Annual growth rate		-0.33	3.19	3.99	0.70	-	1.64
<b>SME domestic sales</b>		10,340,886	10,717,138	11,171,567	11,299,248	20,861,339	11,524,070
Ratio		35.85	35.52	34.86	34.83	62.50	34.53
Annual growth rate		0.15	3.64	4.24	1.14	-	1.99
<b>SME export sales</b>		1,423,791	1,422,375	1,452,905	1,413,715	2,694,174	1,397,535
Ratio (Export contribution)		15.04	14.23	13.68	13.42	26.28	13.63
Export propensity		12.11	11.72	11.51	11.12	11.44	10.82
Annual growth rate		-3.66	-0.10	2.15	-2.70	-	-1.14

Notes:

1. The data prior to 2019 in the table are defined based on the Old Standards.
2. “-”: not applicable.
3. The ratio in the table is the percentage of SMEs among all enterprises.
4. The annual growth rate is the rate of increase from the previous year.
5. The export value in revenue is the export value reported by the company in the sales tax filing, and the result of the import and export customs clearance data from the Ministry of Finance. It may vary due to changes in the exchange rate, scope of data, and calculation methods.
6. According to the growth rate of Taiwan’s exports released by the Customs Administration, Ministry of Finance, the total value of Taiwan’s exports amounted to US\$345.21 billion in 2020 with an annual growth rate of 4.88%. If the value is calculated in NTD, the export value totaled approximately NT\$10,201.2 billion with an annual growth rate of 0.19%. The export amount is the export value (denominated in NTD) included in the revenue reported by enterprises when they file sales tax returns. The definition and scope of calculation are different from the basis of the export amount of goods cleared by customs.
7. Export contribution = (export sales value of SMEs/export sales value of all enterprises) × 100%.
8. Export propensity = (export sales value of SMEs/total sales value of SMEs) × 100%.

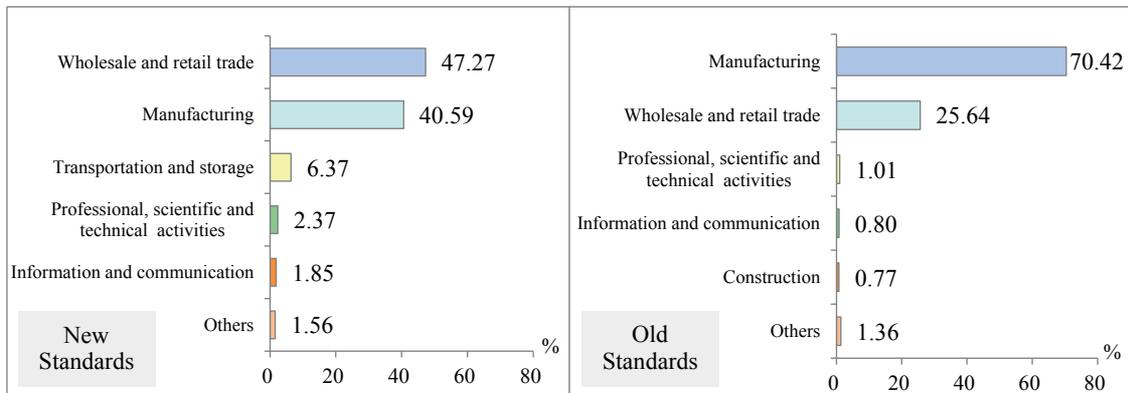
Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2016-2020.

#### **(4) The Export Value of SMEs in 2020 Was Led by Wholesale and Retail Trade, Followed by Manufacturing**

To understand the competitive performance of SMEs in global industries and the cyclical changes in each industry, we must first observe the scale of exports and the composition of large industries. According to the definitions in the New Standards, the top 3 export sectors for SMEs in 2020 in descending order were wholesale and retail trade, manufacturing, and transportation and storage. Their export values amounted to NT\$1,273,481 million (47.27%), NT\$193,664 million (40.59%), and NT\$171,518 million (6.37%), respectively. If the definitions in the Old Standards were to be adopted, the manufacturing, wholesale and retail trade, and information and communication sectors would account for 70.42%, 25.64%, and 1.01%, respectively (Figure

1-1-4).

**Figure 1-1-4 Distribution of Export Sales in SMEs by Industry, 2020**



Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

Under both the New and Old Standards, the export value of SMEs is dominated by wholesale and retail trade and manufacturing. However, the ranking is different and there are obvious changes in the composition. Compared with the definitions in the Old Standards, the proportion of exports of SMEs in wholesale and retail trade defined in accordance with the New Standards has increased significantly. The percentage of exports of SMEs based on the Old Standards was 25.64%, but it rose to 47.27% based on the New Standards. By comparison, the percentage of manufacturing based on the Old Standards was 70.42%, and it fell to 40.59% under the New Standards. The gap is 29.83% (Figure 1-1-4).

Although the percentage of exports of SMEs in the wholesale and retail trade sector has changed significantly due to the changes in Standards, the overall export performance of all enterprises in all sectors shows that the manufacturing sector held the largest share of exports from Taiwan. The overall export volume of the manufacturing sector reached NT\$7,150,955 million, which was approximately 2.90 times that of the wholesale and retail trade sector (NT\$2,469,775 million). The two industries accounted for 69.75% and 24.09% of the total exports of enterprises (Appendix C Table C-3). In conclusion, the manufacturing sector remains the largest export sector in Taiwan. However, large enterprises remain the main exporters of the manufacturing sector and SMEs mostly serve as satellite factories of large enterprises or a part of their supply chains. In addition, the scale of exports SMEs in the manufacturing sector based on the New Standards is smaller than that of the wholesale and retail trade sector.

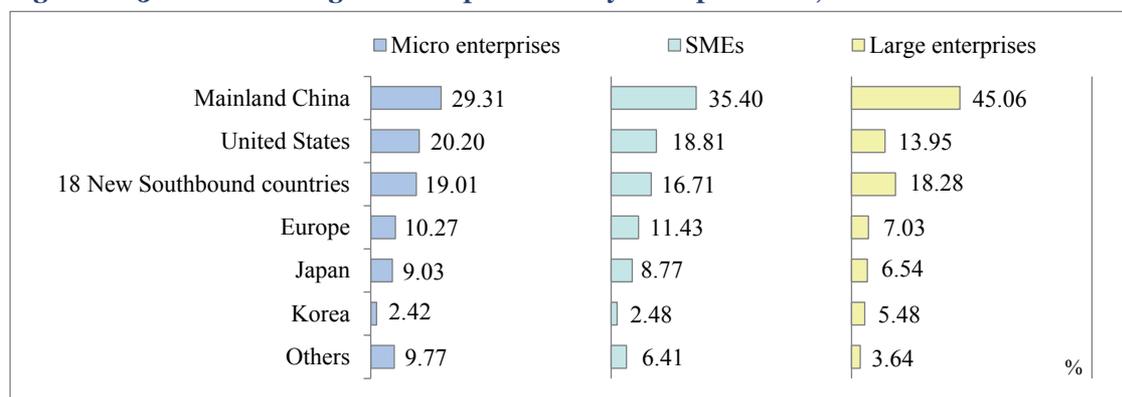
Upon closer observation, the export performance of SMEs in the industry manufacturing sector showed that SMEs in the manufacturing sector defined based on the New Standards achieved an export value of NT\$193.664 billion in 2020. The top 3 industries in terms of the value of exports in descending order were the manufacture of electronic parts and components (28.86%), the manufacture of machinery and equipment (12.96%), and the manufacture of fabricated metal products (12.08%). All 3 industries accounted for more than 10% of the shares. The total share of the top 3 industries was 53.90% and the concentration of export products remained high (Appendix C Table C-9). The top 6 industries for SME manufacturing were the same based on both the Old

and New Standards despite the changes in composition.

### (5) Mainland China Ranked First in the Percentage of SME Export Value by Region in 2020, Followed by the US and 18 New Southbound Countries

According to the definitions in the New Standards, regardless of the size of enterprises, the top 3 export regions in 2020 were Mainland China, the United States and the 18 New Southbound countries, which accounted for 70% to 80% of the total export value of each category. However, the second and third places for large enterprises were different. Large enterprises had a higher dependence on the Mainland China (including Hong Kong and Macau) market (45.06%) while micro enterprises and SMEs had a relatively lower dependence (29.31% and 35.40%, respectively) (Figure 1-1-5).

**Figure 1-1-5 Shares of Regions in Export Sales by Enterprise Size, 2020**



Notes:

1. The data in the figure are defined based on the New Standards.

2. Micro enterprises are those with fewer than 5 employees.

3. Regional categories: (1) Mainland China includes Hong Kong and Macau; (2) 18 New Southbound countries include the Philippines, Indonesia, Malaysia, Singapore, Vietnam, Cambodia, Laos, Myanmar, Brunei, India, Pakistan, Bangladesh, Nepal, Sri Lanka, Bhutan, New Zealand and Australia; (3) Others include nations other than the USA, Japan, Korea, China, the New Southbound 18 nations and Europe.

Source: Bureau of Foreign Trade, Ministry of Economic Affairs, Customs Data, 2021.

## 3. Current Status of Newly-established SMEs

### (1) About 100 Thousand Newly-established Enterprises in 2020 Were SMEs; Most Sales Came from the Domestic Market

There were 108,530 newly-established enterprises in 2020 (those that had been established for less than 1 year). According to the definitions in the New Standards, there were 108,301 SMEs which accounted for 99.79%, an increase of 7,804 enterprises (or 7.77%) over 2019. In terms of the sales model, the proportion of the domestic sales of newly-established enterprises reached 91.02%, and the proportion of the domestic sales of newly-established SMEs also reached 90.78%, indicating that most of the newly-established enterprises target the domestic market as their main market when they start their businesses (Table 1-1-5).

**Table 1-1-5 Number and Sales Performance of Newly-established Enterprises, 2020**

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	108,530	108,301	99.79	-	229	0.21	-
Total sales	226,299	217,012	95.90	100.00	9,287	4.10	100.00
Domestic sales	205,987	197,011	95.64	90.78	8,976	4.36	96.65
Export sales	20,312	20,002	98.47	9.22	311	1.53	3.35

Notes:

1. The data in the figure are defined based on the New Standards.
2. "-": not applicable.
3. Due to the rounding of numbers, there may be small discrepancies between the total revenue and total domestic sales and exports.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

## (2) The Service Sector Accounted for the Largest Number of Newly-established SMEs

Most of the newly-established SMEs in 2020 were in the service sector. They included 92,165 enterprises, which accounted for 85.10% of the total. In terms of the proportion of the three levels of industries, the sales, domestic sales, and exports of the service industries accounted for 74.68%, 78.36%, and 38.46%, respectively, of the newly-established SMEs. The percentages in terms of the industrial sales, domestic sales, and exports of newly-established SMEs were 25.13%, 21.44%, and 61.48%, respectively. The share of agriculture was below 1%. This shows that most of the newly-established SMEs in terms of their number and sales were in the service sector and most of the export sales of newly-established SMEs were in the industrial sector (Table 1-1-6).

**Table 1-1-6 Number and Sales Performance of Newly-established SMEs by Sector, 2020**

Unit: Enterprises; million NT\$; %

Sector	Indicator	No. of enterprises	Share of total	Total sales		Domestic sales		Export sales	
				Total sales	Share of total	Domestic sales	Share of total	Export sales	Share of total
<b>All sectors</b>		108,301	100.00	217,012	100.00	197,011	100.00	20,002	100.00
Agricultural sector		729	0.67	409	0.19	397	0.20	12	0.06
Industrial sector		15,407	14.23	54,535	25.13	42,238	21.44	12,297	61.48
Service sector		92,165	85.10	162,068	74.68	154,375	78.36	7,693	38.46

Notes:

1. The data in the table are defined based on the New Standards.
2. Due to the rounding of numbers, there may be small discrepancies between the total revenue and total domestic sales and exports.

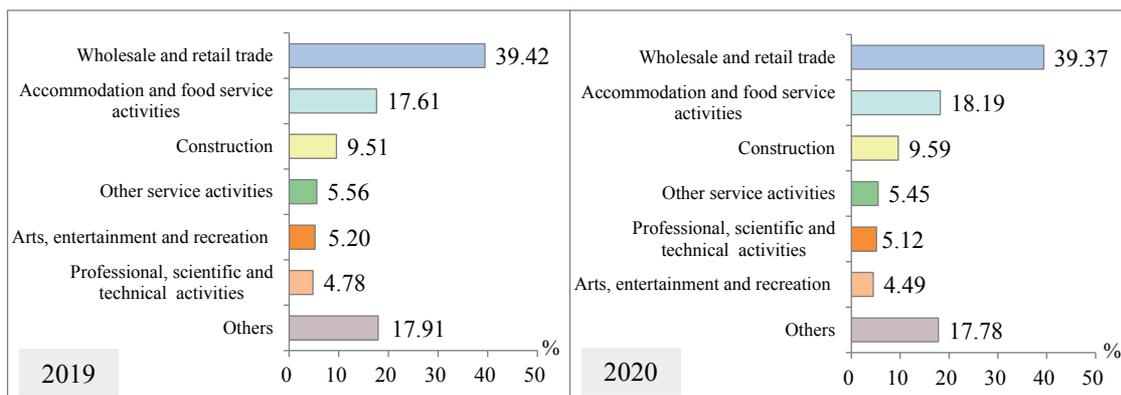
Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

## (3) The Top 6 industries Based on the Number of Newly-established SMEs Were in the Service Sector and Industries with Higher Revenue Included Industries and Services

In terms of the sector distribution patterns, the top 6 industries based on the number of newly-established SMEs in 2020 defined in accordance with the New Standards were wholesale and retail trade (42,640 SMEs or 39.37%), accommodation and food service activities (19,704 SMEs or 18.19%), construction (10,390 SMEs or 9.59%), other services (5,902 SMEs or 5.45%), professional, scientific, and technical activities (5,548 SMEs or 5.12%), and arts, entertainment,

and recreation (4,860 SMEs or 4.49%). All industries were service sector industries except for construction. By comparison, large enterprises consisted mostly of capital-intensive industries such as financial and insurance activities, real estate activities, and manufacturing (Figure 1-1-6 and Table 1-1-7).

**Figure 1-1-6 Distribution of Number of Newly-established SMEs by Industry, 2019-2020**



Notes:

1. The 2019 data in the figure are defined based on the Old Standards.

2. The 2020 data are defined based on the New Standards.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2019-2020.

**Table 1-1-7 Number of Newly-established Enterprises, Annual Sales, and Shares by Industry and Enterprise Size, 2020**

Unit: Enterprises; million NT\$; %

Indicator Enterprise Size	Number of enterprises				Annual sales			
	All enterprises	SMEs	Share	Large enterprises	All enterprises	SMEs	Share	Large enterprises
Total	108,530	108,301	100.00	229	226,299	217,012	100.00	9,287
Agriculture, forestry, fishing and animal husbandry	730	729	0.67	*	409	409	0.19	*
Mining and quarrying	48	48	0.04	0	229	229	0.11	0
Manufacturing	4,247	4,206	3.88	41	27,224	24,120	11.11	3,104
Electricity and gas supply	324	318	0.29	6	374	374	0.17	0
Water supply and remediation activities	448	445	0.41	*	784	756	0.35	*
Construction	10,401	10,390	9.59	11	33,925	29,056	13.39	4,869
Wholesale and retail trade	42,666	42,640	39.37	26	95,697	95,010	43.78	687
Transportation and storage	2,049	2,045	1.89	*	5,544	5,363	2.47	*
Accommodation and food service activities	19,711	19,704	18.19	7	22,170	22,150	10.21	20
Information and communication	2,832	2,829	2.61	*	5,890	5,889	2.71	*
Finance and insurance activities	1,241	1,188	1.10	53	2,095	1,898	0.87	197
Real estate activities	4,127	4,077	3.76	50	11,390	11,286	5.20	104
Professional, scientific and technical activities	5,563	5,548	5.12	15	8,603	8,557	3.94	45
Support service activities	2,371	2,366	2.18	*	4,039	3,989	1.84	*
Education	785	784	0.72	*	850	850	0.39	*

Industry	Indicator Enterprise Size	Number of enterprises				Annual sales			
		All enterprises	SMEs	Share	Large enterprises	All enterprises	SMEs	Share	Large enterprises
Human health and social work activities	223	222	0.20	*	310	310	0.14	*	
Arts, entertainment and recreation	4,861	4,860	4.49	*	3,854	3,854	1.78	*	
Other service activities	5,903	5,902	5.45	*	2,913	2,910	1.34	*	

Notes:

1. The data in the table are defined based on the New Standards.
2. Where the number of SMEs was 5 or under, the number would be indicated by “\*” to keep the information on individual SMEs confidential.
3. Refer to Appendix C Table C-7 for the domestic sales and export amounts.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

The composition and share of newly-established SMEs by industries in 2020 was similar to that for 2019, and the top 4 were the same. The number of SMEs that provided professional, scientific, and technical activities increased by 743 (or 15.46%), and the number of such SMEs rose from 6th to 5th in the rankings. The number of SMEs that specialized in arts, entertainment, and recreation fell by 367 companies (or -7.02%) from 5th to 6th (Figure 1-1-6).

As for revenue, the top 5 industries in terms of newly-established SMEs in 2020 were wholesale and retail trade (NT\$95.010 billion or 43.78%), construction (NT\$29.056 billion, or 13.39%), manufacturing (NT\$24.120 billion, or 11.11%), accommodation and food service activities (NT\$22.150 billion, or 10.21%), and real estate activities (NT\$11.286 billion, or 5.20%). They included the industrial sector (manufacturing and construction) and service sector (wholesale and retail trade, accommodation and food service activities, and real estate activities (Table 1-1-7). Compared to 2019, the wholesale and retail trade SMEs still ranked first among newly-established SMEs in 2020. The industries that ranked 2nd to 4th remained the same but the rankings were changed. Real estate activities rose to 2nd place.

## 4. Number of Years of Operations and Organizational Structure of SMEs

### (1) SMEs Were More Flexible in terms of Entry & Exit than Large Enterprises

In terms of the number of years of operations, 6.99% of all SMEs defined based on the New Standards had operated for less than 1 year as of 2020; 29.35% of the SMEs had operated for less than 5 years; and 48.32% had operated for less than 10 years, which accounted for nearly half of the total number of SMEs. By contrast, large companies had relatively longer operations, with only 21.15% operating for 10 years or less and 78.85% operating for more than 10 years (Table 1-1-8).

### (2) Sole Proprietorships Accounted for the Highest Number of SMEs with 52%

In terms of the business type, the majority of SMEs were sole proprietorships in 2020, regardless of whether they are defined based on the New or Old Standards. Based on the definitions in the New Standards, there were 808,840 sole proprietorships (52.22%); this was followed by

limited companies with 481,534 SMEs (31.09%); and companies limited by shares with 135,785 (8.77%) in 3rd place. SMEs in the three categories accounted for 92.08% of all SMEs. Large companies consisted mostly of companies limited by shares (89.95%), followed by limited companies (6.26%). Companies in these two categories accounted for 96.21% of the total number of large companies (Table 1-1-9).

**Table 1-1-8 Number and Shares of Enterprises by Particular Ages, 2020**

Unit: Enterprises; %

Enterprise size Age	Total	SMEs		Large enterprises	
		Number of enterprises	Share of total	Number of enterprises	Share of total
<b>Total</b>	1,565,637	1,548,835	100.00	16,802	100.00
Less than 1 year	108,530	108,301	6.99	229	1.36
1 – 2 years	103,207	102,925	6.65	282	1.68
2 – 3 years	91,588	91,289	5.89	299	1.78
3 – 4 years	82,079	81,732	5.28	347	2.06
4 – 5 years	70,682	70,350	4.54	332	1.98
5 – 10 years	295,920	293,855	18.97	2,065	12.29
10 – 20 years	628,675	620,015	40.03	8,660	51.54
20 years or more	184,956	180,368	11.65	4,588	27.31

Note: The data in the table are defined based on the New Standards.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

**Table 1-1-9 Number and Shares of Enterprises by Form of Organization, 2020**

Unit: Enterprises; %

Enterprise size Organization	Total	SMEs		Large enterprises	
		Number of enterprises	Share of total	Number of enterprises	Share of total
<b>Total</b>	1,565,637	1,548,835	100.00	16,802	100.00
Corporation limited	150,898	135,785	8.77	15,113	89.95
Limited corporation	482,585	481,534	31.09	1,051	6.26
Unlimited corporation	72	71	0.00	*	*
Unlimited corporation with limited liability shareholders	18	18	0.00	0	0.00
Partnership	35,461	35,461	2.29	0	0.00
Sole proprietorship	808,862	808,840	52.22	22	0.13
Subsidiary of domestic company	38,793	38,792	2.50	*	*
Subsidiary of foreign company	5,842	5,611	0.36	231	1.37
Others	43,106	42,723	2.76	383	2.28

Notes:

1. The data in the table are defined based on the New Standards.

2. Others denotes business entities not in the form of any type of company, partnership or sole proprietorship.

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

4. Where the number of SMEs is 5 or under, the number is indicated by “\*” to keep the information on individual SMEs confidential.

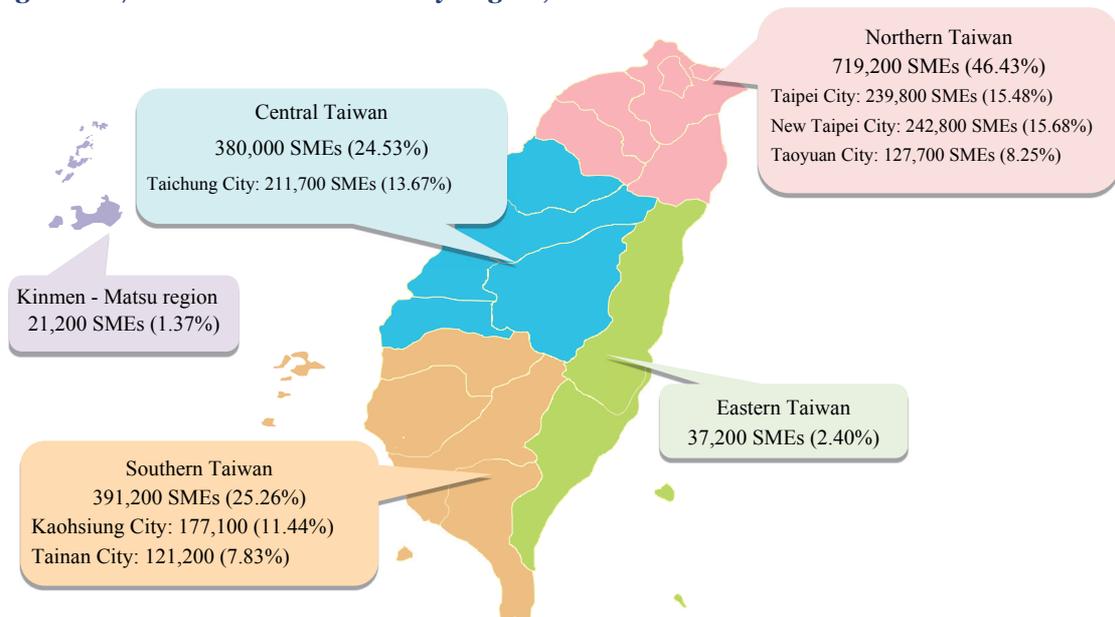
Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

## 5. SMEs and Regional Development

### (1) About 46 Percent of SMEs Were Concentrated in Northern Taiwan

In terms of the regional distribution of SMEs based on the definitions in the New Standards, there were 719.2 thousand SMEs in Northern Taiwan in 2020, which accounted for 46.43% of the total. There were 380 thousand (24.53%) and 391.2 thousand SMEs (25.26%) in Central and Southern Taiwan, respectively. SMEs in Eastern Taiwan, Kinmen, and Matsu accounted for 3.77% (Figure 1-1-7).

**Figure 1-1-7 Distribution of SMEs by Region, 2020**



Notes:

1. The data in the figure are defined based on the New Standards.
2. 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, 2020.

By contrast, the regional distribution of large enterprises has a more prominent geographical disparity. 70.97% of SMEs were in Northern Taiwan, 14.03% were in Central Taiwan, 14.44% were in Southern Taiwan, and only 0.56% were in Eastern Taiwan, Kinmen, and Matsu (Table 1-1-10).

In terms of the distribution of SMEs in metropolitan areas, most SMEs were concentrated in the six metropolitan areas. There were 1.1204 million SMEs in the six metropolitan areas and they accounted for 72.34% of all SMEs. Taipei City ranked first with 239.8 thousand (15.48%), while New Taipei City ranked second with 242.8 thousand (15.68%) (Table 1-1-11).

**Table 1-1-10 Number and Total Sales of Enterprises in Taiwan's Regions by Enterprise Size, 2020**

Unit: Enterprises; million NT\$, %

Enterprise size \ Region	Total	Northern Taiwan	Central Taiwan	Southern Taiwan	Eastern Taiwan	Kinmen - Matsu region
<b>Number of enterprises</b>						
All enterprises	1,565,637	731,082	382,358	393,666	37,298	21,233
SMEs	1,548,835	719,158	380,001	391,239	37,225	21,212
Share of total	100.00	46.43	24.53	25.26	2.40	1.37
Annual growth rate	16,802	11,924	2,357	2,427	73	21
Large enterprises	100.00	70.97	14.03	14.44	0.43	0.13
<b>Total sales</b>						
All enterprises	43,629,308	27,539,690	7,858,794	7,897,064	275,470	58,290
SMEs	23,555,513	13,343,410	5,069,726	4,876,824	219,074	46,479
Share of total	100.00	56.65	21.52	20.70	0.93	0.20
Annual growth rate	20,073,796	14,196,279	2,789,068	3,020,241	56,396	11,811
Large enterprises	100.00	70.72	13.89	15.05	0.28	0.06

Notes:

1. The data in the table are defined based on the New Standards.
2. The scope includes the number of businesses in all parts of Taiwan, Kinmen, and Matsu, and their revenue.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

**Table 1-1-11 Number and Total Sales of Enterprises in Taiwan's Six Special Municipalities by Enterprise Size, 2020**

Unit: Enterprises; million NT\$, %

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
<b>Number of enterprises</b>								
All enterprises	1,565,637	1,134,659	246,651	245,300	129,073	213,221	122,049	178,365
SMEs	1,548,835	1,120,372	239,809	242,822	127,709	211,697	121,211	177,124
Share of total	100.00	72.34	15.48	15.68	8.25	13.67	7.83	11.44
Large enterprises	16,802	14,287	6,842	2,478	1,364	1,524	838	1,241
<b>Total sales</b>								
All enterprises	43,629,308	34,147,005	13,734,294	5,208,225	3,950,064	4,367,220	2,363,550	4,523,651
SMEs	23,555,513	18,995,172	6,276,846	3,276,073	2,337,430	3,066,904	1,517,935	2,519,983
Share of total	100.00	80.64	26.65	13.91	9.92	13.02	6.44	10.70
Large enterprises	20,073,796	15,151,833	7,457,448	1,932,152	1,612,633	1,300,316	845,615	2,003,669

Notes:

1. The data in the table are defined based on the New Standards.
2. The scope includes the number of businesses in all parts of Taiwan, Kinmen, and Matsu, and their revenue.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

## (2) More than 50% of SME Sales Took Place in Northern Taiwan

Northern Taiwan reported the highest SME sales in 2020, accounting for 56.65% of total SME sales. In particular, SME sales in Northern Taiwan accounted for 83.86% of the total in information and communication and 80.70% in professional, scientific, and technical activities. Meanwhile, SME sales in Northern Taiwan accounted for the largest percentage in financial and insurance

activities (74.27%), transportation and storage (68.29), and support service activities (62.87%), all of which were 60% or higher and suggested clustering (Table 1-1-10).

SME sales in Central Taiwan were more evenly distributed for each industry. The percentage of SME sales was the highest in manufacturing with 34.23%, but it remained lower than the 42.77% in Northern Taiwan. Clustering was more prominent in Southern Taiwan in human health and social work activities with SME sales accounting for 67.78%, which was higher than the ratio in Northern Taiwan (20.76%) and Central Taiwan (10.88%) (Table 1-1-10).

### (3) Most Industries Were Clustered in Northern Taiwan in 2020 and SME Sales Accounted for 71.64% in Information and Communication

A look at the number of SMEs by region and by industry showed that most industries were located in Northern Taiwan in 2020. As many as 71.64% of SMEs in information and communication were in Northern Taiwan, suggesting a high degree of clustering in Northern Taiwan. Meanwhile, the number of SMEs in financial and insurance activities and professional, scientific and technical activities was clearly higher in Northern Taiwan, accounting for shares of 64.41% and 62.28%, respectively. Both were above 60%. In comparison, agriculture, forestry, fishing and animal husbandry, and electricity and gas supply had a lower percentage in Northern Taiwan, and accounted for only 22.33% and 28.71%, respectively (Table 1-1-12).

**Table 1-1-12 Number and Shares of SMEs in Each Region by Industry, 2020**

Unit: Enterprises; %

Industry	Region											
	Total	Northern Taiwan	Share	Central Taiwan	Share	Southern Taiwan	Share	Eastern Taiwan	Share	Kinmen - Matsu region	Share	
Total	1,548,835	719,158	46.43	380,001	24.53	391,239	25.26	37,225	2.40	21,212	1.37	
Agriculture, forestry, fishing and animal husbandry	11,779	2,630	22.33	3,184	27.03	5,086	43.18	824	7.00	55	0.47	
Mining and quarrying	1,043	377	36.15	266	25.50	205	19.65	191	18.31	*	*	
Manufacturing	144,647	60,826	42.05	54,142	37.43	28,374	19.62	1,092	0.75	213	0.15	
Electricity and gas supply	1,992	572	28.71	732	36.75	651	32.68	31	1.56	6	0.30	
Water supply and remediation activities	7,907	3,097	39.17	2,047	25.89	2,543	32.16	185	2.34	35	0.44	
Construction	138,757	63,442	45.72	35,055	25.26	35,595	25.65	3,590	2.59	1,075	0.77	
Wholesale and retail trade	720,674	335,759	46.59	169,853	23.57	182,476	25.32	15,982	2.22	16,604	2.30	
Transportation and storage	34,877	18,530	53.13	6,433	18.44	9,030	25.89	596	1.71	288	0.83	
Accommodation and food service activities	175,580	73,898	42.09	39,815	22.68	52,580	29.95	7,836	4.46	1,451	0.83	
Information and communication	25,042	17,940	71.64	3,704	14.79	3,119	12.46	216	0.86	63	0.25	
Finance and insurance activities	20,320	13,089	64.41	3,214	15.82	3,708	18.25	261	1.28	48	0.24	
Real estate activities	41,730	21,454	51.41	10,090	24.18	9,069	21.73	878	2.10	239	0.57	
Professional, scientific and technical activities	56,247	35,031	62.28	10,614	18.87	9,720	17.28	691	1.23	191	0.34	
Support service activities	33,854	16,007	47.28	7,312	21.60	9,162	27.06	1,058	3.13	315	0.93	
Education	5,044	2,720	53.93	972	19.27	1,226	24.31	105	2.08	21	0.42	
Human health and social work activities	1,411	662	46.92	305	21.62	394	27.92	43	3.05	7	0.50	

Industry	Region	Total	Northern Taiwan		Central Taiwan		Southern Taiwan		Eastern Taiwan		Kinmen - Matsu region	
			Share	Share	Share	Share	Share	Share	Share	Share		
Arts, entertainment and recreation		37,593	17,084	45.44	9,023	24.00	9,896	26.32	1,385	3.68	205	0.55
Other service activities		90,338	36,040	39.89	23,240	25.73	28,405	31.44	2,261	2.50	392	0.43

Notes:

1. The data in the table are defined based on the New Standards.
2. The scope includes the number of businesses in all parts of Taiwan, Kinmen, and Matsu, and their revenue.
3. Where the number of SMEs is 5 or under, the number is indicated by “\*” to keep the information on individual SMEs confidential.

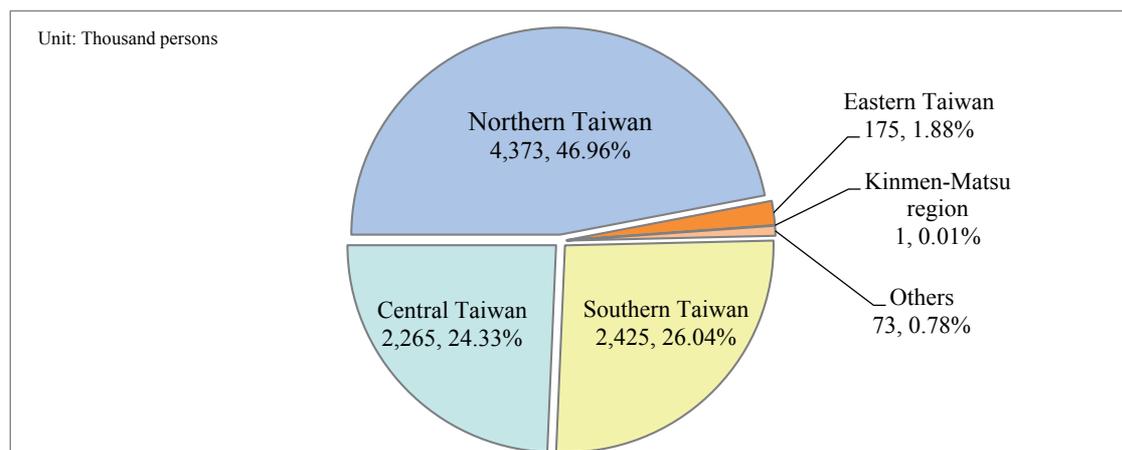
Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

In Central Taiwan, the number of SMEs in manufacturing accounted for the largest percentage at 37.34%. In Southern Taiwan, SMEs in agriculture, forestry, fishing and animal husbandry accounted for the largest percentage at 43.18%, higher than the 27.03% in Central Taiwan and 22.33% in Northern Taiwan (Table 1-1-12).

#### (4) The Northern Region Had about 47 Percent of SME Employees

In 2020, the number of employed persons in Taiwan’s SMEs (defined based on the New Standards) totaled 9.311 million. In terms of regional distribution, 4.373 million people (46.96%) worked in Northern Taiwan, followed by Southern Taiwan (2.425 million people, 26.04%), and Central Taiwan (2.265 million people, 24.33%). They were followed by Eastern Taiwan (1.88%), other regions (0.78%), and Kinmen and Matsu (0.01%) (Figure 1-1-8).

**Figure 1-1-8 Distribution of SME Employment by Region, 2020**



Notes:

1. The data in the figure are defined based on the New Standards.
2. Others denote employed persons with a domicile record in Taiwan but who worked for SMEs overseas in 2020.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data, 2020.

## II Female-owned SMEs

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

### 1. Female-owned SMEs Accounted for over 36 Percent of All SMEs

In 2020, the number of enterprises for which the gender of the legal representative of the enterprise could be identified was 1,546,908. They included 568,564 SMEs (99.53%) with female owners. 565,876 SMEs were defined based on the New Standards and the number of female-owned SMEs as a proportion of all SMEs was 36.96% (Table 1-2-1).

**Table 1-2-1 Number and Sales Performance of Enterprises by Sex of Business Owner, 2020**

Unit: Enterprises; million NTS; %

Indicator	Enterprise size	All enterprises	SMEs	Large enterprises
<b>No. of enterprises</b>		1,546,908	1,531,197	15,711
Female-owned enterprises		568,564	565,876	2,688
Share of total <sup>a</sup>		100.00	99.53	0.47
Share of total <sup>b</sup>		36.75	36.96	17.11
Male-owned enterprises		978,344	965,321	13,023
<b>Total sales</b>		38,253,921	21,570,093	16,683,828
Female-owned enterprises		6,883,747	5,259,063	1,624,683
Share of total <sup>a</sup>		100.00	76.40	23.60
Share of total <sup>b</sup>		17.99	24.38	9.74
Male-owned enterprises		31,370,174	16,311,029	15,059,145
<b>Domestic sales</b>		30,310,459	19,339,526	10,970,933
Female-owned enterprises		6,018,233	4,799,838	1,218,395
Share of total <sup>a</sup>		100.00	79.75	20.25
Share of total <sup>b</sup>		19.86	24.82	11.11
Male-owned enterprises		24,292,226	14,539,689	9,752,537
<b>Export sales</b>		7,943,462	2,230,566	5,712,896
Female-owned enterprises		865,514	459,226	406,288
Share of total <sup>a</sup>		100.00	53.06	46.94
Share of total <sup>b</sup>		10.90	20.59	7.11
Male-owned enterprises		7,077,948	1,771,340	5,306,608

Notes:

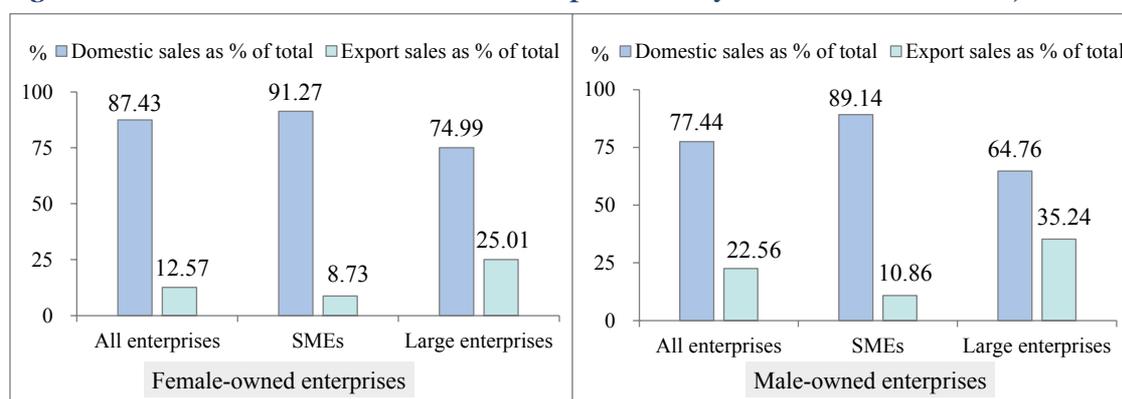
1. The data in the table are defined based on the New Standards.
2. Whether an enterprise should be classified as male-owned or female-owned was determined using the registered identity of the business owner.
3. The totals for all enterprises given in this table do not conform to those given in Table 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.
4. Share of total <sup>a</sup> in the table represents the percentages of SMEs (large enterprises) in all female-owned enterprises; Share of total <sup>b</sup> represents the percentage of female-owned enterprises in all enterprises.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

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

In terms of revenue, female-owned enterprises are more dependent on the domestic market, and the dependence is even more prominent for SMEs. According to definitions in the New Standards, the domestic sales rate of female-owned SMEs was 91.27%, while the export rate was about 8.73%. The difference was 82.54%. The domestic sales rate of male-owned SMEs was 89.14%, while the export rate was about 10.86%. The difference was 78.28% which was lower than that of females. This demonstrates that female-owned SMEs tend to focus more on domestic sales (Figure 1-2-1).

**Figure 1-2-1 Shares of Domestic Sales and Export Sales by Sex of Business Owner, 2020**



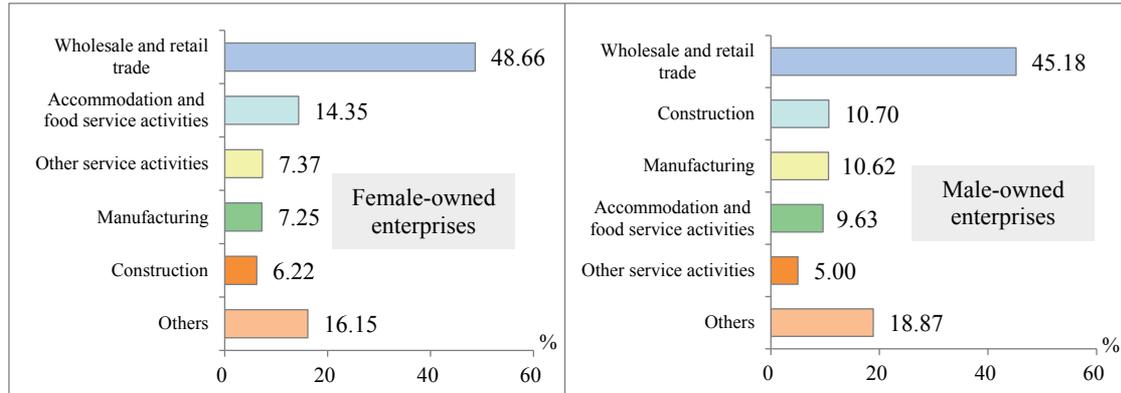
Note: The data in the figure are defined based on the New Standards.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

## 3. The Top 3 Industries for Female-owned SMEs Were Wholesale and Retail Trade, Accommodation and Food Service Activities, and Other Service Activities

In terms of the number of SMEs by industry in 2020, more than 85% of female-owned SMEs and nearly 77% of male-owned SMEs were in the service sector. Based on the definitions in the New Standards, the number of female-owned SMEs, and their revenue, domestic sales, and exports in 2020 were the highest in wholesale and retail trade (48.66%, 47.95%, 47.11%, and 56.69%, respectively).

Although the top 5 industries with the highest number of SMEs owned by females were the same as those with SMEs owned by males in 2020, the sequence was slightly different. The rankings of industries with female-owned SMEs were, in descending order, as follows: Wholesale and retail trade (48.66%), accommodation and food service activities (14.35%), other service activities (7.37%), manufacturing (7.25%), and construction (6.22%). As for male-owned SMEs, SMEs in wholesale and retail trade (45.18%) topped the list, which was the same for female-owned SMEs. They were followed by construction (10.70%), manufacturing (10.62%), accommodation and food service activities (9.63%), and other service activities (5.00%) (Figure 1-2-2).

**Figure 1-2-2 Industry Distribution of SMEs by Sex of Business Owner, 2020**

Notes: The data in the figure are defined based on the New Standards.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

#### 4. The Percentage of Female-owned SMEs in Business for 10 Years or Less Was Slightly Higher than for Male-owned SMEs

In terms of the number of years in business, there were 42,076 new female-owned (less than one year since establishment) SMEs in 2020, about 22,000 fewer than the 64,407 new male-owned SMEs. In terms of the percentage of SMEs with less than 10 years in business, the percentage of female-owned SMEs (49.79%) was slightly higher than that of male-owned SMEs (47.04%), showing that female SME owners had been in business for fewer years than their male counterparts (Table 1-2-2).

**Table 1-2-2 Number and Shares of SMEs by Particular Ages and Sex of Business Owner, 2020**

Unit: Enterprises; %

Age	Sex of owner	Total men and women	Female-owned enterprises		Male-owned enterprises	
			No. of enterprises	Share of total	No. of enterprises	Share of total
<b>Total</b>		1,531,197	565,876	100.00	965,321	100.00
Less than 1 year		106,483	42,076	7.44	64,407	6.67
1 – 2 years		100,526	38,784	6.85	61,742	6.40
2 – 3 years		89,446	34,229	6.05	55,217	5.72
3 – 4 years		80,369	30,914	5.46	49,455	5.12
4 – 5 years		69,236	26,351	4.66	42,885	4.44
5 – 10 years		289,814	109,426	19.34	180,388	18.69
10 – 20 years		615,541	223,567	39.51	391,974	40.61
20 years or more		179,782	60,529	10.70	119,253	12.35

Notes:

1. The data in the table are defined based on the New Standards.

2. The difference between the sum of all indicators and the sum listed in Table 1-1-8 arises because representatives of some enterprises were legal persons or foreigners and thus their gender could not be distinguished.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

## 5. About 60 Percent of Female-owned SMEs Were Sole Proprietorships

Sole proprietorships were the most common form of organization for both female-owned enterprises (59.23 percent) and male-owned enterprises (48.99 percent), followed by limited corporations at 28.80 percent and 32.25 percent, and corporations limited at 6.25 percent and 10.04 percent, respectively. The top 3 organization types accounted for 94.28% and 91.28% of female-owned and male-owned SMEs, respectively. This shows that the organization types of female-owned and male-owned SMEs were generally similar, but sole proprietorships accounted for a higher percentage of female-owned SMEs (Table 1-2-3).

**Table 1-2-3 Number and Shares of SMEs by Form of Organization and Sex of Business Owner, 2020** Unit: Enterprises; %

Sex of owner Organization	Total men and women	Female-owned enterprises		Male-owned enterprises	
		No. of enterprises	Share of total	No. of enterprises	Share of total
<b>Total</b>	1,531,197	565,876	100.00	965,321	100.00
Corporation limited	132,252	35,364	6.25	96,888	10.04
Limited corporation	474,283	162,949	28.80	311,334	32.25
Unlimited corporation	67	32	0.01	35	0.00
Unlimited corporation with limited liability shareholders	17	6	0.00	11	0.00
Partnership	35,431	13,007	2.30	22,424	2.32
Sole proprietorship	808,056	335,164	59.23	472,892	48.99
Subsidiary of domestic company	37,448	8,076	1.43	29,372	3.04
Subsidiary of foreign company	3,090	1,078	0.19	2,012	0.21
Others	40,553	10,200	1.80	30,353	3.14

Notes:

1. The data in the table are defined based on the New Standards.

2. The difference between the sum of all indicators and the sum listed in Table 1-1-9 arises because representatives of some enterprises were legal persons or foreigners and thus their gender could not be distinguished.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

## 6. Sales Comparison between Male-owned and Female-owned Newly-established SMEs

The total revenue of newly-established (operating for less than one year) SMEs by owners of both genders in 2020 was approximately NT\$201.630 billion, accounting for 0.93% of the total revenue of SMEs. The revenue of newly-established SMEs with female and male owners were NT\$62.136 billion and NT\$139.494 billion, respectively, accounting for 1.18% and 0.86% of the total revenue of individual SME owners. The revenue of newly-established SMEs with female owners accounted for 30.82% of all revenue of newly-established SMEs while those with male owners accounted for 69.18% (Table 1-2-4).

**Table 1-2-4 Number and Sales Performance of Newly-established SMEs by Sex of Business Owner, 2020**

Unit: Enterprises; million NT\$; %

Indicator \ Item	Male and female combined (1)	Female-owned enterprise size (2)	Female-owned enterprise ratio (3)=(2)/(1)	Female-owned enterprise structural ratio	Male-owned enterprise size (4)	Male-owned enterprise ratio (5)=(4)/(1)	Male-owned enterprise structural ratio
Number	106,483	42,076	39.51	-	64,407	60.49	-
Sales	201,630	62,136	30.82	100.00	139,494	69.18	100.00
Domestic sales	182,231	59,372	32.58	95.55	122,860	67.42	88.07
Export sales	19,399	2,764	14.25	4.45	16,635	85.75	11.93

Notes:

1. The data in the table are defined based on the New Standards.
2. “-”: not applicable.
3. Due to rounding, sales and the sum of domestic sales and export sales may not be the same.
4. The difference between the sum of all indicators and the sum listed in Table 1-1-6 arises because representatives of some enterprises were legal persons or foreigners and thus their gender could not be distinguished.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

In terms of domestic sales and exports, at least 89% of the revenue of SMEs with both female and male owners came from domestic sales. Approximately 88% of the revenue of newly-established SMEs with owners of both genders came from domestic sales (95.55% and 88.07%, respectively), indicating that most of the new enterprises in their early stages of development target the domestic market. In addition, the data show that although the revenue of newly-established enterprises with male owners was 1.53 times the revenue of newly-established enterprises with female owners, they accounted for a relatively low ratio of total revenue and most of the revenue came from domestic sales (Table 1-2-4).

### III Business Performance of SMEs

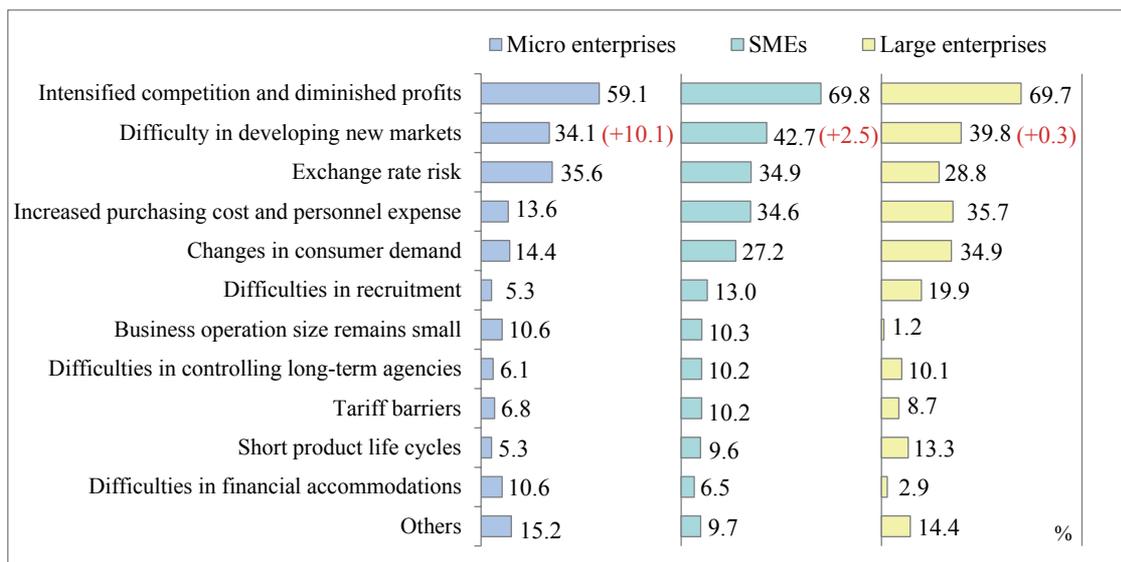
The overview of the business operations of SMEs is based on the results of the “Report of the Survey Analysis of Wholesale, Retail and Food Services in 2020” compiled by the Department of Statistics, Ministry of Economic Affairs. As the new “Standards for Identifying Small and Medium-sized Enterprises” were promulgated on June 24, 2020, and the report survey time was April 2020, the definitions for the scale of enterprises according to the Old Standards were adopted. As a result, micro enterprises refer to those with fewer than 5 employees, small and medium enterprises refer to those with fewer than 100 employees (including those with fewer than 5 employees), and large enterprises refer to those with 100 or more employees. It must be noted that the survey questions were designed to be multiple selection questions and so the total sum of all options in the survey may often exceed 100%.

#### 1. Wholesale Trade Business Performance

##### (1) Main Business Predicaments Mostly for Wholesale Trade: “Intensified Competition and Diminished Profits”

Regardless of size, the main business predicaments for wholesale in 2020 were “intensified competition and diminished profits,” which accounted for between 60% and 70%. The second and third difficulties for micro enterprises and SMEs were “exchange rate risks” and “difficulty in developing new markets,” but the rankings were different. Compared to 2019, the “difficulty in developing new markets” for wholesale trade of all scales increased, and the increase for micro enterprises was significant with a 10.1% increase (Figure 1-3-1).

**Figure 1-3-1 Obstacles in Operations for Wholesale Trade by Enterprise Size, 2020 (Multiple Selection)**

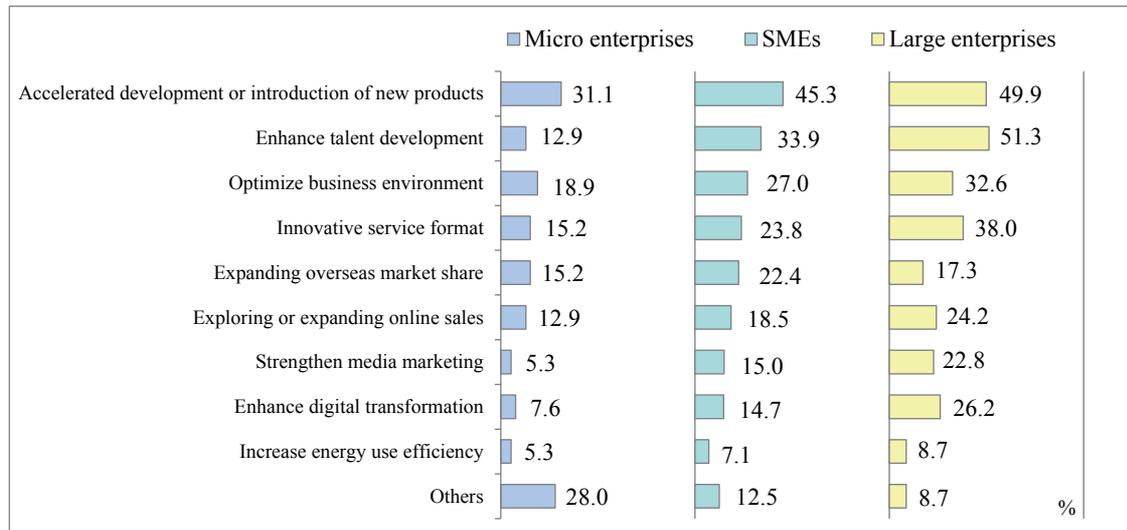


Note: The sample size of the wholesale industry totaled 2,235 companies, including 132 micro enterprises, 1,888 SMEs, and 347 large enterprises. Source: Department of Statistics, Ministry of Economic Affairs (2020, November). *Report of the Survey Analysis of Wholesale, Retail and Food Services in 2020*.

## (2) Main Business Development Plans for Micro Enterprises and SMEs in Wholesale Trade Focused on “Accelerated Development or Introduction of New Products”

The main business development plans for micro enterprises and SMEs in wholesale trade for 2020 focused on “accelerated development or introduction of new products” (which accounted for 31.1% and 45.3%, respectively); for large wholesalers, the main development strategy was “enhance talent development” (51.3%). For micro enterprises, the second main development strategy was “others” (28.0%), and “optimize business environment” (30.9%) ranked third. For SMEs, the second main development strategy was “enhance talent development” (33.9%), and “optimize business environment” (27.0%) ranked third (Figure 1-3-2).

**Figure 1-3-2 Operational Development Plan for Wholesale Trade by Enterprise Size, 2020 (Multiple Selection)**



Note: The sample size of the wholesale industry totaled 2,235 companies, including 132 micro enterprises, 1,888 SMEs, and 347 large enterprises.

Source: Department of Statistics, Ministry of Economic Affairs (2020, November). *Report of the Survey Analysis of Wholesale, Retail and Food Services in 2020*.

## 2. Retail Trade Business Performance

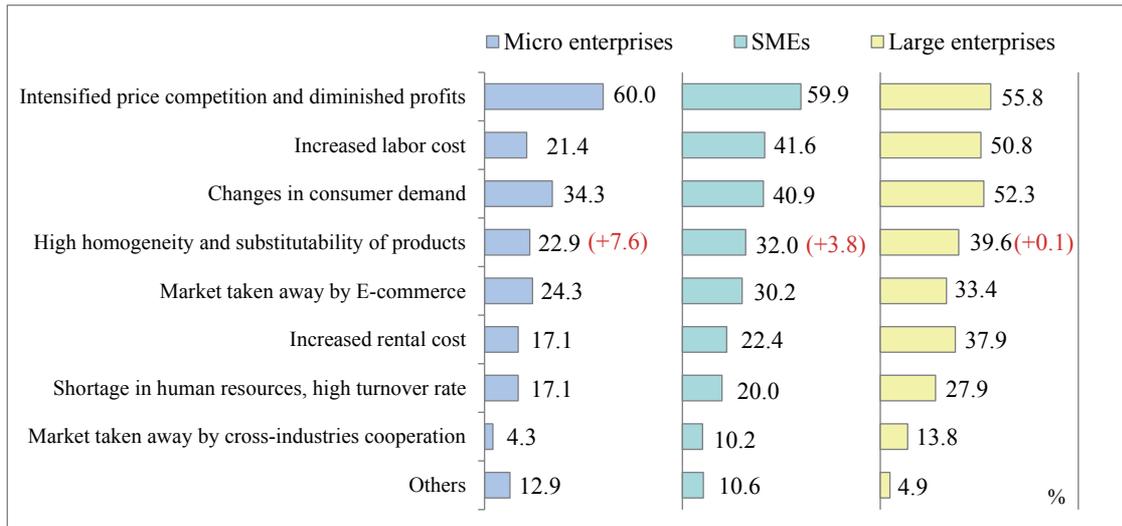
### (1) The Business Predicaments for Retailers of All Sizes Were “Intensified Price Competition and Diminished Profits”

Regardless of size, the main business predicaments for retailers in 2020 were “intensified price competition and diminished profits,” which accounted for 50% to 60%. The second and third difficulties for micro enterprises were “changes in consumer demand” (34.3%) and “market taken away by E-commerce” (24.3%); for SMEs, they were “increased labor cost” (41.6%) and “changes in consumer demand” (40.9%). Compared with 2019, the continuous development of e-commerce in 2020 increased the difficulties posed by “market taken away by E-commerce” for micro enterprises and SMEs by 7.6% and 3.8%, respectively (Figure 1-3-3).

### (2) Micro Enterprises and SMEs’ Main Business Development Plan Focused on “Enhance Talent Development”

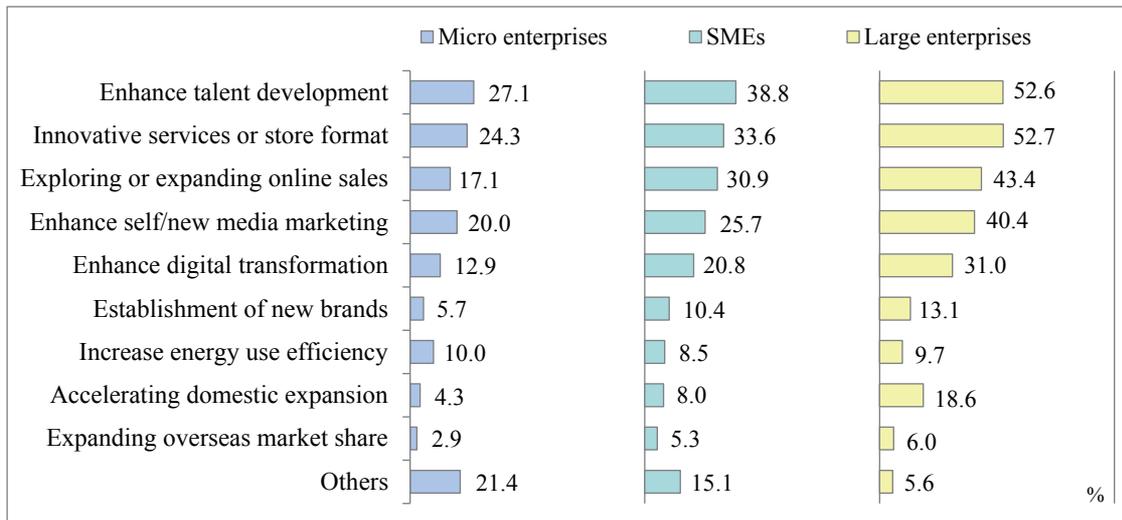
The main business development plans for micro enterprises and SMEs in wholesale trade for 2020 focused on “enhance talent development” (accounting for 27.1% and 38.8%, respectively); for large retailers, the main development strategy was “innovative services or stores with new form” (52.7%). Small and medium retailers focused on “innovative services or stores with new form” and “development or expansion of online sales,” which were ranked second and third. Large retailers focused on “enhance talent development” and “development or expansion of online sales,” which were ranked second and third. This shows that in addition to talent development, retail trade will also focus on Online Merge Offline (OMO) applications in future development (Figure 1-3-4).

**Figure 1-3-3 Obstacles in Operations for Retail Trade by Enterprise Size, 2020 (Multiple Selections)**



Note: The sample size of the retail industry totaled 1,097 companies, including 70 micro enterprises, 774 SMEs, and 323 large enterprises.  
 Source: Department of Statistics, Ministry of Economic Affairs (2020, November). *Report of the Survey Analysis of Wholesale, Retail and Food Services in 2020*.

**Figure 1-3-4 Operational Development Plan for Retail Trade by Enterprise Size, 2020 (Multiple Selection)**



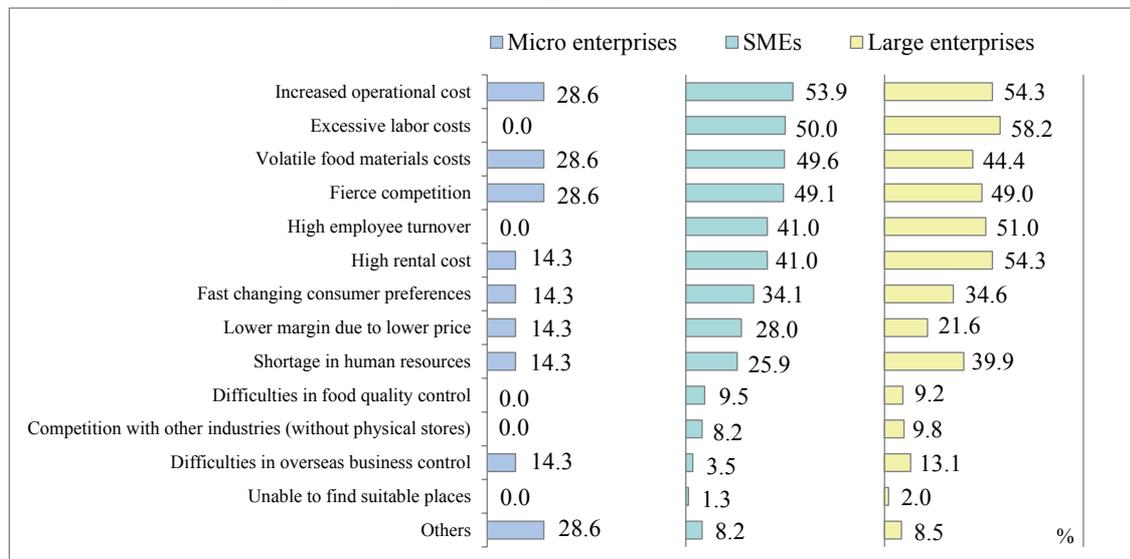
Note: The sample size of the retail industry totaled 1,097 companies, including 70 micro enterprises, 774 SMEs, and 323 large enterprises.  
 Source: Department of Statistics, Ministry of Economic Affairs (2020, November). *Report of the Survey Analysis of Wholesale, Retail and Food Services in 2020*.

### 3. Food and Beverage Service Activities Business Performance

#### (1) The Main Business Predicament for Small and Medium Food and Beverage Service Activities Was “Increase in Operating Costs”

The difficulties for micro enterprises in food and beverage service activities in 2020 were topped by “increased operational cost,” “volatile food materials costs,” “fierce competition,” and “others.” These factors were tied for first place (28.6%). The top 3 business predicaments for SMEs were “increased operational cost” (53.9%), “excessive labor costs” (50.0%), and “volatile food materials costs” (49.6%). For large enterprises, they were “excessive labor costs” (58.2%), “increased operational cost” (54.3%), and “high rental cost” (54.3%) (Figure 1-3-5).

**Figure 1-3-5 Obstacles in Operations for Food and Beverage Service Activities by Enterprise Size, 2020 (Multiple Selection)**



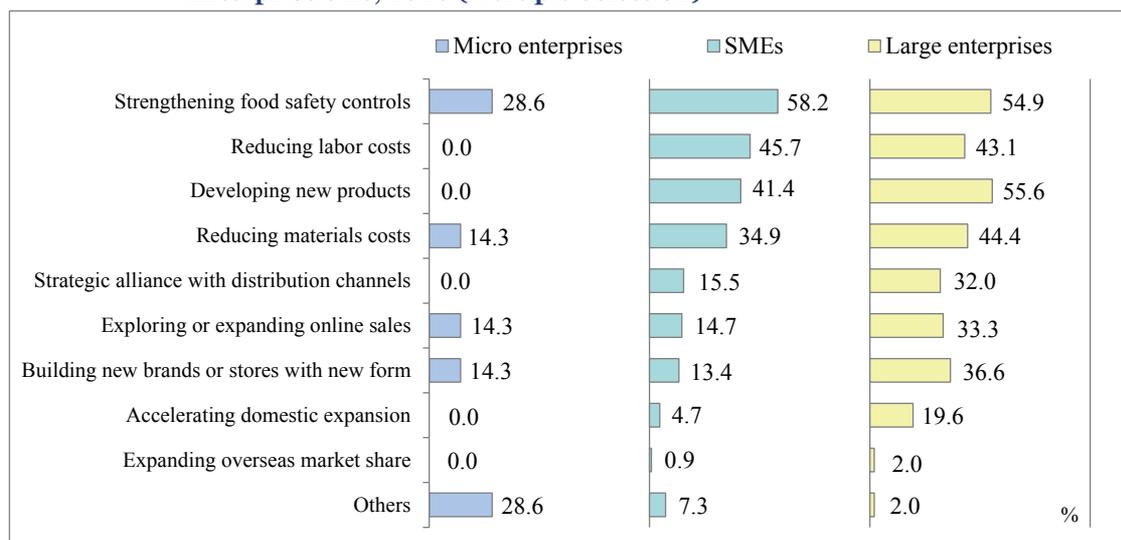
Note: The sample size of the food and beverage service industry totaled 385 companies, including 7 micro enterprises, 232 SMEs, and 153 large enterprises.

Source: Department of Statistics, Ministry of Economic Affairs (2020, November). *Report of the Survey Analysis of Wholesale, Retail and Food Services in 2020*.

#### (2) Main Business Development Plans of Micro Enterprises and SMEs in Food and Beverage Service Activities Focused on “Strengthening Food Safety Controls”

In 2020, the percentages of micro and small- and medium-sized restaurants with plans to open new stores in the future were 14.3% and 15.5%, respectively. The percentage was 58.2% for large restaurants, showing that large enterprises were more aggressive in expanding their networks. As a result of food safety issues in recent years, consumers started paying careful attention to food safety. The attention in turn drove micro enterprises and SMEs to make “strengthening food safety controls” the top priority in their business plans (28.6% and 58.2%, respectively). Large enterprises focused on “developing new products” (55.6%) (Figure 1-3-6).

**Figure 1-3-6 Operational Development Plan for Food and Beverage Service Activities by Enterprise Size, 2020 (Multiple Selection)**



Note: The sample size of the food and beverage service industry totaled 385 companies, including 7 micro enterprises, 232 SMEs, and 153 large enterprises.

Source: Department of Statistics, Ministry of Economic Affairs (2020, November). *Report of the Survey Analysis of Wholesale, Retail and Food Services in 2020*.

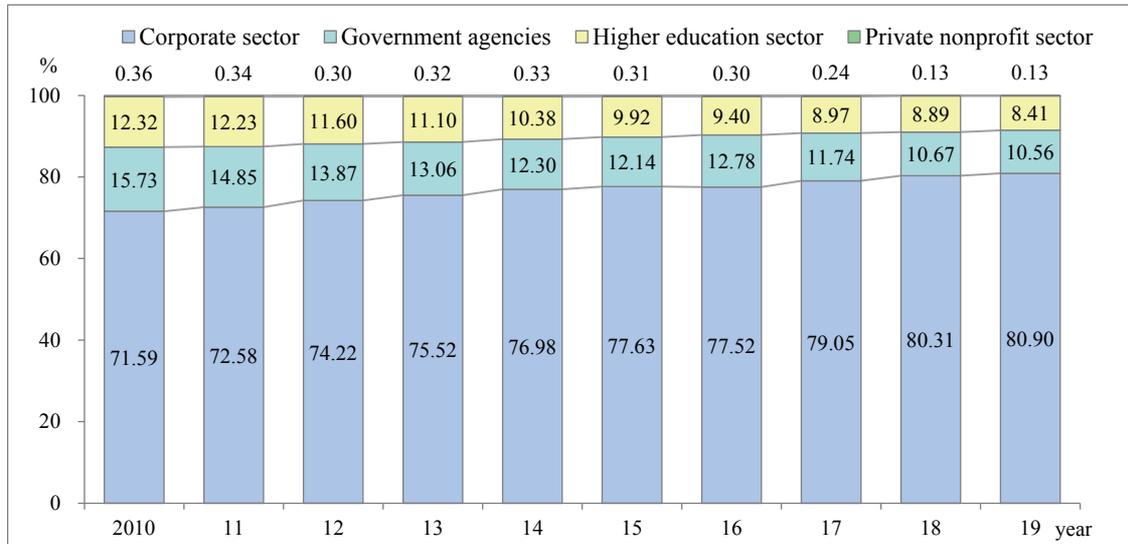
## IV Overview of SMEs' Expenditure on R&D

R&D expenditures are crucial for the survival and growth of SMEs amid intense market competition and the continuous upgrading of products, technologies, and services. This section provides an overall description of the R&D investments of SMEs based on the “Indicators of Science and Technology 2020” published by the Ministry of Science and Technology.

### 1. The Corporate Sector Spearheaded R&D

Total R&D expenses in Taiwan in 2019 amounted to NT\$660.786 billion, which reflected growth of 7.27% compared with the NT\$615.986 billion in 2018. The R&D expenditures of all sectors as a percentage of all R&D expenditures in Taiwan were as follows: The corporate sector invested NT\$534.586 billion (80.90%), the government sector invested NT\$69.754 billion (10.56%), the higher education sector invested NT\$55.577 billion (8.41%), and the private nonprofit sector invested only NT\$869 million (0.13%) (Figure 1-4-1).

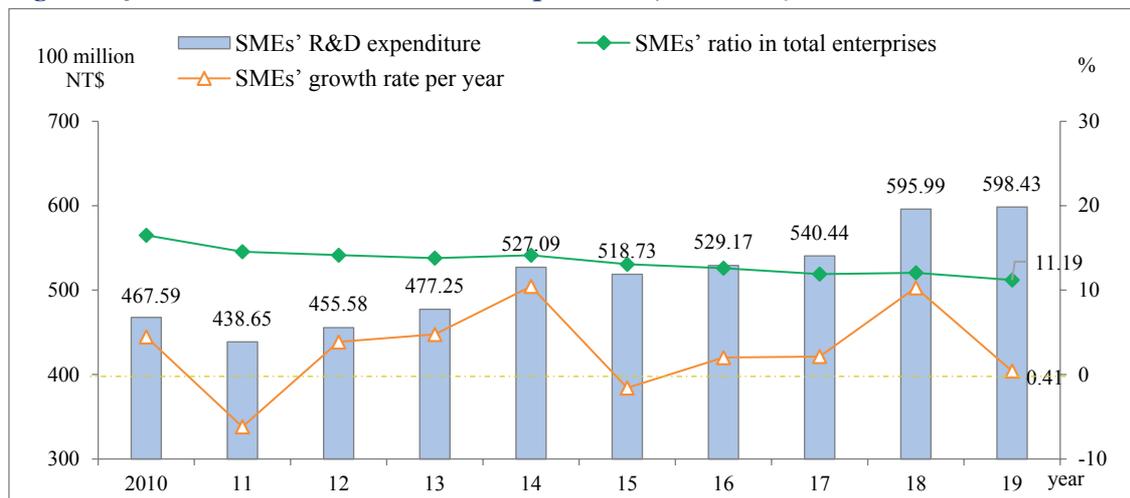
The corporate sector has always been the main source of R&D funding in Taiwan, and the proportion of R&D funding in the corporate sector rose from 71.59% in 2010 to 80.90% in 2019, an increase of 9.31%. In 2019, the growth rate of R&D expenditures in the corporate sector reached 8.06% (Figure 1-4-1).

**Figure 1-4-1 Ratio of R&D Expenditure by Sector, 2010-2019**

Source: Ministry of Science and Technology (2020, December). *Indicators of Science and Technology Taiwan 2020*.

## 2. 2019 R&D Expenditures of SMEs Increased Compared to 2018

Total R&D expenditures of SMEs amounted to NT\$59.843 billion in 2019, accounting for 11.19% of the total for all enterprises. During the past decade, the percentage of R&D expenditures of SMEs in the corporate sector decreased from 16.50% in 2010 to 11.19% in 2019. However, the R&D expenditures of SMEs generally increased and the growth rate shifted from negative to positive in 2016. The growth rate in 2018 was 10.28% and the growth rate increased by a slight 0.41% in 2019 (Figure 1-4-2). The R&D expenditures of large enterprises rose each year from 2010 to 2019, with a growth rate of 9.11% being recorded in 2019.

**Figure 1-4-2 Overview of SMEs' R&D Expenditure, 2010-2019**

Note: SMEs here are those with fewer than 200 employees.

Source: Ministry of Science and Technology (2020, December). *Indicators of Science and Technology Taiwan 2020*.

# CHAPTER 2

## Financial and Funding Analysis of SMEs

Financial analysis plays a vital role in the understanding of the current state of Taiwan's SMEs and the outlook for their future development. The first two sections of this chapter present an overview of the financial status of Taiwan's SMEs as well as ratio analysis, using the Business Income Tax Return dataset for 2019 provided by the Fiscal Information Agency of the Ministry of Finance; there is thus a one-year time lag as compared with the data presented in the other chapters of this White Paper. The third section examines the interaction between SMEs and the banking sector, using survey data from the Central Bank of the Republic of China (Taiwan) or statistics collected by the Financial Supervisory Commission.

### I SMEs: Consolidated Financial Analysis

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

#### 1. Asset Allocation Analysis

##### (1) SMEs in More than 50 Percent of the Industries Held More Cash than Before

As can be seen from Table 2-1-1, for SMEs in 2019, the share of total assets accounted for by current assets was down 0.31 percentage points, mainly caused by decreased shares of inventories (down 0.32 percentage points), and the share of accounts receivable decreased by 0.41 percentage points. The share of liabilities was down by 0.4 percentage points. Moreover, the share of current liabilities was down 0.75 percentage points.

In terms of the cash ratio, 2019 saw an increased share of cash in half of the 18 industries, showing short-term liquidity in 2019 similar to that in 2018. These industries were mining and quarrying, manufacturing, construction, wholesale and retail trade, information and communication, and support services (Table 2-1-2).

**Table 2-1-1 Consolidated Balance Sheet for Taiwanese Enterprises, 2018-2019**

Unit: %

Enterprise size/year Item	SMEs		Large enterprises	
	2018	2019	2018	2019
Current assets	43.35	43.04	53.55	51.38
Cash	15.58	15.95	19.11	18.87
Accounts receivable	10.36	9.95	27.93	26.55
Inventories	14.25	13.93	5.01	4.71
Advance payments	1.62	1.58	0.52	0.44
Other current assets	1.54	1.63	0.99	0.82
Non-current assets	56.65	56.96	46.45	48.62
Long-term investment	29.08	29.25	13.10	14.01
Fixed assets	17.87	17.86	9.82	9.45
Land and buildings	12.56	12.51	4.69	3.97
Machinery	4.32	4.38	4.20	4.12
Other fixed assets	0.99	0.96	0.94	1.37
Intangible and other assets	9.70	9.85	23.53	25.15
<b>Total assets = Liabilities + Net worth</b>	100.00	100.00	100.00	100.00
Liabilities	53.45	53.05	75.72	75.67
Current liabilities	42.71	41.96	52.04	49.35
Short-term loans	12.75	12.6	34.99	32.96
Accounts payable	11.16	10.9	8.30	7.49
Income received in advance	3.42	3.20	3.22	3.21
Other current liabilities	15.38	15.27	5.53	5.70
Non-current liabilities	10.74	11.09	23.68	26.32
Net worth	46.55	46.95	24.29	24.33

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2018-2019.

## (2) Long-term Investment Increased

Funds and long-term investments are investments undertaken by an enterprise for financial or operational reasons, where the investments are held over the long term in the form 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, 2019 saw the long-term investments share of total assets both increase for SMEs and large enterprises.

## (3) Fixed Assets Share of Total Decreased

Fixed assets as a percentage of total assets declined in 2019 for both SMEs and large enterprises, mainly driven by the decrease in land and buildings (Table 2-1-1).

**Table 2-1-2 Consolidated Balance Sheet for Taiwanese SMEs by Industry, 2019**

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	35.29	51.99	55.56	22.11	34.81	82.73	63.08	44.95	28.68
Cash	13.90	20.76	20.76	14.59	16.69	21.82	22.82	23.58	14.55
Accounts receivable	8.57	13.55	17.78	3.11	11.09	19.34	17.58	15.71	5.38
Inventories	6.03	12.75	13.69	0.25	3.47	37.86	18.54	0.86	4.54
Advance payments	5.87	3.62	2.08	3.73	2.22	2.14	2.43	2.94	2.19
Other current assets	0.93	1.31	1.24	0.43	1.33	1.56	1.70	1.86	2.01
Non-current assets	64.71	48.01	44.44	77.89	65.19	17.27	36.92	55.05	71.32
Long-term investment	5.91	2.17	1.65	5.95	14.42	1.13	11.36	8.20	3.77
Fixed assets	51.05	34.30	39.21	54.06	38.46	11.88	19.70	37.80	56.73
Land and buildings	19.26	17.88	25.78	3.03	16.88	5.35	14.41	10.05	42.09
Machinery	25.93	14.67	11.66	43.68	20.09	5.53	4.23	25.78	7.97
Other fixed assets	5.87	1.75	1.77	7.35	1.49	1.01	1.06	1.97	6.67
Intangible and other assets	7.74	11.54	3.58	17.88	12.32	4.26	5.86	9.05	10.82
<b>Total assets =Liabilities + Net worth</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
Liabilities	71.68	69.14	67.72	66.39	51.18	68.84	65.11	47.12	76.69
Current liabilities	54.61	61.49	56.75	29.24	39.93	64.36	56.78	38.02	50.86
Short-term loans	20.38	14.45	17.67	8.35	7.59	8.76	14.34	9.50	12.75
Accounts payable	9.11	20.68	19.18	16.67	17.12	15.32	19.00	15.20	10.73
Income received in advance	0.67	0.83	2.73	0.28	0.44	29.45	1.16	0.54	1.08
Other current liabilities	24.45	25.52	17.17	3.94	14.78	10.83	22.29	12.77	26.31
Non-current liabilities	17.07	7.65	10.97	37.15	11.25	4.48	8.33	9.10	25.83
Net worth	28.32	30.86	32.28	33.61	48.83	31.16	34.88	52.88	23.31

**Table 2-1-2 Consolidated Balance Sheet for Taiwan SMEs by Industry, 2019 (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	57.63	18.81	48.65	48.18	53.46	46.67	43.17	26.15	36.17
Cash	27.47	12.17	8.47	25.25	28.75	32.45	23.03	14.04	18.58
Accounts receivable	18.27	4.30	3.79	13.34	18.35	8.82	16.23	6.11	7.01
Inventories	4.15	0.78	31.89	5.27	1.78	0.68	0.80	1.77	7.77
Advance payments	4.51	0.29	2.12	1.98	1.92	2.36	2.00	2.75	1.53
Other current assets	3.23	1.27	2.38	2.34	2.66	2.36	1.11	1.48	1.29
Non-current assets	42.37	81.19	51.35	51.82	46.54	53.33	56.83	73.85	63.83
Long-term investment	12.43	67.49	13.05	25.83	14.82	8.00	5.03	8.59	40.56
Fixed assets	14.84	2.71	20.78	16.95	19.95	29.4	44.51	54.06	19.17
Land and buildings	10.17	2.53	18.55	12.47	8.56	15.97	29.70	41.16	14.47

Item \ Industry	Information and communication	Financial and insurance activities	Real estate activities	Professional, scientific and technical activities	Support service activities	Education	Human health and social work activities	Arts, entertainment and recreation	Other service activities
Machinery	2.94	0.14	1.51	3.32	8.01	10.2	7.42	8.00	3.51
Other fixed assets	1.73	0.04	0.72	1.15	3.37	3.23	7.39	4.89	1.19
Intangible and other assets	15.10	11.00	17.53	9.04	11.78	15.93	7.29	11.20	4.10
<b>Total assets = Liabilities + Net worth</b>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Liabilities	69.67	27.19	70.36	53.96	50.61	82.60	67.04	73.95	41.74
Current liabilities	61.20	19.86	49.67	45.05	42.45	66.02	56.44	47.22	35.13
Short-term loans	8.71	8.67	17.24	7.45	9.97	13.64	4.55	11.89	3.54
Accounts payable	20.79	3.62	8.13	12.66	13.23	12.03	28.98	11.11	7.81
Income received in advance	3.86	0.05	2.35	4.72	1.77	8.64	3.77	2.08	4.15
Other current liabilities	27.84	7.52	21.95	20.21	17.48	31.70	19.14	22.14	19.63
Non-current liabilities	8.47	7.33	20.69	8.91	8.16	16.58	10.60	26.73	6.61
Net worth	30.33	72.80	29.64	46.04	49.39	17.40	32.97	26.05	58.26

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2019.

## 2. Analysis of SMEs' Financial Structure

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

### (1) Share of Current Liabilities Declined

As can be seen from Table 2-1-1, the share of current liabilities decreased in 2019 for both SMEs and large enterprises.

### (2) Non-current Liabilities Increased

Non-current liabilities include long-term liabilities and other non-current liabilities. From 2018 to 2019, non-current liabilities in SMEs and large enterprises both increased.

## 3. Analysis of SMEs' Profit and Loss

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

As for the operating costs' share of net revenue, the operating costs of large enterprises and SMEs both declined slightly from 2018 to 2019. As a result, the SMEs' gross margin (referring to the "gross operating profit" item in Table 2-1-3) increased modestly compared to that for 2018. In 2019, the SMEs' potential profitability increased.

### (2) Operating Expenses Rose Slightly

The term "operating expenses" is used to refer to expenditure derived from an enterprise's selling, general and administrative (SG&A) activities, including sales, management, and R&D

expenses, and so on. Regardless of their size, firms need to continually think of ways to cut costs and reduce operating expenses.

In 2019, SMEs' operating expenses rose slightly to 21.76 percent, and continued to be higher than those of large enterprises.

**Table 2-1-3 Profit and Loss of Taiwanese Enterprises, 2018-2019**

Unit: %

Item	Enterprise size / year		SMEs		Large enterprises	
	2018	2019	2018	2019	2018	2019
Net operating revenue	100.00	100.00	100.00	100.00	100.00	100.00
Minus: Operating costs	76.25	75.54	87.76	87.68	87.76	87.68
Gross operating profit	23.75	24.46	12.24	12.32	12.24	12.32
Minus: Operating expenses	21.23	21.76	8.23	8.50	8.23	8.50
Net operating profit	2.52	2.70	4.01	3.82	4.01	3.82
Plus: Non-operating revenue	2.06	2.10	4.16	2.86	4.16	2.86
Minus: Interest expenses	0.68	0.69	0.37	0.42	0.37	0.42
Minus: Other non-operating expenses	0.84	0.70	2.63	1.00	2.63	1.00
Current term profit (before tax)	3.06	3.41	5.17	5.26	5.17	5.26

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2018-2019.

### **(3) The Decrease in Operating Costs Was Higher than the Increase in Operating Expenses, and SMEs' Profitability Increased Slightly**

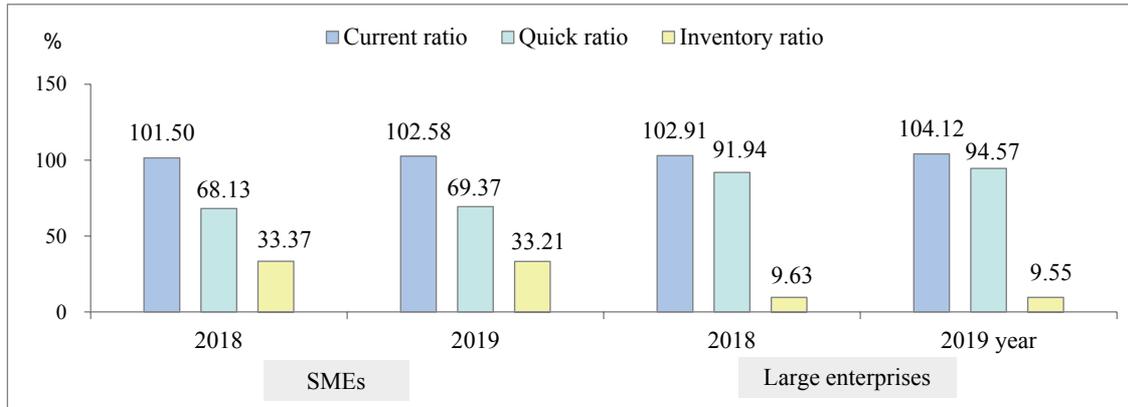
In 2019, SMEs' net operating profit increased marginally to 2.70 percent, with the decrease in operating costs being higher than the increase in operating expenses.

## **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 (with the exception that companies with superior cash generation capability and/or rapid turnover ratios could maintain a much lower current ratio, hence their superior financial efficiency). The reference value for the quick ratio is 100 percent, indicating that the enterprise has NT\$1 in current assets that can be quickly converted into cash at close to their book values to repay every NT\$1 in current liabilities.

In 2019, the current ratio inclined slightly from 101.50 percent in 2018 to 102.58 percent in 2019. The quick ratio rose from 68.13% in 2018 to 69.37%, indicating that SME solvency in the short and very short term had risen slightly. Large enterprises exhibited both a higher current ratio and quick ratio in 2019, indicating that large enterprises saw rising solvency in the short term and very short term compared to 2018 (Figure 2-2-1).

**Figure 2-2-1 Short-term Liquidity of Taiwanese Enterprises, 2018-2019**

Notes:

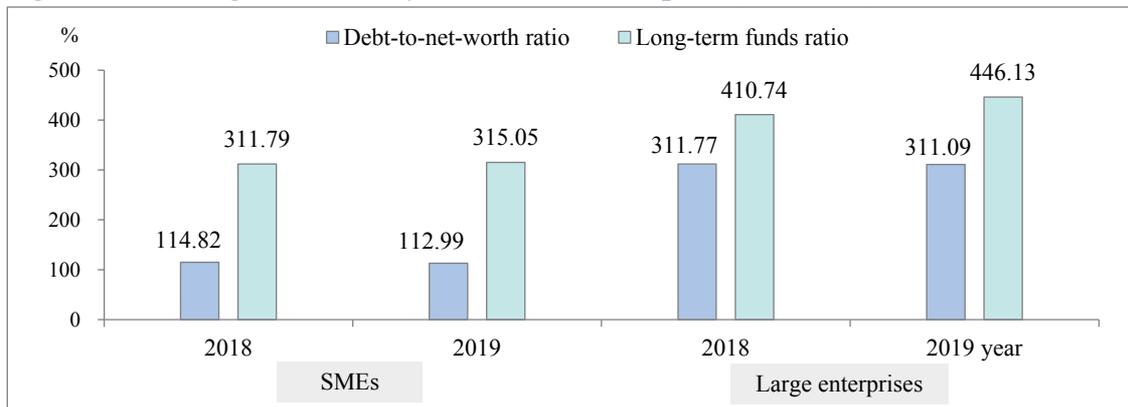
1. Current ratio = current assets ÷ current liabilities × 100% (reference value = 200; ideally, the ratio should be higher than the reference value).
2. Quick ratio = (current assets – inventories) ÷ current liabilities × 100% (reference value = 100; ideally, the ratio should be higher than the reference 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, 2018-2019.

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

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

In 2019, the average debt-to-net-worth ratio of SMEs was 112.99 percent; for large enterprises, the debt-to-net-worth ratio in 2019 was 311.09 percent; indicating large enterprises' higher usage of financial leverage (Figure 2-2-2).

**Figure 2-2-2 Long-term Stability of Taiwanese Enterprises, 2018-2019**

Notes: 1. Debt-to-net-worth ratio = debt ÷ net worth × 100% (reference value = 100; ideally, the ratio should be below the reference value).

2. Long-term funds ratio = (equity + long-term debt) ÷ fixed assets × 100% (reference value = 100; ideally, the ratio should be above the reference value).

Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2018-2019.

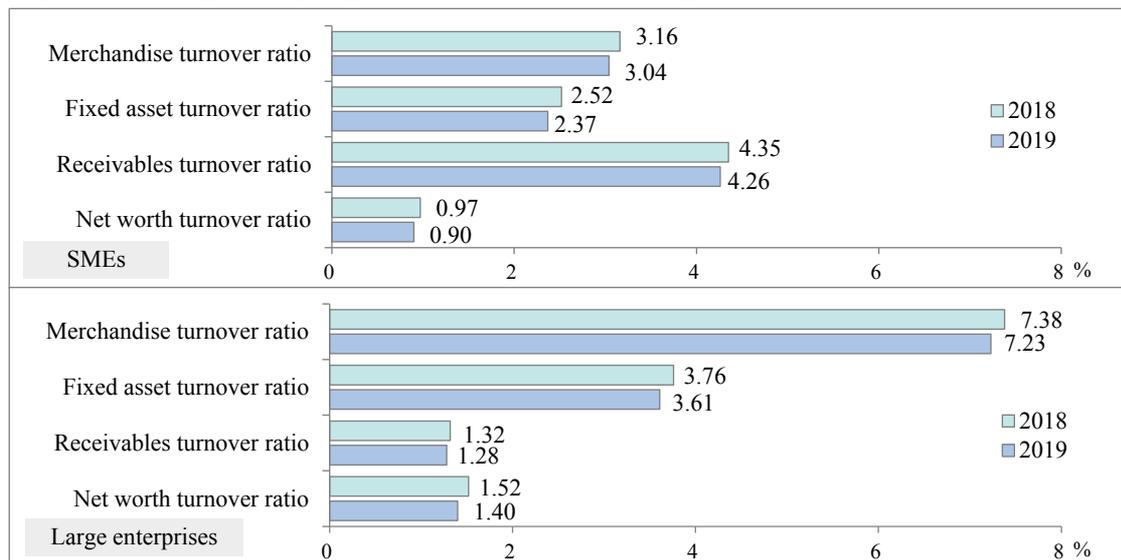
The long-term funds ratio is mainly used to gauge whether a firm’s long-term funding operations are appropriate. Ideally, enterprises should rely mainly on long-term funds for their funding of fixed asset purchases. The fact that both SMEs and large enterprises hit over 100 percent in their long-term funds ratio illustrated that their stability in terms of their long-term funds allocation was above average and better than that for 2018.

### 3. SMEs’ Operational Efficiency Slightly Down

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

Examination of the data in 2019 shows that receivables turnover for SMEs decreased slightly to 4.26 percent in 2019, and merchandise turnover went down slightly to 3.04 percent. In the meantime, receivables turnover for large enterprises was 1.28 percent in 2019, and merchandise turnover was 7.23 percent, suggesting that the SMEs’ merchandise efficiency was slightly up (Figure 2-2-3).

**Figure 2-2-3 Operating Capability of Taiwanese Enterprises, 2018-2019**



Notes: 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

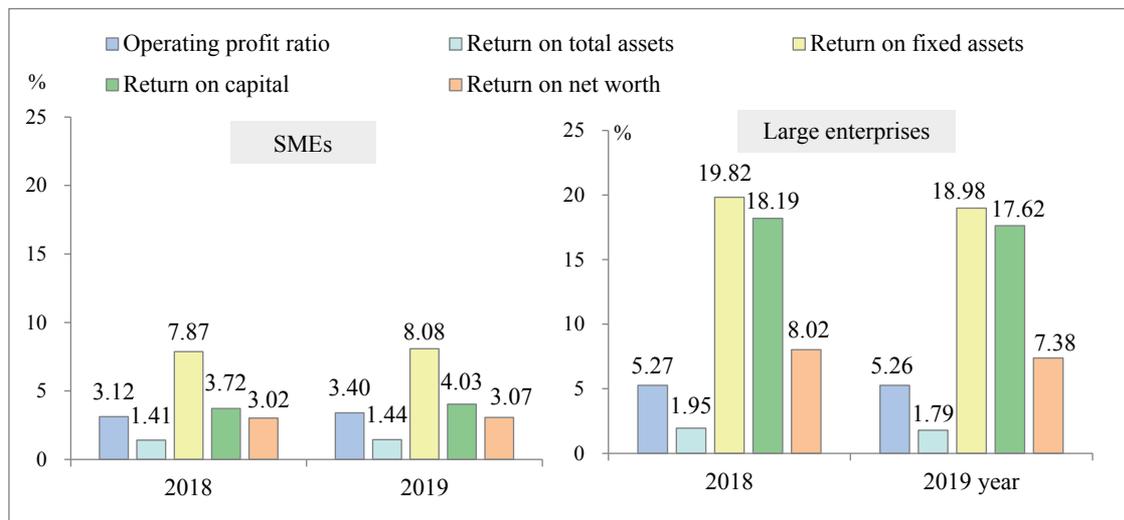
Source: Fiscal Information Agency, Ministry of Finance, Business Income Tax Return data, 2018-2019.

Examination of the net worth turnover and fixed asset turnover indicators shows that, for SMEs, fixed asset turnover declined to 2.37 percent, while net worth turnover declined to 0.90 percent. For large enterprises, fixed asset turnover was 3.61 percent, and net worth turnover fell to 1.40 percent (Figure 2-2-3).

## 4. SMEs' Profitability Went Up

2019 saw all five indicators increasing for SMEs. The operating profit ratio increased to 3.40 percent, the return on total assets increased to 1.44 percent, the return on fixed assets increased to 8.08 percent, the return on capital increased to 4.03 percent, and the return on net worth increased to 3.07 percent. Overall, the SMEs' profitability went up (Figure 2-2-4).

**Figure 2-2-4 Profitability of Taiwanese Enterprises, 2018-2019**



Notes: 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, 2018-2019.

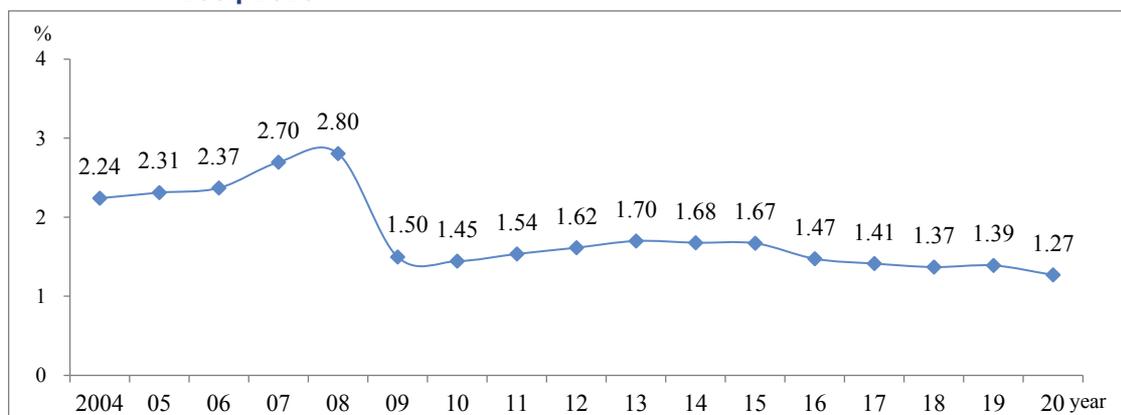
## III SME Funding and Financing

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

### 1. The Borrowing Cost Has Fallen for Five Consecutive Years

The average new loan interest rate of the five major banks has been falling for five consecutive years since 2014. It fell slightly to 1.27% in 2020, while the borrowing cost for all enterprises as a whole has exhibited a downward trend (Figure 2-3-1).

**Figure 2-3-1 Average Interest Rate on New Loans by Taiwan's Five Largest Banks, 2004-2020**



Notes: 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 the Land Bank of Taiwan.

Source: Central Bank of the Republic of China, Statistical database, accessed June 2021.

## 2. SMEs: The Primary Funding Source Was Financial Institutions

SMEs and their owners tend to have insufficient knowledge of the range of financing tools that are now available, and in many cases, they are unable to provide the comprehensive financial statements needed to secure direct financing. As a result, small-sized enterprises' funding sources are mostly limited to borrowings from financial institutions (62.82 percent) and commercial credit (35.70 percent). Medium-sized enterprises' funding sources are also mostly limited to borrowings from financial institutions (51.73 percent) and commercial credit (46.30 percent). Large enterprises' funding sources are not as heavily reliant on indirect financing as those of SMEs, but are still highly dependent on borrowings from financial institutions (39.48 percent) and commercial credit (44.96 percent) (Table 2-3-1).

**Table 2-3-1 Corporate Liability Structure as of the End of 2019**

Unit: 100 million NT\$, %

Item	Large enterprises		Medium-sized enterprises		Small-sized enterprises	
	Amount	Share	Amount	Share	Amount	Share
Total liabilities	251,517	100.00	49,619	100.00	11,991	100.00
Borrowings from financial institutions	99,300	39.48	25,666	51.73	7,533	62.82
Government loans	27	0.01	-	-	-	-
Borrowings from firms and individuals	3,081	1.23	681	1.37	112	0.94
Overseas borrowings	1,742	0.69	-	-	-	-
Transactions with repurchase clause	-	-	-	-	-	-
Short-term bills	7,479	2.97	60	0.12	28	0.23
Domestic corporate bonds	10,731	4.27	-	-	-	-

Item	Large enterprises		Medium-sized enterprises		Small-sized enterprises	
	Amount	Share	Amount	Share	Amount	Share
Overseas securities	411	0.16	-	-	-	-
Commercial credit (Trading liabilities)	113,079	44.96	22,972	46.30	4,281	35.70
Provisions and other liabilities	15,666	6.23	241	0.48	37	0.31

Notes:

1. “-” denotes no data available or data uncertain.

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

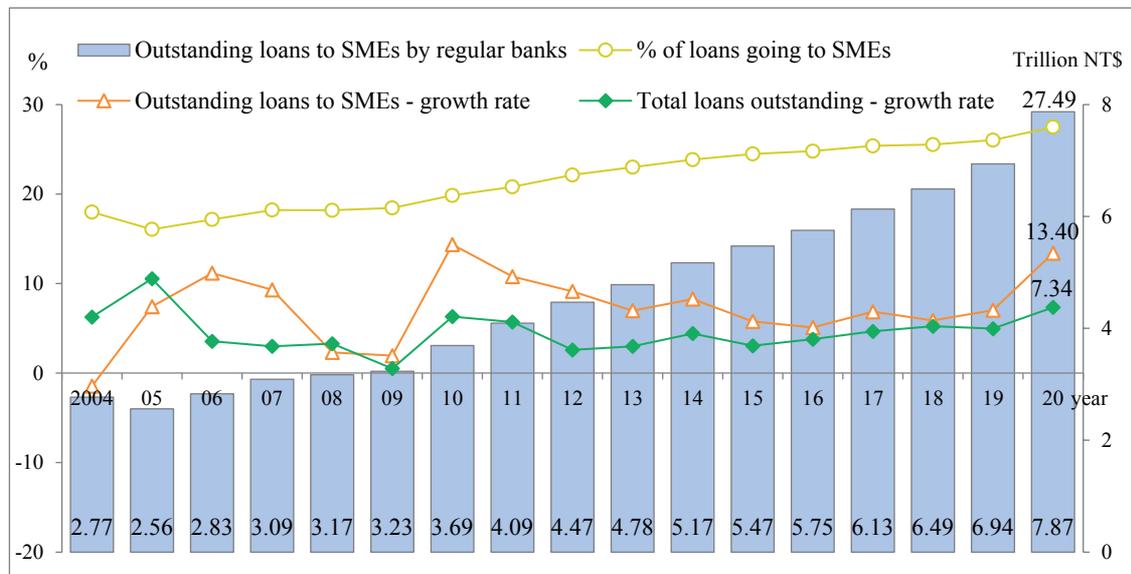
3. An enterprise with total assets of NT\$300 million or more is classified as a large enterprise; a medium-sized enterprise: between NT\$25 million and NT\$300 million; a small enterprise: less than NT\$25 million.

Source: Central Bank of the Republic of China (2020, December). *Survey Report of the Financial Conditions of Private and Public Enterprises*.

### 3. Continuous Increase in Total Bank Loans to SMEs in 2020

At the end of 2020, 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\$7.87 trillion, a record high (Figure 2-3-2).

**Figure 2-3-2 Changes in Bank Loans to SMEs by Regular Banks, 2004-2020**



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

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

### 4. Top 10 Banks Based on SME Loan Balances

The Top 10 banks based on SME loan balances in 2020 were led by First Commercial Bank. Other banks with government ownership included Taiwan Cooperative Bank, Taiwan Business Bank, and Hua Nan Commercial Bank at the top. The Top 10 banks based on loan balances held a combined market share of 68.79 percent, slightly less compared to 2019 (Table 2-3-2).

**Table 2-3-2 Top 10 Banks by Amount of Loans to SMEs in 2020**

Unit: 100 million NT\$, %

Bank	Loans outstanding	Market share	Loans to SMEs as percentage of total loans
<b>Total</b>	54,096.41	68.79	-
First Commercial Bank	7,910.37	10.06	49.70
Taiwan Cooperative Bank	7,623.95	9.69	37.15
Taiwan Business Bank	6,234.04	7.93	55.87
Hua Nan Commercial Bank	5,982.78	7.61	37.50
Mega International Commercial Bank	5,336.01	6.78	39.96
Land Bank of Taiwan	5,307.50	6.75	26.89
Chang Hwa Commercial Bank	4,866.52	6.19	36.50
E. Sun Commercial Bank	4,292.32	5.46	31.03
Bank of Taiwan	4,145.93	5.27	15.15
CTBC Bank	2,396.99	3.05	15.40

Note: “-”: not applicable.

Source: Banking Bureau, Financial Supervisory Commission (2020). *Statistics of Banking Business*.

## 5. Private Banks Active in Lending to SMEs

With the introduction of various government measures to provide preferential loans to SMEs, private banks' SME loans increased substantially in 2019 and 2020 as shown in Financial Supervisory Commission data. In terms of the annual growth rate from 2019 to 2020, the top 10 private banks saw SME loans grow between 3.18 percent and 29.04 percent, with loan balances of between NT\$148 billion and NT\$429 billion (Table 2-3-3).

**Table 2-3-3 Top 10 Private Banks by Amount of Loans to SMEs in 2020**

Unit: 100 million NT\$, %

Bank	Loans outstanding at the end of 2019	Loans outstanding at the end of 2020	Annual growth rate
E. Sun Commercial Bank	3,662.47	4,292.32	17.20
CTBC Bank	2,221.87	2,396.99	7.88
Shanghai Commercial & Savings Bank	2,156.64	2,367.45	9.77
Cathay United Bank	2,094.04	2,283.83	9.06
Bank SinoPac	1,815.28	2,249.15	23.90
Taishin International Bank	1,619.08	2,089.28	29.04
Taipei Fubon Bank	1,710.10	2,063.36	20.66
Taichung Commercial Bank	1,755.93	1,833.49	4.42
Sunny Bank	1,568.44	1,772.75	13.03
Yuanta Bank	1,437.96	1,483.66	3.18

Source: Banking Bureau, Financial Supervisory Commission (2020). *Statistics of Banking Business*.

# CHAPTER 3

## SMEs: Human Resources

The annual growth rate of the labor force in Taiwan has dropped below 1% since 2013 as a result of an aging population. The impact of the COVID-19 epidemic in 2020 also affected the growth of human resources in Taiwan. According to the statistics from the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan, the labor force averaged 11,964 thousand people in 2020, an increase of 18 thousand or 0.15% from 2019. The number of employed persons increased by only 4 thousand or 0.03%, which was a record low growth rate. The labor force participation rate was 59.14%, a slight 0.03% decrease from 2019 and the first decrease in the labor force participation rate since the financial crisis. In addition, the annual average number of unemployed people was 460 thousand in 2020, which was an increase of 14 thousand or 3.14% from the previous year. The average unemployment rate was 3.85%, which was also an increase of 0.12% from the previous year.

This Chapter contains two sections on the overview of human resources in SMEs. Section I focuses on the use of the labor force in SMEs. The characteristics of the employed and unemployed in 2020 (including age, gender, education level, and regional distribution in counties and cities) are evaluated based on size and industry with a comparison of changes. This section will also describe the SMEs' use of foreign labor, part-time workers, temporary workers, or dispatched labor. Section II focuses on the labor conditions in SMEs with a particular focus on the weekly work hours and salary levels by industry. It also provides a summary of recent manpower demand in Taiwan.

In terms of data processing and definitions, the number of employees is used as the standard for defining the size of enterprises for the number of employed persons and the number of paid employees published in this Chapter. On June 24, 2020, the MOEA revised and promulgated the "Standards for Identifying Small and Medium-sized Enterprises" and adjusted the definitions of SMEs. The definitions of SMEs in the manufacturing, mining and quarrying, and construction sectors remained those with fewer than 200 employees, while the criterion for other industries was increased from fewer than 100 employees to fewer than 200 employees. The scope of SMEs in the New Standards is larger than that in the Old Standards. To facilitate comparison with data from the previous year, the statistics from 2020 will be provided based on New and Old Standards as reference for readers.

### I Labor Utilization by SMEs

The distinguishing characteristics of the employed persons, paid employees, and unemployed of SMEs, the characteristics of owners and self-employed, the demand for and use of foreign laborers

by SMEs, and the use of full-time workers, part-time workers, temporary or dispatched labor illustrate the unique characteristics of labor utilization by SMEs. They are described as follows.

## 1. SMEs Continued to Provide Labor Market Stability

Despite the impact of the COVID-19 epidemic in 2020, the total number of employed persons in Taiwan (including employers and self-employed, government-employed, private-employed, and unpaid family workers) rose slightly to 11.504 million, which was an increase of 4 thousand people (or 0.03%) compared to the previous year. 9.311 million people were employed in SMEs defined in accordance with the New System and they accounted for 80.94% of the total number of employed persons in Taiwan. The number would be 9.039 million people employed in SMEs if defined based on the Old System (78.58%). The number of employed persons in large enterprises as defined in the New Standards was 1.168 million (10.16%), whereas the number under the Old Standards would be 1.44 million (12.52%). In addition, the number of government-employed persons totaled 1.024 million (8.91%) (Table 3-1-1).

**Table 3-1-1 Employed Persons and Paid Employees in Taiwan by Enterprise Size, 2019-2020**

Unit: Thousand persons; %

Enterprise size Year  Indicator	All enterprises		SMEs			Large enterprises		
	2019	2020	2019	2020		2019	2020	
				New Standards	Old Standards		New Standards	Old Standards
<b>No. of employed persons</b>	11,500	11,504	9,054	9,311	9,039	1,429	1,168	1,440
Share of total	100.00	100.00	78.73	80.94	78.58	12.42	10.16	12.52
Annual growth rate	0.58	0.03	0.99	-	-0.17	-1.48	-	0.77
<b>No. of paid employees</b>	9,147	9,178	6,702	6,986	6,716	1,427	1,167	1,437
Share of total	100.00	100.00	73.27	76.12	73.18	15.60	12.72	15.66
Annual growth rate	0.71	0.34	1.30	-	0.21	-1.44	-	0.70

Notes:

1. The SMEs in terms of the number of employed and number of employees in the table are based on the New Standards established in accordance with Article 2 of the "Standards for Identifying Small and Medium-sized Enterprises" revised and promulgated by the MOEA on June 24, 2020. They include businesses in all industries that hire fewer than 200 regular employees; The Old Standards were based on Article 2 of the "Standards for Identifying Small and Medium-sized Enterprises" revised and promulgated by the Ministry of Economic Affairs on March 30, 2015. They included businesses in the manufacturing, construction, and mining and quarrying sectors that hired fewer than 200 regular employees; and businesses in other industries that hired fewer than 100 regular employees.
2. The data up to and including 2019 in the table are defined based on the Old Standards.
3. "-": not applicable.
4. The number of employed persons includes employers, persons who are self-employed, government-employed, or privately employed, and unpaid family workers. Paid employees include employees of the government and the private sector.
5. The number of people employed and the number of employees also include people whose household registration is in Taiwan and who work (are employed) in Taiwan, and are assigned to Mainland China (including Hong Kong and Macau) or a foreign country to work.

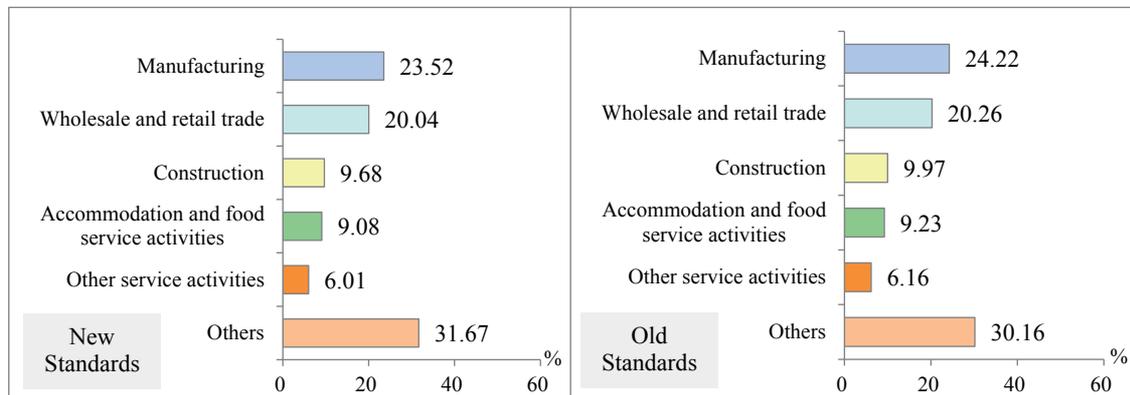
Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2019-2020.

By using the same basis for comparison and adopting the Old Standards, the number of employed persons in SMEs decreased by 15 thousand or 0.17% in 2020 compared to 2019, while the number of employed persons in large enterprises increased by 11 thousand or 0.77%, and the number of employed persons in government agencies increased by 6 thousand or 0.59%. The number of employed persons in SMEs in Taiwan has increased slightly each year over a long

period. The number of employed persons in SMEs continued to increase during the financial crisis. The impact of the epidemic in 2020 resulted in the first instance of negative growth in the number of employed persons in SMEs. However, the number of employed persons in large enterprises and government agencies maintained positive growth, indicating that the epidemic had a greater impact on SMEs than on large enterprises (Table 3-1-1).

In terms of industries, the rankings of the number of employed persons in SMEs under both the New Standards and Old Standards were the same in 2020. Manufacturing topped the charts with 2.19 million, equivalent to 23.52% under the New Standards and 24.22% under the Old Standards. It was followed by wholesale and retail trade with 1.866 million (20.04%) under the New Standards and 1.831 million (20.26%) under the Old Standards. Construction ranked third with 901 thousand or 9.68% under the New Standards and 9.97% under the Old Standards (Figure 3-1-1 and Appendix C Table C-5).

**Figure 3-1-1 Breakdown of SME Employees by Industry, 2020**



Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2020.

The industry composition of the number of employed persons in SMEs in 2020 was similar to that of 2019, except for the replacement of the industry ranked in 5th place (agriculture, forestry, fishing and animal husbandry in 2019 was replaced by other service activities in 2020). As a result of the impact of the epidemic, the number of employed persons in manufacturing and wholesale and retail trade, two of the top five industries, decreased from 2019.

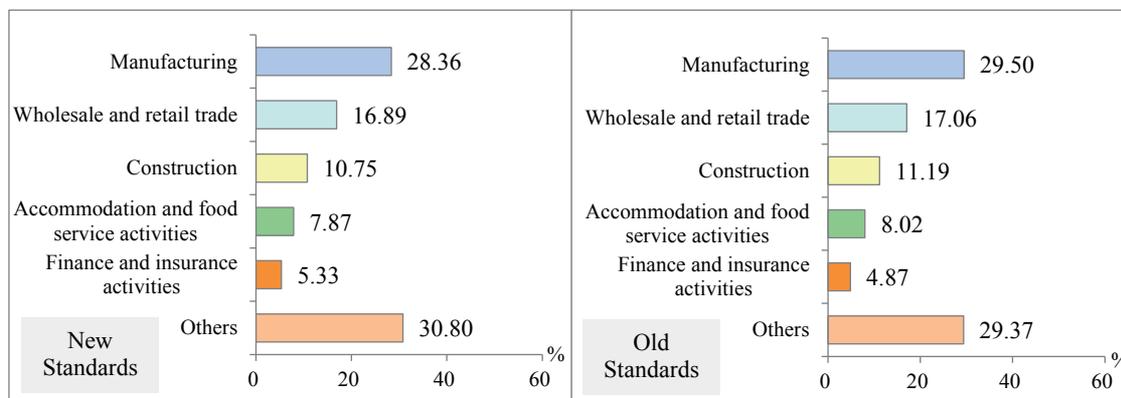
## 2. The Share of Paid Employees Working in SMEs Has Risen Consistently in 2020

The number of paid employees in Taiwan (including those employed by the government and private sector) totaled 9.178 million, which was an increase of 31 thousand persons compared to 2019 with a growth rate of approximately 0.34%. The number of paid employees in SMEs defined based on the New Standards was 6.986 million, which accounted for 76.12% of the total number of paid employees in Taiwan; the number of such employees based on the Old Standards would be 6.716 million (73.18%) (Table 3-1-1).

If the same basis of comparison and the Old Standards are adopted for calculations, the number of paid employees of SMEs in 2020 increased by 14 thousand compared to 2019 with a growth rate of 0.21%. The number of paid employees of large enterprises and the government increased by 10 thousand (or 0.70%) and 6 thousand (or 0.59%), respectively. In fact, the number of paid employees in SMEs has increased each year over a long period. Despite the impact of the epidemic in 2020, the number of paid employees in SMEs continued to increase, but the growth rate was the lowest ever recorded (Table 3-1-1).

In terms of industries, the rankings of the number of paid employees in SMEs under both the New Standards and Old Standards were the same in 2020. Manufacturing topped the charts with 1.981 million, equivalent to 28.36% under the New Standards and 29.50% under the Old Standards. It was followed by wholesale and retail trade with 1.18 million (16.89%) under the New Standards and 1.145 million (17.06%) under the Old Standards. Construction ranked third with 751 thousand or 10.75% under the New Standards and 11.19% under the Old Standards. Overall, the number of paid employees in SMEs by industry in 2020 was similar to that in 2019 (Figure 3-1-2 and Appendix C Table C-6).

**Figure 3-1-2 Breakdown of Paid SME Employees by Industry, 2020**

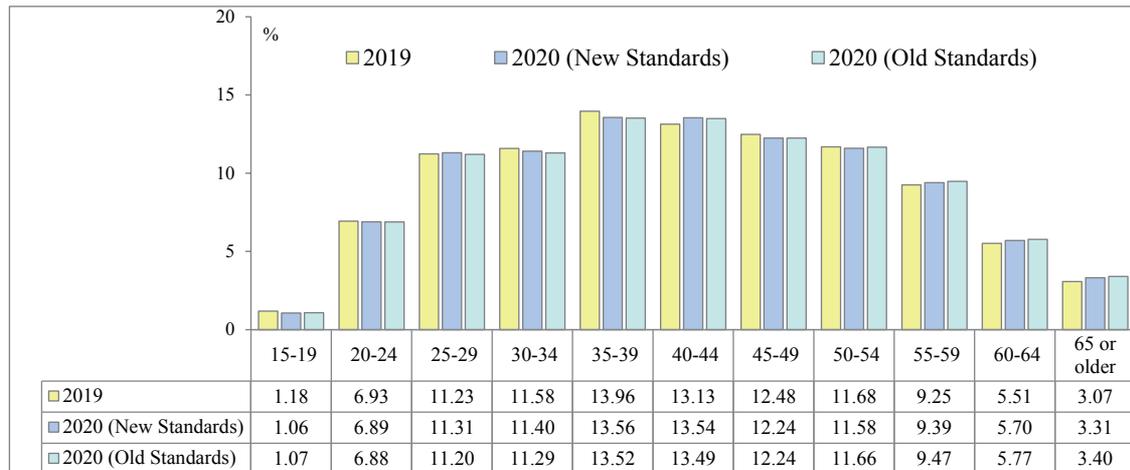


Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2020.

### 3. SME Manpower Structure Continued to Rise in Age and Education

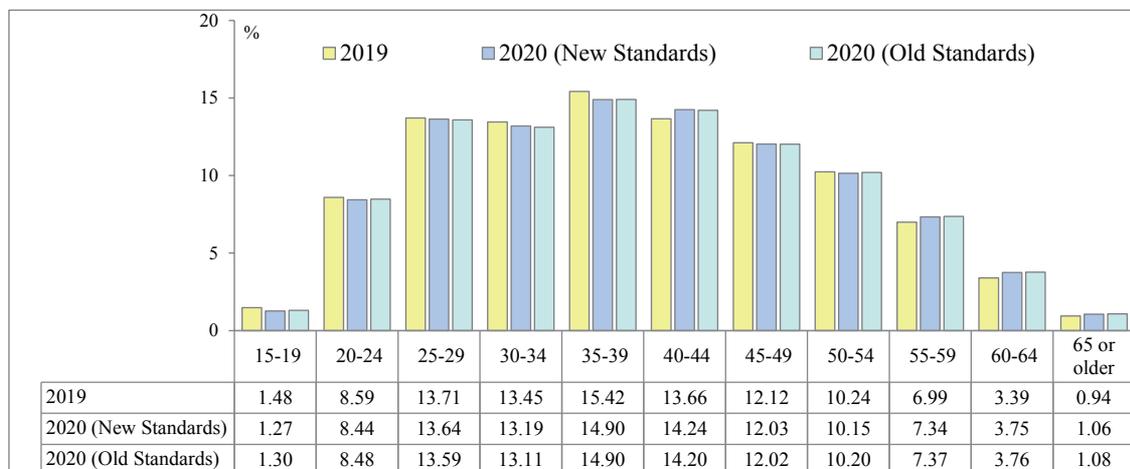
In terms of the age structure of paid employees in SMEs in 2020, the top 3 age groups under the New Standards were the 35 to 39, 40 to 44, and 45 to 49 age groups, which accounted for 13.56%, 13.54%, and 12.24%, respectively, of the total. The top 3 groups were the same based on both the Old and New Standards and their percentages are also similar (Figure 3-1-3).

As for the age distribution of paid employees of SMEs in 2020, the first 2 of the top 3 groups under the New Standards were the same, with those aged 35 to 39 accounting for the highest percentage of paid employees at 14.90%; they were followed by those aged 40 to 44 which accounted for 14.24%; the third group was those aged 25 to 29 with 13.64%. The top 3 groups were also the same based on both the Old and New Standards and their percentages are also similar (Figure 3-1-4).

**Figure 3-1-3 Age Structure of SME Employees, 2019-2020**

Notes: The data up to and including 2019 in the figure are defined based on the Old Standards.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2020.

**Figure 3-1-4 Age Structure of Paid SME Employees, 2019-2020**

Notes: The data up to and including 2019 in the figure are defined based on the Old Standards.

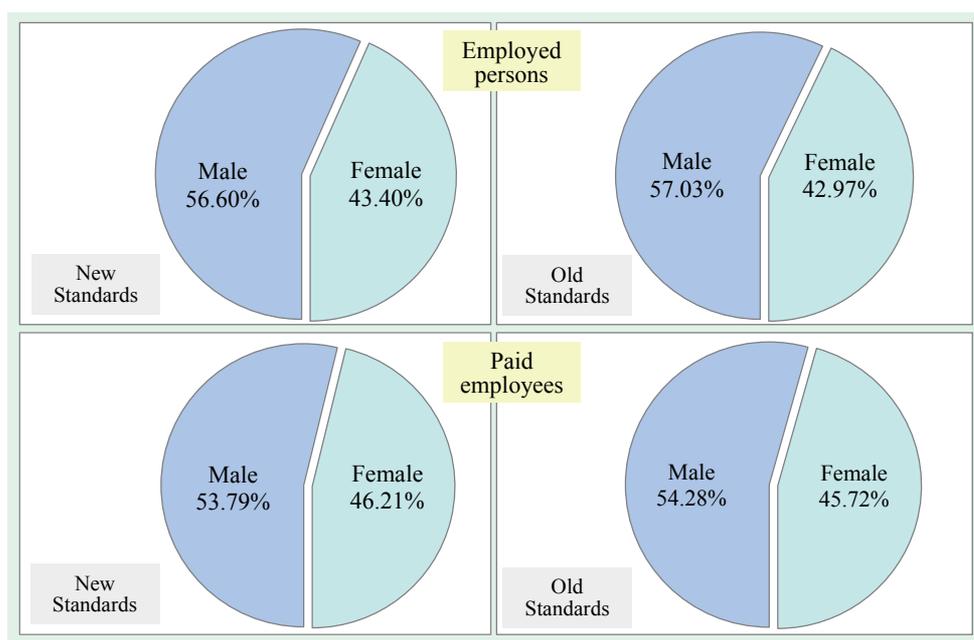
Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2020.

By examining the age structure of the number of employed persons and number of paid employees in SMEs, we can see that the percentage of employed persons and paid employees resulted in an inverted U-shaped distribution. The percentages of the employed persons and paid employees increased with age at the beginning, but the percentage fell with age after reaching the peak. In 2020, the share of both the employed persons and paid employees in SMEs peaked at 35 to 39 years old. In addition, the percentage of middle-aged and elderly employed persons and paid employees over the age of 55 in SMEs increased each year, indicating that the labor force in Taiwan has gradually aged (Figure 3-1-3 and Figure 3-1-4).

In terms of the gender composition, the percentage of males in SMEs is higher than the percentage of women in terms of both the number of employed persons and paid employees in

2020. According to the New Standards, the number of employed persons and paid employees accounted for 56.60% and 53.79%, respectively; according to the Old Standards, they were 57.03% and 54.28%, respectively. However, the percentage of female employed persons and paid employees in 2020 increased slightly from 2019 (Figure 3-1-5).

**Figure 3-1-5 Male/Female Ratio of Employed Persons and Paid Employees Working in SMEs, 2020**



Note: In 2019, 57.11% of the employed persons in SMEs were male and 42.89% were female; 54.35% of paid employees were male and 45.65% were female.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2020.

As for education, the top three groups in terms of the level of education of SME employees in 2020 were senior high school, university, and junior college, which accounted for 35.32%, 26.19%, and 15.27%, respectively, under the New Standards. The top 3 groups based on the Old Standards were the same as those based on the New Standards (Table 3-1-2).

The top 3 groups of paid employees in SMEs in terms of education level in 2020 were the same as those employed by SMEs. They were, in descending sequence, senior high school, university, and junior college, which accounted for 34.22%, 30.30%, and 15.83%, respectively, under the New Standards; the top 3 groups based on the Old Standards were the same as those based on the New Standards (Table 3-1-2).

By examining the changes in the education levels of the employed persons and paid employees, we found that the percentages of both the employed persons and paid employees with a junior college degree or above in 2020 increased from 2019, indicating that the employed persons and paid employees in SMEs have become more educated.

**Table 3-1-2 Educational Structure of Employed Persons and Paid Employees Working in SMEs, 2019-2020**

Unit: %

Education	Item Year	Employed persons			Paid Employees		
		2019	2020		2019	2020	
			New Standards	Old Standards		New Standards	Old Standards
Illiterate		0.17	0.10	0.11	0.06	0.05	0.05
Self-taught		0.02	0.02	0.02	0.01	0.01	0.01
Elementary school		6.39	5.76	5.92	3.61	3.14	3.24
Junior high school		12.91	12.08	12.38	11.30	10.46	10.79
Senior high school education		35.95	35.32	35.89	35.15	34.22	34.94
Senior high school		9.35	-	-	9.16	-	-
Senior vocational school		26.60	-	-	25.99	-	-
Junior college		15.18	15.27	15.21	15.64	15.83	15.78
University		24.79	26.19	25.63	29.03	30.30	29.71
Master's		4.34	4.90	4.55	4.96	5.61	5.18
Ph.D.		0.24	0.35	0.28	0.25	0.39	0.30

Notes:

1. The data up to and including 2019 in the table are defined based on the Old Standards.

2. "-": not applicable.

3. Senior high schools and vocational high schools were integrated into senior high schools starting from 2020.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2019-2020.

#### 4. More than 70% of Employed Persons and Paid Employees of SMEs Were Concentrated in the Six Metropolitan Areas

According to the distribution of employed persons and paid employees of SMEs in Taiwan in 2020 based on definitions in the New Standards, more than 70% were concentrated in the six metropolitan areas. The number of employed persons in SMEs was higher in New Taipei City and Taipei City, with 1.491 million people and 1.452 million people, respectively (they accounted for 16.01% and 15.59%, respectively). The number of employed persons in large enterprises was higher in Taoyuan City and Taipei City, with 206 thousand and 183 thousand, respectively (17.64% and 15.67%, respectively) (Table 3-1-3).

In 2020, Taipei City and New Taipei City had the highest number of paid employees in SMEs. They included 1.236 million and 1.206 million people, respectively (17.69% and 17.26%, respectively). The top 2 regions were the same as those of employed persons of SMEs but the ranking was different. Large enterprises with higher numbers of paid employees were mostly distributed in Taoyuan City and Taipei City with 206 thousand and 183 thousand, respectively (17.65% and 15.68%, respectively). The ranking was the same as that for employed persons of large enterprises) (Table 3-1-4).

**Table 3-1-3 Number of Employed Persons by Region, 2020**

Unit: Thousand persons; %

Enterprise size City or Country	Total	SMEs		Large enterprises		Government employment	
			Share		Share		Share
Total	11,504	9,311	100.00	1,168	100.00	1,024	100.00
Taipei City	1,881	1,452	15.59	183	15.67	246	24.02
New Taipei City	1,683	1,491	16.01	81	6.93	112	10.94
Taoyuan City	1,105	822	8.83	206	17.64	78	7.62
Taichung City	1,485	1,264	13.58	124	10.62	98	9.57
Tainan City	967	779	8.37	120	10.27	69	6.74
Kaohsiung City	1,313	1,069	11.48	134	11.47	110	10.74
6 cities combined	8,434	6,877	73.86	848	72.60	713	69.63
Other cities combined	3,070	2,434	26.14	320	27.40	311	30.37

Note: The data in the table are defined based on the New Standards.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data, 2020.**Table 3-1-4 Number of Paid Employees by Region, 2020**

Unit: Thousand persons; %

Enterprise size City or Country	Total	SMEs		Large enterprises		Government employment	
			Share		Share		Share
Total	9,178	6,986	100.00	1,167	100.00	1,024	100.00
Taipei City	1,665	1,236	17.69	183	15.68	246	24.02
New Taipei City	1,398	1,206	17.26	81	6.94	112	10.94
Taoyuan City	950	666	9.53	206	17.65	78	7.62
Taichung City	1,179	958	13.71	124	10.63	98	9.57
Tainan City	743	554	7.93	120	10.28	69	6.74
Kaohsiung City	1,051	807	11.55	134	11.48	110	10.74
6 cities combined	6,986	5,427	77.68	848	72.66	713	69.63
Other cities combined	2,192	1,559	22.32	319	27.34	311	30.37

Note: The data in the table are defined based on the New Standards.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data, 2020.

## 5. The Number of SME Employers Decreased Slightly with Younger Employers and a Broader Education Distribution

Employers refer to employed persons who operate or jointly operate businesses with partners and hire others to assist in work. Based on the Old Standards, the number of SME employers totaled 445 thousand in 2020, which was a slight decrease of approximately 1,920 from 2019 with a decrease of 0.43%. The number of employers of large enterprises totaled 1,910 which was an increase of 590 persons or 44.71% compared to the previous year (Table 3-1-5).

In terms of the age composition under the New Standards, employers of SMEs under the age of 45 in 2020 accounted for 29.52%, but no employer of any large enterprise was under the age of 45. This shows that owners of SMEs are relatively younger than those of large enterprises (Table 3-1-5).

As for education, the top three groups in terms of the level of education of SME employers in

2020 were senior high school, university, and junior college, which accounted for 35.88%, 19.17%, and 18.26%, respectively, under the New Standards. Those with a university degree or higher (including bachelor, master's, and PhD degrees) accounted for 26.61%. Most employers of large enterprises had a degree from a university or above with 78.12% being recorded. Overall, the distribution of the education level of SME employers in 2020 was more diverse than that of employers of large enterprises, who generally have more education than SME employers (Table 3-1-5).

**Table 3-1-5 Characteristics of Employers by Enterprise Size, 2019-2020**

Unit: Thousand persons; %

Item	Year Enterprise size	2019		2020			
		SMEs	Large enterprises	SMEs		Large enterprises	
				New Standards	Old Standards	New Standards	Old Standards
No. of employers		446.63	1.32	445.49	444.71	1.13	1.91
Share of total		99.71	0.29	99.75	99.57	0.25	0.43
Age		100.00	100.00	100.00	100.00	100.00	100.00
15 – 19		0.01	-	-	0.00	-	-
20 – 24		0.33	-	0.47	0.47	-	-
25 – 29		1.78	-	2.12	2.13	-	-
30 – 34		5.06	-	5.38	5.39	-	-
35 – 39		9.35	-	8.90	8.89	-	6.73
40 – 44		13.44	-	12.65	12.63	-	9.99
45 – 49		15.74	20.08	15.47	15.46	10.94	15.61
50 – 54		19.34	37.71	18.89	18.90	22.90	17.92
55 – 59		17.74	14.01	18.08	18.08	38.85	31.49
60 – 64		11.38	18.68	11.43	11.45	17.22	10.19
65 or older		5.83	9.52	6.59	6.59	10.08	8.08
Sex		100.00	100.00	100.00	100.00	100.00	100.00
Male		78.89	87.12	79.47	79.44	91.09	91.87
Female		21.11	12.88	20.53	20.56	8.91	8.13
Education		100.00	100.00	100.00	100.00	100.00	100.00
Illiterate		0.05	-	-	-	-	-
Self-taught		0.02	-	0.03	0.03	-	-
Elementary school		6.78	2.48	6.92	6.93	-	-
Junior high school		13.39	-	12.30	12.32	-	-
Senior high school education		35.90	25.43	35.88	35.94	12.94	7.66
Senior high school		9.09	12.78	-	-	-	-
Senior vocational school		26.81	12.65	-	-	-	-
Junior college		20.02	16.00	18.26	18.28	8.94	8.15
University		17.05	38.16	19.17	19.09	55.72	59.44
Master's		6.04	16.10	6.72	6.68	17.96	22.13
Ph.D.		0.74	1.83	0.72	0.72	4.44	2.63

Notes:

1. The data prior to 2019 in the table are defined based on the Old Standards.

2. “-”: not applicable.

3. Senior high schools and vocational high schools were integrated into senior high schools starting from 2020.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2019-2020.

## 6. The Number of Self-employed Persons Fell Slightly; the Share of Self-employed with a Junior College, University, or Higher Education Increased in 2020

Self-employed persons refer are those who are independently engaged in labor or technical work in return for payment and those who do not have any paid employees to assist in work. As the self-employed operate small-scale businesses, they are all considered SMEs. The number of self-employed persons in Taiwan had fallen slowly since 2011 but has increased since 2015. However, the impact of the epidemic in 2020 reduced the number of self-employed persons by 6 thousand compared to 2019.

In terms of age structure, the largest number of self-employed persons in 2020 consisted of those aged 50 to 54 (16.24%). They were followed by those aged 55 to 59 (16.18%) and those aged 60 to 64 (12.96%). It is worth noting that there were more young self-employed persons in 2020, and the percentage of self-employed persons under the age of 35 was higher than that in 2019 (Table 3-1-6).

**Table 3-1-6 Characteristics of Self-employed Persons, 2019-2020**

Unit: Thousand persons; %

Item \ Year	2019	2020
No. of self-employed persons	1,326	1,320
Age	100.00	100.00
15 – 19	0.04	0.10
20 – 24	1.10	1.28
25 – 29	3.23	3.43
30 – 34	5.22	5.27
35 – 39	8.91	8.70
40 – 44	11.11	10.84
45 – 49	13.44	12.50
50 – 54	16.19	16.24
55 – 59	16.46	16.18
60 – 64	12.95	12.96
65 or older	11.36	12.50
Sex	100.00	100.00
Male	74.53	74.16
Female	25.47	25.84
Education	100.00	100.00
Illiterate	0.55	0.28
Self-taught	0.06	0.07
Elementary school	18.08	17.03
Junior high school	20.43	19.52
Senior high school education	36.50	37.48
Senior high school	9.29	-
Senior vocational school	27.21	-

Item	Year	2019	2020
	Junior college		12.51
University		9.72	10.96
Master's		2.03	2.04
Ph.D.		0.13	0.15

## Notes:

1. As the self-employed operate small-scale businesses, they are all considered SMEs and there are no differences between the New and Old Standards.

2. "-": not applicable.

3. Senior high schools and vocational high schools were integrated into senior high schools starting from 2020.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data, 2019-2020.

In terms of the distribution of education, the highest percentage of self-employed persons in 2020 consisted of those with a senior high school education with 37.48%. They were followed by those with a junior high school education (19.52%), and those with an elementary school education (17.03%). Compared to 2019, the percentage of self-employed persons with a university degree or higher increased to 13.15% in 2020, up from 11.88% in 2019 (Table 3-1-6).

## 7. The Number of Unemployed Persons Previously Working for SMEs Increased by 14 thousand in 2020

Due to the impact of the epidemic, the number of unemployed persons totaled 460 thousand, which was an increase of approximately 14 thousand people or 3.28% from 2019. The average unemployment rate was 3.85%, which was an increase of 0.12% compared to 2019.

In terms of the size of the enterprises in which the unemployed persons previously worked, by comparing between different years based on the same benchmarks in the Old Standards, the number of unemployed persons who previously worked in SMEs before 2020 was 308 thousand. It was an increase of approximately 23 thousand people or 8.07% from 285 thousand in 2019. The number of unemployed persons who previously worked in large companies totaled 35 thousand in 2020, which was a 5.41% decrease compared to 37 thousand in 2019. The number of unemployed persons who previously worked in government agencies totaled 15 thousand, which was a decrease of 2 thousand (or 11.76%) compared to 2019. In addition, 102 thousand of the unemployed were first-time job seekers, which was a decrease of 5 thousand people (or 4.67%) from 2019 (Table 3-1-7).

In terms of the age structure of the unemployed, calculations based on the New Standards showed that those aged 25 to 29 accounted for the largest percentage (18.00%) of those whose previous employers were SMEs. They were followed by those aged 35 to 39 (14.07%). Those aged 30 to 34 accounted for the largest percentage (20.49%) of those whose previous employers were large enterprises. They were followed by those aged 40 to 44 (19.55%). Those aged 25 to 29 accounted for the largest percentage (36.01%) of those whose previous employers were government agencies. In addition, those aged 20 to 24 accounted for the largest percentage (60.86%) of those who were first-time job seekers. In terms of gender, except for cases where unemployed women who were previously employed by government agencies accounted for a higher percentage

than men, men accounted for a higher ratio in all other categories (Table 3-1-7).

**Table 3-1-7 Characteristics of the Unemployed by Enterprise Size, 2019-2020**

Unit: Thousand persons; %

Item	Year Enterprise size	2019				2020					
		SMEs	Large enter- prises	Govern- ment	First time job- seekers	SMEs		Large enterprises		Govern- ment	First time job- seekers
						New Standards	Old Standards	New Standards	Old Standards		
No. of the unemployed		285	37	17	107	316	308	27	35	15	102
Share of total		63.90	8.30	3.81	23.99	68.70	66.96	5.87	7.61	3.26	22.17
Age		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
15 – 19		1.16	0.62	0.00	7.44	0.58	0.57	0.18	0.29	0.00	7.12
20 – 24		12.05	9.00	8.46	62.80	11.67	11.61	10.83	11.52	4.83	60.86
25 – 29		19.77	20.91	26.45	23.69	18.00	18.11	14.18	14.02	36.01	25.69
30 – 34		12.66	16.99	14.67	2.28	13.14	13.26	20.49	17.89	12.57	3.40
35 – 39		14.46	22.58	18.55	2.42	14.07	13.79	16.08	18.06	16.33	1.26
40 – 44		12.74	16.10	9.86	0.49	12.58	12.67	19.55	17.29	11.50	0.22
45 – 49		9.11	7.21	3.90	0.34	9.66	9.59	8.91	9.73	7.50	0.89
50 – 54		7.97	4.55	12.08	0.54	9.15	9.19	4.84	5.40	3.91	0.51
55 – 59		5.53	1.77	1.60	-	6.25	6.30	4.11	4.12	6.72	0.02
60 – 64		4.20	0.26	4.42	-	4.49	4.48	0.84	1.69	0.55	0.02
65 or older		0.35	0.02	0.01	-	0.40	0.41	0.00	0.00	0.08	0.00
Sex		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Male		59.46	57.09	46.59	53.06	57.55	57.59	63.67	62.02	41.36	53.39
Female		40.54	42.91	53.41	46.94	42.45	42.41	36.33	37.98	58.64	46.61
Education		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Illiterate		-	-	-	-	0.01	0.01	0.00	0.00	0.00	0.00
Self-taught		-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00
Elementary school		4.84	0.06	2.75	0.27	3.56	3.64	0.00	0.00	1.46	0.00
Junior high school		12.97	3.75	2.40	1.19	11.71	11.86	3.88	4.26	1.69	1.46
Senior high school education		36.33	26.22	19.64	17.26	34.38	34.47	27.19	27.91	18.60	16.64
Senior high school		9.59	5.59	1.66	5.94	-	-	-	-	-	-
Senior vocational school		26.74	20.63	17.98	11.32	-	-	-	-	-	-
Junior college		12.82	19.79	11.97	4.06	12.55	12.56	15.12	14.50	15.55	4.89
University		29.87	38.06	45.24	65.25	33.92	33.76	39.04	39.36	41.77	63.92
Master's		3.05	12.12	16.82	11.45	3.58	3.49	14.69	13.17	20.92	12.92
Ph.D.		0.13	-	1.16	0.52	0.28	0.20	0.08	0.79	0.00	0.16

Notes:

1. The categories in the table are the sizes of the former employers of the unemployed.
2. "-": not applicable.
3. The data prior to 2019 in the table are defined based on the Old Standards.
4. Senior high schools and vocational high schools were integrated into senior high schools starting from 2020.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data, 2019-2020.

In terms of the education level of the unemployed, according to the New Standards, the highest percentage of the unemployed who were previously employed in SMEs had a senior high school education and were followed by those with a university education, their shares being 34.38% and

33.92%, respectively. Among the unemployed previously employed by large enterprises, those with a university education accounted for the highest percentage and were followed by those with a senior high school education with shares of 39.04% and 27.19%, respectively. Overall, the age and education composition of unemployed persons in 2020 showed that the number of unemployed in the domestic labor market was relatively high among young people and those with a university degree (Table 3-1-7).

As for the reasons for leaving their previous jobs, regardless of the size of the company they worked for in 2020, the largest number of unemployed people who voluntarily left their jobs in 2020 were those who were dissatisfied with their old jobs. Calculations based on the New Standards showed that SMEs and large enterprises accounted for 48.15% and 58.02% of such people, respectively. For those who were previously employed by government agencies, the main cause of their unemployment was the “end of seasonal or temporary jobs” (70.95%) (Table 3-1-8).

**Table 3-1-8 Reasons for Leaving Previous Jobs by Enterprise Size, 2019-2020**

Unit: %

Item	Year		Enterprise size						
	2019			2020					
	SMEs	Large enterprises	Government	SMEs		Large enterprises		Government	
			New Standards	Old Standards	New Standards	Old Standards			
Downsizing or out of business	32.89	26.73	7.05	39.02	39.09	29.78	31.18	3.49	
Dissatisfaction with previous jobs	51.10	62.71	29.29	48.15	47.98	58.02	57.45	19.85	
Poor health	1.30	3.06	0.87	1.82	1.86	3.27	2.61	0.34	
End of seasonal or temporary jobs	11.33	3.29	57.72	8.32	8.36	3.33	4.04	70.95	
Women: marriage or giving birth	0.89	0.57	0.00	0.45	0.46	0.80	0.63	0.00	
Retired	0.12	0.52	0.56	0.06	0.07	0.49	0.39	1.37	
Housework too busy	0.95	1.82	0.44	0.96	0.96	0.84	0.90	0.89	
Taking care of children under the age of 12	0.23	0.14	0.23	0.15	0.15	0.21	0.16	0.26	
Taking care of elderly family members over the age of 65	0.43	0.78	0.21	0.49	0.50	0.00	0.00	0.19	
Housework	0.29	0.90	0.00	0.32	0.30	0.63	0.73	0.43	
Others	1.42	1.30	4.07	1.22	1.24	3.48	2.79	3.11	

Notes:

1. The categories in the table are the sizes of the former employers of the unemployed.

2. The data prior to 2019 in the table are defined based on the Old Standards.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data, 2019-2020.

## 8. Nearly 60 Percent of Foreign Employees Work in SMEs

The number of foreign laborers in domestic companies continued to increase in 2020. According to statistics compiled by the Ministry of Labor, there were more than 709 thousand foreign employees in Taiwan as of the end of December 2020. The number of foreign employees in manufacturing and construction totaled 445,576, which was an increase of 1,466 people or 0.33% compared to 2019. Regardless of the size of the enterprises, the number of foreign employees in Taiwan in 2020 increased from 2019 with an increase of 1,060 people in SMEs and 406 people in large enterprises. The growth rate in the SMEs' use of foreign employees (0.41%) was slightly

higher than that for large enterprises (0.22%) (Table 3-1-9).

**Table 3-1-9 Number of Foreign Workers by Enterprise Size, 2016-2020**

Unit: Persons; %

Year \ Enterprise Size	Total	SMEs	Large enterprises
2016	376,605	215,145 (57.13)	161,460 (42.87)
2017	413,685	233,480 (56.44)	180,205 (43.56)
2018	436,118	250,155 (57.36)	185,963 (42.64)
2019	444,110	256,654 (57.79)	187,456 (42.21)
2020	445,576	257,714 (57.84)	187,862 (42.16)

Notes:

1. Figures only include foreign workers in both the manufacturing and construction industries. Hence, an SME here is defined as an enterprise with fewer than 200 regular employees in the mining and quarrying, manufacturing, and construction industries.
2. Figures in parentheses denote the share of the total based on enterprise size.

Source: Figures were provided by the Workforce Development Agency, Ministry of Labor, 2020.

## 9. SMEs Reduced the Use of Part-time Workers

SMEs had a higher demand for part-time workers compared to large enterprises and government agencies in 2020. A comparison between different years with the same benchmarks based on the Old Standards showed that as a result of the epidemic, SMEs employed approximately 381 thousand part-time workers in 2020, a decrease of 16 thousand compared to 2019. Large enterprises employed approximately 18 thousand part-time workers, which was an increase of 10 thousand compared to 2019. Government agencies employed 22 thousand part-time workers which was a slight increase of 3 thousand compared to 2019 (Table 3-1-10).

The number of full-time workers employed by SMEs under the Old Standards totaled 8.602 million, which was an increase of 23 thousand compared to 2019. The number of full-time workers employed by large enterprises totaled 1.441 million, which was a decrease of 40 thousand compared to 2019. In addition, the number of full-time workers in government agencies totaled 998 thousand, which was a slight decrease of 1 thousand compared to 2019 (Table 3-1-10).

A comparison of the full-time and part-time workers in 2020 shows that the SMEs' use of part-time workers accounted for 4.22% of overall hiring under the New Standards and 4.24% of overall hiring under the Old Standards, a 0.34% decrease compared to the previous year. The numbers of part-time workers in large enterprises and their ratios in overall hiring based on the New and Old Standards were 0.68% and 1.23%, respectively. The percentage of part-time workers in government agencies was 2.16% (Table 3-1-10).

In terms of the industry type, the highest number of part-time workers hired by SMEs based on the New Standards were in wholesale and retail trade and they were followed by accommodation and food service activities. They totaled 92 thousand and 83 thousand, respectively (Table 3-1-10). In terms of the employment ratio of part-time workers to the total workers in the industry, the education sector had the highest percentage, followed by accommodation and food service activities and support service activities in the third, accounting for 11.79%, 9.90%, and 7.34%, respectively.

**Table 3-1-10 Full-time and Part-time Manpower Utilization by Industry and Enterprise Size, 2020**

Unit: Thousand persons

Enterprise Size Item Industry	SMEs				Large enterprises				Government	
	New Standards		Old Standards		New Standards		Old Standards		Full-time	Part-time
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time		
Total	8,876	391	8,602	381	1,167	8	1,441	18	998	22
Increase and decrease compared to the previous year	-	-	23	-16	-	-	-40	10	-1	3
Share	95.78	4.22	95.76	4.24	99.32	0.68	98.77	1.23	97.84	2.16
Agriculture, forestry, fishing and animal husbandry	529	10	527	10	-	-	2	-	6	-
Mining and quarrying	4	-	4	-	-	-	0	-	0	-
Manufacturing	2,157	37	2,157	37	826	4	826	4	14	-
Electricity and gas supply	7	-	5	-	2	-	4	-	22	-
Water supply and remediation activities	37	-	36	-	2	-	2	-	46	0
Construction	854	39	854	39	12	-	12	-	6	-
Wholesale and retail trade	1,769	92	1,738	91	24	-	56	1	10	0
Transportation and storage	351	10	320	10	37	-	68	-	53	2
Accommodation and food service activities	755	83	745	83	7	-	17	0	0	-
Information and communication	221	6	193	6	37	1	65	1	0	-
Finance and insurance activities	369	4	316	4	39	1	92	1	18	-
Real estate activities	102	1	102	1	2	-	3	-	0	-
Professional, scientific and technical activities	317	7	288	7	29	-	58	0	29	-
Support service activities	265	21	256	20	8	-	18	1	0	-
Public administration and defence; compulsory social security	-	-	-	-	0	-	0	-	369	3
Education	247	33	218	25	25	2	54	9	333	17
Human health and social work activities	264	15	222	14	115	0	158	1	76	-
Arts, entertainment and recreation	95	5	95	5	1	-	2	-	12	-
Other service activities	530	27	527	27	1	-	3	-	2	-

Note: “-” denotes no available data; “0” denotes a figure that is less than one unit (one unit=1,000 persons).

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Utilization Survey* data, 2020.

As for the changes in the temporary or dispatched manpower of SMEs, the number of temporary or dispatched workers of SMEs in 2020 totaled 559 thousand, which was a decrease of 8 thousand compared to 2019 and a reduction of 1.41%. Large enterprises employed 24 thousand temporary or dispatched workers in 2020, 3 thousand or 14.29% more compared to 2019. Government agencies reduced the employment of temporary or dispatched workers by 4 thousand or 7.14% compared to 2019 (Table 3-1-11).

**Table 3-1-11 Utilization of Temporary or Dispatched Labor by Industry and Enterprise Size, 2019-2020**

Unit: Thousand persons; %

Industry	2019		2020					
	SMEs	Large enterprises	Government	SMEs		Large enterprises		Government
				New Standards	Old Standards	New Standards	Old Standards	
Total	567	21	56	570	559	13	24	52
Share	88.04	3.26	8.70	89.79	88.07	2.06	3.78	8.15
Agriculture, forestry, fishing and animal husbandry	18	-	0	21	21	-	0	-
Mining and quarrying	-	-	-	-	-	-	-	-
Manufacturing	48	8	1	40	40	10	10	1
Electricity and gas supply	1	-	1	-	-	-	-	-
Water supply and remediation activities	2	-	2	0	0	-	-	2
Construction	231	0	-	264	264	-	-	0
Wholesale and retail trade	78	-	2	65	63	-	1	0
Transportation and storage	5	1	2	10	8	-	2	3
Accommodation and food service activities	87	2	-	79	77	0	3	-
Information and communication	2	0	-	8	8	-	-	-
Finance and insurance activities	4	1	-	-	-	-	-	-
Real estate activities	1	-	-	3	3	-	-	-
Professional, scientific and technical activities	5	-	1	1	1	-	-	-
Support service activities	44	3	-	5	5	-	-	-
Public administration and defence; compulsory social security	-	-	11	34	32	0	2	7
Education	7	4	35	-	-	-	-	36
Human health and social work activities	9	1	1	13	11	2	4	3
Arts, entertainment and recreation	5	1	-	8	8	1	1	-
Other service activities	22	-	0	4	4	-	-	0

Notes:

1. "0" denotes data under one unit; and "-" denotes no data.

2. The data prior to 2019 in the table are defined based on the Old Standards.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Utilization Survey* data, 2019-2020.

## II Labor Conditions in SMEs

This Section provides information on the labor conditions for employed persons of SMEs in 2020 and focuses on two labor conditions including the average weekly work hours and salary. It includes analyses by sector and provides an overview of the overall manpower demand in Taiwan in recent years.

## 1. Due to the Impact of the Epidemic, the Average Weekly Work Hours of SMEs in Most Industries Fell with the Highest Reduction in Transportation and Storage in 2020

In 2020, the average weekly work hours of SMEs under both the Old and New Standards totaled 40.51 hours, which was 0.88 hours lower than in 2019. In terms of the industries under the New Standards, the top 4 industries with the longest weekly work hours in 2020 included other service activities and real estate activities which were tied for first place (42.51 hours), followed by electricity and gas supply and wholesale and retail trade (41.80 hours) (Table 3-2-1).

**Table 3-2-1 Working Hours per Week and Number of Employed Workers by Enterprise Size and Industry, 2019-2020**

Unit: Hours / per week

Industry	Year Enterprise Size	2019			2020				
		SMEs	Large enterprises	Government	SMEs		Large enterprises		Government
					New Standards	Old Standards	New Standards	Old Standards	
Total		41.39	42.14	40.81	40.51	40.51	41.35	41.18	40.51
Agriculture, forestry, fishing and animal husbandry		40.08	40.00	42.25	39.93	39.91	-	44.44	39.93
Mining and quarrying		41.43	-	40.00	40.69	40.69	-	-	40.69
Manufacturing		40.90	42.37	40.52	39.93	39.93	41.44	41.44	39.93
Electricity and gas supply		41.77	43.54	40.77	41.80	42.31	48.35	44.26	41.80
Water supply and remediation activities		40.64	40.89	40.24	40.20	40.20	40.00	40.00	40.20
Construction		39.51	43.33	40.73	38.13	38.13	41.49	41.49	38.13
Wholesale and retail trade		42.48	41.75	38.15	41.80	41.82	40.52	40.54	41.80
Transportation and storage		43.53	43.06	41.09	41.66	41.50	39.27	41.23	41.66
Accommodation and food service activities		42.28	41.40	-	41.03	41.04	42.08	40.68	41.03
Information and communication		40.93	41.81	40.00	40.27	40.25	41.37	40.97	40.27
Finance and insurance activities		41.38	41.55	41.37	40.86	40.86	40.62	40.75	40.86
Real estate activities		43.10	41.82	40.00	42.51	42.48	42.78	43.93	42.51
Professional, scientific and technical activities		40.70	41.73	41.16	40.24	40.17	40.88	40.92	40.24
Support service activities		41.95	43.57	-	41.05	41.04	43.53	42.25	41.05
Public administration and defence; compulsory social security		40.00	40.00	42.28	-	-	40.00	40.00	-
Education		37.89	38.60	39.13	36.98	37.33	38.98	36.44	36.98
Human health and social work activities		40.46	42.63	41.95	40.51	40.18	42.12	42.18	40.51
Arts, entertainment and recreation		40.43	41.67	39.55	40.06	40.10	40.00	37.93	40.06
Other service activities		43.58	40.61	40.00	42.51	42.53	40.00	39.70	42.51

Notes:

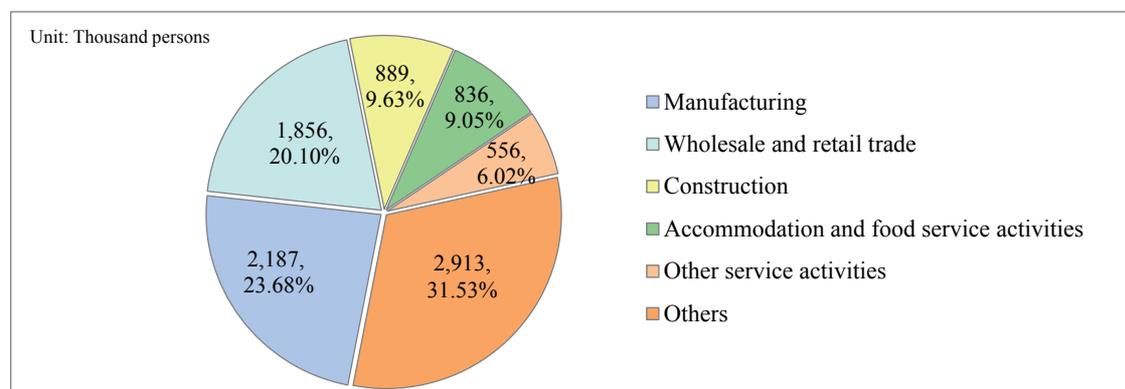
1. Employed persons with non-zero main working hours are classified as employed workers. Hence the figure for the sum of employed workers in each industry is different from the number of employed persons based on enterprise size as noted in Table 3-1-1.
2. The data prior to 2019 in the table are defined based on the Old Standards.
3. “-” denotes no available data.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data, 2019-2020.

In terms of the changes in the number of weekly work hours of SMEs in each industry, SMEs determined based on the Old Standards in almost every industry reduced average weekly work hours in 2020 when compared to 2019. Only the electricity and gas supply industry increased work hours by 0.54 hours. The industry with the highest reduction in weekly work hours was transportation and storage with 2.03 hours, which may have been caused by reduced work due to the epidemic (Table 3-2-1).

As regards the number and percentage of employed workers in SMEs in each industry, according to definitions in the New Standards, the top 5 industries were manufacturing, wholesale and retail trade, construction, accommodation and food service activities, and other service activities. The manufacturing industry accounted for the highest share with 2.187 million (23.68%) and approximately 39.93 weekly work hours. It was followed by wholesale and retail trade with 1.856 million (20.10%) and approximately 41.80 weekly work hours (Figure 3-2-1).

**Figure 3-2-1 Distribution of Employed Persons in SMEs by Industry, 2020**



Notes:

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

2. The data in the figure are defined based on the New Standards.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2020.

## **2. The Average Monthly Income for SME Employees Fell Slightly in 2020; the Largest Average Monthly Income Increase Was Seen in Professional, Scientific and Technical Activities**

The average monthly salary of paid employees in SMEs in 2020 based on the New Standards was NT\$38.2 thousand. In terms of the changes in the average monthly salary of SMEs, the average amount based on the Old Standards was 37.9 thousand, which was a decrease of 0.21 thousand from 2019.

Additional analysis of each industry based on the New Standards showed that the electricity and gas supply sector had the highest average monthly salary of SMEs in 2020 with NT\$60.4 thousand. However, the industry only had approximately 7 thousand paid employees, which accounted for 0.09%. They were followed by employees in professional, scientific, and technical activities with

an average of NT\$49.2 thousand for 323 thousand paid employees (3.62%). Financial and insurance activities ranked third with an average of NT\$48.6 thousand for 372 thousand paid employees (4.28%). SMEs with the lowest average monthly salary in 2020 were those in the agriculture, forestry, fishing and animal husbandry sector which offered an average monthly salary of NT\$27.5 thousand for 410 thousand paid employees (4.72%) (Table 3-2-2).

**Table 3-2-2 Number of Paid Employed Persons and Average Wage of Main Work by Enterprise Size and Industry, 2019-2020**

Unit: Ten thousand NTS / per month

Industry	Year Enterprise Size	2019			2020				
		SMEs	Large enter- prises	Govern- ment	SMEs		Large enterprises		Govern- ment
					New Standards	Old Standards	New Standards	Old Standards	
Total		3.81	4.70	5.01	3.82	3.79	4.73	4.75	5.10
Agriculture, forestry, fishing and animal husbandry		2.90	3.76	4.11	2.75	2.74	-	5.37	3.37
Mining and quarrying		4.14	-	4.98	4.11	4.11	-	-	7.03
Manufacturing		3.83	4.36	4.93	3.85	3.85	4.42	4.42	4.70
Electricity and gas supply		4.09	6.30	6.23	6.04	6.57	8.04	6.33	5.61
Water supply and remediation activities		3.65	9.26	3.77	3.78	3.79	7.25	5.94	3.87
Construction		4.08	5.18	4.72	4.05	4.05	5.07	5.07	4.65
Wholesale and retail trade		3.73	4.51	3.48	3.72	3.68	6.49	6.04	3.55
Transportation and storage		3.90	5.38	4.78	3.85	3.79	4.79	4.64	4.44
Accommodation and food service activities		3.34	3.60	-	3.18	3.18	4.27	3.83	-
Information and communication		4.68	5.60	4.20	4.73	4.70	5.36	5.20	-
Finance and insurance activities		4.79	5.47	6.01	4.86	4.88	6.29	5.40	5.57
Real estate activities		3.85	5.38	4.77	3.86	3.86	5.63	5.05	0.00
Professional, scientific and technical activities		4.74	6.04	5.81	4.92	4.86	5.86	5.64	5.32
Support service activities		3.25	3.81	-	3.26	3.26	3.60	3.34	-
Public administration and defence; compulsory social security		5.00	4.50	4.93	-	-	4.38	4.38	5.03
Education		3.60	5.52	5.21	3.80	3.63	4.92	4.91	5.55
Human health and social work activities		4.35	5.01	5.34	4.49	4.46	5.50	5.27	5.02
Arts, entertainment and recreation		3.46	3.20	3.68	3.49	3.49	3.68	3.51	3.64
Other service activities		3.57	4.22	4.06	3.55	3.55	4.73	4.20	3.29

Notes:

1. Employed persons with working hours of 15 or more are classified as paid employed persons here.

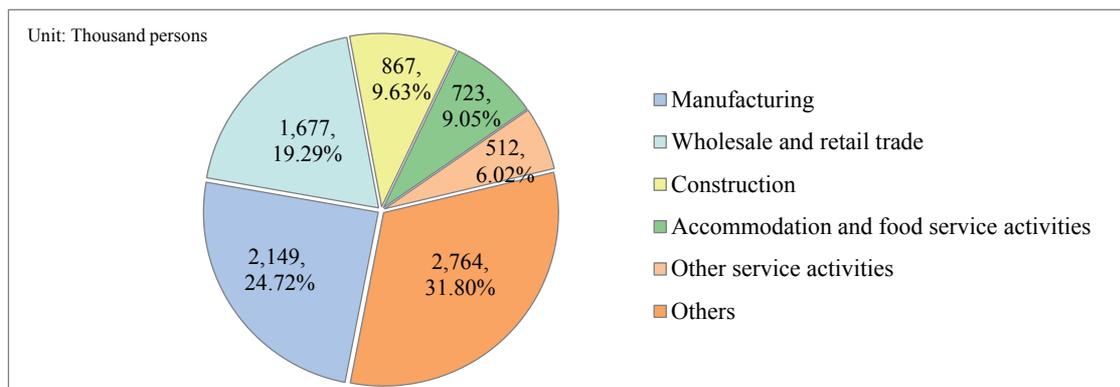
2. “-” denotes no available data.

Source: Directorate-General of Budget, Accounting and Statistics, *Manpower Survey* data, 2019-2020.

In terms of the number and percentage of paid employees in SMEs in each industry, according to definitions in the New Standards, the top 5 industries were manufacturing, wholesale and retail trade, construction, accommodation and food service activities, and other service activities. The manufacturing industry accounted for the highest share with 2.149 million people (24.72%) and an average monthly salary of NT\$38.5 thousand. It was followed by wholesale and retail trade with

1.677 million people (19.29%) and an average monthly salary of NT\$37.2 thousand (Table 3-2-2 and Figure 3-2-2).

**Figure 3-2-2 Distribution of Paid Employees in SMEs by industry, 2020**



Notes:

1. Employed persons with working hours of 15 or more are classified as paid employed persons here. Hence the figure for the sum of paid employed persons in each industry is different from the number of employed persons based on enterprise size as noted in Table 3-1-1.
2. The data in the figure are defined based on the New Standards.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2020.

Compared to 2019, the average monthly salary of paid employees in the SMEs of most industries increased in 2020. According to calculations based on the Old Standards, the average monthly salary of SMEs in 7 industries is estimated to have decreased in 2020 compared to 2019. They include agriculture, forestry, fishing and animal husbandry, mining and quarrying, construction, wholesale and retail trade, transportation and storage, accommodation and food service activities, and other service activities. The average monthly salary of all other industries has increased. The top three industries in terms of the increase in the average monthly salary of SMEs in 2020 were, in descending order, electricity and gas supply, water supply and remediation activities, and professional, scientific, and technical services.

Overall, due to the impact of the COVID-19 epidemic in 2020, the average weekly work hours of SMEs decreased by 0.88 hours compared to 2019. The decrease may be attributed to reduced work in manufacturing as a result of the epidemic; the average monthly salary of SMEs decreased slightly by NT\$0.21 thousand.

### 3. Demand for Labor Continued to Rise in July 2021

According to the Report of the Manpower Requirements Survey 2021 (2nd) published by the Ministry of Labor in May 2021 prior to the implementation of the level 3 epidemic alert, the recovery of the global economy in the first quarter of 2021, the continuous expansion of emerging technologies, continuation of the stay-at-home economy and remote business opportunities, increased demand in conventional industries, and a projected increase in summer travel and consumption starting from July increased companies' demand for labor.

Compared to the end of April, 30.2% of the companies expected manpower demand at the end of July 2021 to increase, 2.2% to fall, 63.1% to remain unchanged, and 4.4% to be unable to be forecast. In terms of the demand in numbers, 70 thousand workers were expected to be added and 6 thousand cut with a net total increase of 64 thousand (Table 3-2-3).

**Table 3-2-3 Anticipated Changes in the Number of Personnel Employed by Business Enterprises during the Period from April 31 to June 31, 2021** Unit: Persons

Industry	Item	Net increase in no. of employees	Change in manpower demand		Top 4 occupational categories			
			New positions	Positions eliminated	Skilled labor, equipment operators and assembly workers	Technicians and professional assistants	Service and sales representatives	Professionals
Total		63,796	69,619	5,823	26,343	14,087	11,676	4,167
Manufacturing		34,293	36,505	2,212	22,395	5,254	239	1,982
Construction		2,782	2,882	100	917	1,695	0	0
Wholesale and retail trade		5,626	6,239	613	971	2,069	1,207	297
Transportation and storage		1,597	1,762	165	1,013	131	131	17
Accommodation and food service activities		5,850	6,790	940	52	13	5,497	0
Information and communication		2,798	2,808	10	95	1,734	381	349
Financial and insurance activities		1,307	1,327	20	0	941	35	134
Real estate activities		645	685	40	0	472	50	14
Professional, scientific and technical activities		1,508	1,791	283	103	1,026	95	261
Supporting service activities		3,481	4,919	1,438	670	365	2,122	3
Human health and social work activities		2,331	2,331	0	0	353	826	1,090
Arts, entertainment and recreation		1,117	1,117	0	25	20	788	20
Other service activities		461	463	2	102	14	305	0

Source: Ministry of Labor (2021, June). *Report of Manpower Requirements Survey 2021 (2nd)*.

A look by sector shows that compared to the end of April, the expected demand for manpower at the end of July 2021 rose by 37 thousand in the industry sector and by 27 thousand in the service sector. Among major industries, the net increase in manufacturing of 34 thousand was the highest (including a net increase of 5 thousand in the manufacture of electronic parts and components, a net increase of 4 thousand in the manufacture of fabricated metal products, and a net increase of 3 thousand in the manufacture of machinery and equipment). The net increase in accommodation and food service activities and wholesale and retail trade was 6 thousand in each of them (Table 3-2-3).

A look by occupation shows that compared to the end of April, the expected demand for manpower at the end of July 2021 rose most of all by 26 thousand in terms of the demand for skilled labor, equipment operators and assembly workers, followed by 14 thousand in the demand for technicians and professional assistants, and 12 thousand in the demand for service and sales representatives (Table 3-2-3).





## Part Two

# SME Policies and Measures

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

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

*The government responds to changes in the domestic and foreign economy and revises the SME development strategies accordingly. It continues to focus on digital transformation and startup incubation in 2021. In addition to guidance and support measures, the government actively implements numerous new programs, including programs for responding to the COVID-19 epidemic, helping SMEs gain business opportunities, and implementing accelerated digital transformation for SMEs. To enhance startup incubation and the innovative development of the industry, the government executed the Startup Terrace Connection Project and plans to establish the Asia New Bay Area 5G AIoT Innovation Park by the end of this year.*

# CHAPTER 4

## Improving Financial and Funding Services and Strengthening Investment in SMEs

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

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

### I Improving Financial and Funding Services

#### 1. Providing SME Financing Counseling and Value Added Service

##### (1) One Contact for Financing Assistance - Instant Solution Center

In 1996, the Small and Medium Enterprise Administration of the Ministry of Economic Affairs (SMEA of the MOEA) created the Instant Solution Center and started providing consulting services via the toll-free hotline, 0800-056-476, to better help SMEs overcome challenges in running a business. Relevant assistance programs, coordination and service mechanisms are connected to assist SMEs in effectively overcoming challenges in operating a business, especially by offering financing-related consulting and assistance. The Instant Solution Center and Finance/Accounting Information Services website is: <https://0800056476.sme.gov.tw>.

##### (2) Small and Medium Enterprises Operations and Financing Assistance Program

To help SMEs succeed in obtaining funding for business development by having a strengthened financial structure, sound business practices, and appropriate finance/accounting systems, the SMEA of the MOEA merged the SMEs Financing Diagnosis Services Program and the Instant Solution Center into the Small and Medium Enterprises Operations and Financing Assistance Program in 2018. Strategies for 2020: 1. organizing the “SMEs Instant Solution Center on Wheels” campaign to provide face-to-face advice and financing assistance for local businesses; and 2. professional consulting services and in-depth diagnosis services. (plan site: <https://0800056476.sme.gov.tw/>)

##### (3) Small and Medium-Sized Enterprises Value Innovation Application Project

To eliminate the funding and knowledge gaps in the early stages and encourage innovative startups to seek funding, the SMEA of the MOEA started the Small and Medium-Sized Enterprises Value Innovation Application Project in 2015, which was succeeded by the Innovation and Fundraising Intelligent Support Program in 2019. The early-stage funding database, “FINDIT,” was created in 2021. The SMEA of the MOEA also organized startup proposal advice, fund matching, early-stage funding workshops, and early-stage investment forums. FINDIT website: <https://findit.org.tw/>.

#### **(4) Project of Enhancing the Financial Capabilities of SMEs**

The SMEA of the MOEA began implementing the “Project for Promoting SMEs Development of Sound Finance” in 2018 to help SMEs create sound financial and accounting systems and improve the health of their operations. The Ministry renamed it as the “Project of Enhancing the Financial Capabilities of SMEs” in 2021 and continued the project. It applies a diverse range of financial and accounting consultation and diagnosis mechanisms as the foundation and uses digital tools for applications and assistance to create the digital financial management of SMEs, strengthen companies’ financial capabilities, and improve their fundraising and financing channels (plan site: <https://0800056476.sme.gov.tw/index.php>).

#### **(5) Project on Promoting Innovative Financing and Commercialization**

To help startups and SMEs gain access to innovation funding sources, the SMEA of the MOEA started the Project on Promoting Innovative Financing and Commercialization in 2019. In 2021, the Administration promoted and optimized the SME Funding Platform and strategic investment mechanisms. It also expanded strategic investments and participation to connect digital tools and used the industrial supply chain and strategic partnerships to develop new fundraising channels and help companies raise capital. Qmakit website: <https://qmakit.findit.org.tw/home>.

## **2. SME Financing Services Platform**

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

## **3. Policy Loans for Special Projects to Help SMEs**

The government provides SMEs with various types of policy loans, either directly or through collaboration with banks. What distinguishes these loans from ordinary ones is that the loans are granted for specific purposes, and have preferential interest rates. The policy loans currently available to SMEs include the following categories (2021): establishment and upgrade, equipment procurement, startup, R&D, exports and foreign investment, tourism development, restoration,

small loans, overseas intellectual property litigation, service development, and investment. Other similar policy loans include credit financing for tourism revival by the Tourism Bureau of the Ministry of Transportation and Communications, and loans from the Comprehensive Development Fund for Indigenous Peoples under the Council of Indigenous Peoples.

#### **4. Plan for Increasing Loans to SMEs by Domestic Banks**

To encourage the development of a long-term partnership relationship between SMEs and banks, and thus help SMEs obtain working capital, the Financial Supervisory Commission (FSC) decided that the implementation of the Plan for Increasing Loans to SMEs by Domestic Banks should continue into the sixteenth stage in 2021 with a plan target of NT\$300 billion. In 2020 (fifteenth stage), domestic banks made loans to SMEs amounting to a net increase of NT\$914.4 billion over 2019 (<https://www.banking.gov.tw/>).

## **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 Small and Medium Enterprise Credit Guarantee Fund of Taiwan (Taiwan SMEG) in 1974. The main purpose in establishing this fund was to provide credit guarantees to SMEs, and to work closely with financial institutions in the development of financing guidance services for SMEs, helping SMEs obtain the funding they need from financial institutions and thereby contributing to the healthy development of Taiwan's SME sector and promoting Taiwan's economic growth and social stability. The SME Credit Guarantee Fund's main functions are as follows:

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

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

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

## 2. Benefits Achieved through the Credit Guarantee Fund

### (1) Helping SMEs Secure Funding

As of the end of December 2020, the Taiwan SMEG had provided credit guarantees in 7.67 million cases through funding provided by the government and contracted financial institutions to SMEs. It had helped SMEs obtain loans totaling NT\$20.2186 trillion from financial institutions and provided NT\$15.0907 trillion in guarantees. The guarantees provided in recent years are shown in Table 4-2-1:

**Table 4-2-1 SMEG Guarantees - SME Fund, 2016-2020**

Unit: Recipients; items; million NTS

Year	Item	No. of credit guarantee recipients	No. of credit guarantee applications accepted	Combined value of credit guarantees	Total amount of financing secured	Outstanding credit guarantees at year-end	Outstanding financing at year-end
2016		105,510	360,138	955,662	1,279,320	595,843	801,792
2017		103,314	339,908	960,320	1,275,308	588,658	786,492
2018		100,714	329,775	1,001,024	1,301,778	602,386	790,077
2019		118,767	347,904	1,023,956	1,305,446	628,137	809,446
2020		131,536	306,499	910,570	1,149,962	591,007	751,027

Source: Credit Guarantee Fund, 2021.

If the credit guarantees provided in individual funding projects by the Taiwan SMEG are included, as of the end of December 2020, the Taiwan SMEG had provided credit guarantees in 8.92 million cases, helped SMEs obtain loans totaling NT\$21.0094 trillion from financial institutions, and provided NT\$15.7569 trillion in guarantees. The guarantees provided in recent years are shown in Table 4-2-2:

**Table 4-2-2 SMEG Guarantees - All Cases, 2016-2020**

Unit: Recipients; items; million NTS

Year	Item	No. of credit guarantee recipients	No. of credit guarantee applications accepted	Combined value of credit guarantees	Total amount of financing secured	Outstanding credit guarantees at year-end	Outstanding financing at year-end
2016		118,517	366,221	964,912	1,291,398	609,951	818,340
2017		116,097	345,805	969,806	1,287,392	602,037	802,044
2018		113,018	334,789	1,006,592	1,308,104	614,174	803,281
2019		130,742	352,814	1,029,377	1,311,731	639,903	822,740
2020		1,188,784	1,457,182	1,405,787	1,711,438	1,086,682	1,312,862

Source: Credit Guarantee Fund, 2021.

### (2) The SME Credit Guarantee Fund Has a Great Impact on the Growth of SMEs

The vast majority of SMEs that received credit guarantees from the SME Credit Guarantee Fund have found that, within a few years, they have been able to raise money on the capital markets or obtain loans directly from banks. Furthermore, as of December 2020, 2,727 of the SMEs that had been granted credit guarantees in the past have since grown sufficiently large to be classified as

“large enterprises,” and 946 have secured a stock market, OTC, or GISA listing.

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

#### **(1) Counterpart Guarantee**

The Taiwan SMEG launched the “Counterpart Guarantee Project” in 2006. 1. SMEG worked with central and local government agencies. Earmarked funds were allocated by relevant government agencies, and these funds were then matched by SMEG. By working together to provide credit guarantees and consolidate the government’s guidance policies and credit guarantee schemes, the program provided a means to jointly aid SMEs and micro enterprises as well as individual entrepreneurs to secure funds from financial institutions needed to found new startups and maintain current operations, expanding and intensifying the use of financing and support resources. 2. SMEG worked with key leading enterprises and established an earmarked fund. 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 other SMEs determined by donors as having the potential for development.

As of December 2020, the Taiwan SMEG had 1. collaborated with the central government on a total of 18,050 loans, amounting to a total of NT\$19.25 billion; 2. collaborated with local governments on a total of 8,825 loans, amounting to a total of NT\$6.42 billion; and 3. collaborated with companies on a total of 45,406 loans, amounting to a total of NT\$36.79 billion (<https://www.smeg.org.tw/basic/?node=10249>).

#### **(2) Small and Medium Enterprise Billion Credit Guarantee Project**

To help startups and micro enterprises obtain financing from financial institutions to facilitate smooth upgrading, transformation, and succession and ease their financial burdens, the Taiwan SMEG launched the Small and Medium Enterprise Billion Credit Guarantee Project in 2019. The project provides “expanded small loan guarantee measures,” and “expanded batch guarantee measures” with up to NT\$6 million in credit guarantees for SMEs with a paid-up capital of NT\$30 million or under (<https://www.smeg.org.tw/basic/?mode=detail&node=362>).

#### **(3) COVID-19 Relief Credit Guarantee**

To help companies affected by COVID-19 manage their businesses during the pandemic, the Taiwan SMEG has adopted a free-for-all approach to relief application and launched the Guarantee Fee Waiver for Extension or Renewal. SMEs intending to stay in business and having made interest payments on time will be eligible for extension or payment by installments. In addition, SMEs with debts with the same or better terms and in good credit standing may apply for renewal. Guarantee fees may be waived for extension, payment by installments, and renewal.

Furthermore, the Taiwan SMEG follows the relief measures taken by various competent authorities, and provides credit guarantees in the form of special purpose funds. The Taiwan SMEG is fully committed to supporting businesses and individuals and contributing better health

preparedness capabilities during the pandemic (<https://www.smeg.org.tw/basic/?node=10118>).

#### **(4) Credit Guarantee for Small Enterprise Loans**

To make it easier and more convenient for small businesses to access financing in the form of small advances of working capital from financial institutions, the SMEA of the MOEA 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 the Taiwan SMEG based on the individual guarantee percentages of each case. In addition, the SMEG provides a minimum credit guarantee of 90% for loans to startups established for less than 5 years, which helps the startups gain working capital.

(<https://www.smeg.org.tw/basic/?mode=detail&node=397>)

#### **(5) Credit Guarantee for Young Entrepreneur Dream Building Financing Loans**

The MOEA integrated the “Young Entrepreneur Dream Building Financing Loans” and the “Young Entrepreneur Loans” into the “Loans for Young Entrepreneurs and Start-ups” in 2014. To create a friendly environment for young entrepreneurs and provide assistance for young startups, funding is provided for startups in the preparation and launch stages to meet the needs of growth after the launch. The Taiwan SMEG provides a maximum credit guarantee of 100% and a minimum credit guarantee of 80% for loans up to NT\$18 million. The loan is limited to the reserve required by the business, registration fees, working capital, and capital expenditures (<https://www.smeg.org.tw/basic/?mode=detail&node=392>).

#### **(6) Credit Guarantee for SME Innovation Development Project Loans**

In order to shore up the innovative capabilities of SMEs, provide SMEs with the funds they need to achieve innovative management and spur development, and help SMEs employ innovation and advanced technology service models to expand into international markets, the MOEA launched the “SME Innovation Development Project Loan” in 2014. The program facilitates the provision of loan facilities to eligible applicants of up to NT\$20 million for working capital and up to NT\$80 million for capital expenditures. In addition, the Taiwan SMEG provides a minimum credit guarantee of 80% for each loan, thereby increasing the willingness of banks to make such loans. In addition, the Taiwan SMEG provides a minimum credit guarantee of 90% for loans to startups established for less than 5 years, which helps the startups gain working capital. If an aforementioned startup receives a specific award or program, an additional 5% is provided, up to NT\$5 million (<https://www.smeg.org.tw/basic/?mode=detail&node=377>).

#### **(7) Direct Guarantee Project to Promote Business Innovation**

The Taiwan SMEG began providing the Direct Guarantee Project to Promote Business Innovation in 2017. Eligible targets include projects that received subsidies or assistance related to MOEA innovation and research projects and SMEs recommended by the MOEA. The financing limit is within 80% of the approved innovation and R&D project minus the project subsidies or the amount after subsidies or assistance funding. The guarantee amount is 95% and the annual guarantee service fee rate is fixed at 0.375%.

(<https://www.smeg.org.tw/basic/?mode=detail&node=353>)

## **(8) Preferential Guarantee Measures for State Development**

In coordination with the government's Forward-looking Infrastructure Development Program and important policy, preferential guarantee measures are provided to SMEs participating in government procurements under the Forward-looking Infrastructure Development Program, SMEs that are in start-up industry or with high quality. The Taiwan SMEG hopes to thereby drive industrial development, attract investments from Taiwan and overseas, and increase employment by offering credit guarantees of up to 95%.

(<https://www.smeg.org.tw/basic/?mode=detail&node=361>)

## **(9) Export Loan Preferential Credit Guarantee Project**

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

(<https://www.smeg.org.tw/basic/?mode=detail&node=360>)

## **(10) 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, the Taiwan SMEG appropriated a sum of NT\$2 billion, the Agricultural Credit Guarantee Fund (ACGF) appropriated a sum of NT\$1 billion, and the Overseas Credit Guarantee Fund (OCGF) appropriated a sum of NT\$2 billion, resulting in a total of NT\$5 billion in earmarked funds. The maximum guarantee amount of NT\$100 million and up to 90% of loans is provided for SME investment plans in New Southbound countries or those approved by or registered with the MOEA. The guarantee service fee is calculated at a fixed ratio of 0.1%.

(<https://www.smeg.org.tw/basic/?mode=detail&node=399>)

## **(11) Preferential Guarantee Measures for Small and Medium Enterprise Investment in Taiwan**

To encourage SMEs to invest in Taiwan, the Taiwan SMEG launched the "Preferential Guarantee Measures for Small and Medium Enterprise Investment in Taiwan" in 2019 to provide credit guarantees for capital expenditures for new plants (expansion) or additional machinery or equipment of NT\$100 million and up to 95% of the loans. For example, the minimum guarantee will be 80% of the amount and guarantee fees will be capped at 0.3% p.a. for funds spent on

factory construction/expansion in industrial parks overseen or developed by the government, industry clusters created according to the Statute for Industrial Innovation, or science parks created according to the Act for Establishment and Administration of Science Parks.

(<https://www.smeg.org.tw/basic/?mode=detail&node=359>)

### **(12) Welcome Taiwanese Businesses' Investment to Taiwan Project Loan Guidelines**

In collaboration with the government assistance for Taiwanese businesses to return to Taiwan and invest, the Taiwan SMEG began providing credit guarantees for loans organized in accordance with the “Welcome Taiwanese Businesses’ Investment to Taiwan Project Loan Guidelines” on May 16, 2019. The maximum guarantee amount is 90% and the minimum annual guarantee service fee rate is 0.375% (<https://www.smeg.org.tw/basic/?mode=detail&node=374>).

### **(13) Small and Medium Enterprise Accelerated Investment Loan Credit Guarantee**

To encourage SMEs to accelerate investments, the Taiwan SMEG began implementing the “Small and Medium Enterprise Accelerated Investment Loan Credit Guarantee” in 2019 to provide an additional credit guarantee of up to NT\$100 million for capital and medium-term financing loans. The maximum guarantee amount is 95% and the minimum annual guarantee service fee rate is capped at 0.3% (<https://www.smeg.org.tw/basic/?mode=detail&node=403>).

### **(14) Local Co-Creation Enterprise Project Loan Credit Guarantee**

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

(<https://www.smeg.org.tw/basic/?mode=detail&node=444>)

### **(15) Social Innovation Enterprise Project Loan Credit Guarantee**

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

(<https://www.smeg.org.tw/basic/?mode=detail&node=445>)

## **III Strengthening Investment in SMEs**

### **1. Establishment of SME Startup Incubation Investment Trust Account**

In October 2003, the SMEA of the MOEA 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 upgrading and transformation. In addition, to help SMEs raise funds to execute international technology transfers and engage in various activities such as technical cooperation and production, a sum of NT\$900 million was appropriated for the “Investment and Trust Account for Incubation and Start-up of SMEs,” and the “Project for Cooperation on International Investments” was launched in May 2015.

## **2. National Development Fund’s Plan for Promoting Investment in SMEs**

To stimulate investment in the SME sector by venture capital firms and other private-sector companies, in 2007 the National Development Fund (NDF) approved the Plan for Promoting Investment in SMEs. The SMEA selected a total of 28 venture capital firms to make collective investments in domestic SMEs, helping SMEs gain capital in the early stages. The SMEA of the MOEA also assigned designated personnel to provide investment services, including investment advice, diagnosis, and guidance, and organizing investment courses, business meetings, and investment fairs (<https://www.moeasmea.gov.tw/article-tw-2725-6747>).

## **3. Service Project for Enhancing Investment in SMEs in Hualien and Taitung Area**

The Executive Yuan officially promulgated the Hualien-Taitung Area Development Act in 2011 to promote the development of industries in Hualien and Taitung and promote balanced regional development. The Act stipulates that the central competent authority shall formulate a Strategic Plan for the Sustainable Development of the Hualien-Taitung Area and has earmarked NT\$40 billion for the establishment of the Hualien-Taitung Area Sustainable Development Fund. The government also activated the “Service Project for Enhancing Investment in SMEs in Hualien and Taitung Area” in 2020. The SMEA of the MOEA shall work with local industry associations and incubation centers in Hualien and Taitung to help manage the sources of projects and track and manage companies that have received investments. They will enhance post-investment management to help SMEs in Hualien and Taitung connect resources of the government and private sector, technologies, and talents to promote the growth of SMEs in Hualien and Taitung and accelerate business growth (plan site: <https://invest-huatung.org.tw/>).

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

## 5. Implementation Project for Strengthening Investment in Strategic Manufacturing Industries

In order to copy the successful model of venture capital firms investing in high-tech industries, enhance the competitiveness of manufacturers, and accelerate industrial transformation and enhancement, in 2015 the NDF specially allocated NT\$10 billion to the Industrial Development Bureau of the Ministry of Economic Affairs (IDB of the MOEA) to realize the Implementation Project for Strengthening Investment in Strategic Manufacturing Industries. The funds are used exclusively with the domestic manufacturing industry. Features of this project include an investment period reaching 10 years (investments are made in the first 7 years, and stakes are sold in the last 3 years), and establishing an advisory unit to conduct broad searches for potential investment projects. The project encourages venture capital firms to make investments and provides policy incentives to increase the effectiveness of investment (plan site: <https://www.psism.org.tw/cht/index.php>).

## 6. Statute for Industrial Innovation

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

(<https://www.moeaidb.gov.tw/ctrl?PRO=application.rwdApplicationView&id=1614>)

## 7. Project to Increase Investment in the Cultural and Creative Industry

The Ministry of Culture began implementing the Project to Increase Investment in the Cultural and Creative Industry in 2010, and allocated NT\$10 billion to invest in the domestic cultural and

creative industry. The funds were invested in proportion to private investments to find suitable cultural and creative companies to provide guidance on a corporate scale, thus giving cultural and creative companies greater market value. The Cultural Content Investment Project was implemented under this project in 2018, and encouraged content industry investors to apply to the Ministry of Culture for joint ventures (<https://cci.culture.tw/>).

## **8. Fundraising Guidance Mechanism – GISA**

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

## **9. Equity Crowdfunding Program for Securities Dealers**

In order to help more young people engage in entrepreneurial activities, the FSC began allowing securities dealers to implement equity crowdfunding services in 2015 for joint-stock companies which (1) have paid-up capital of less than NT\$50 million and (2) have not yet gone public. Such companies are permitted to utilize an approved crowdfunding platform to raise funds, wherein total funding may not exceed NT\$30 million within a one-year period. General investors' total investments on a single platform may not exceed NT\$150,000 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 (<https://www.tpex.org.tw/web/option/index.php?l=zh-tw>).

# CHAPTER 5

## Enhancing R&D and Promoting Upgrading and Transformation for SMEs

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

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

### I Promoting the Digital Transformation of SMEs

#### 1. Project for Assisting Small and Micro Enterprises in Digital Transformation and Innovation Service in the Cloud Era

The Small and Medium Enterprise Administration of the Ministry of Economic Affairs (SMEA of the MOEA) began implementing the “Project for Assisting Small and Micro Enterprises in Digital Transformation and Innovation Service in the Cloud Era” in 2021 to support small and micro enterprises in shopping malls, shopping districts, or specific industrial clusters that have 9 or fewer employees. It adopted 4 major strategies including “local digital empowerment,” “value-added digital services,” “market channel expansion,” and “digital business opportunities” to help small and micro enterprises optimize digital applications, increase business performance, and create employment opportunities. It also used highlight case studies and digital transformation education materials and models to help more small and micro enterprises that have not yet implemented digitalization learn more about the benefits of digital tools, join the ranks of digital optimization, and continue their digital transformation (<https://cloudsme.tw/>).

## **2. Project of Assistance for Micro SMEs by Using Cloud Service and Digital Transformation in Commercial District**

The SMEA of the MOEA began implementing the “Project of Assistance for Micro SMEs by Using Cloud Service and Digital Transformation in Commercial District” in 2021. The project targeted shopping districts and assisted small and micro enterprises in shopping districts that have 9 or fewer employees. The Administration employed 3 major strategies including “digital transformation assistance,” “digital marketing and channel expansion,” and “seed talent training” to help small and micro enterprises in shopping districts use digital tools and cloud services, achieve digital transformation, and create local employment opportunities.

(plan site: <https://microcloud.sme.gov.tw/>)

## **3. Industry Digital Transformation in the Cloud Era - Project for Assisting Digital Transformation and Sustainable Development of Small and Micro Enterprises - Digital Transformation of Indigenous Businesses**

The Council of Indigenous Peoples (CIP) began promoting the “Industry Digital Transformation in the Cloud Era - Project for Assisting Digital Transformation and Sustainable Development of Small and Micro Enterprises - Digital Transformation of Indigenous Businesses” in 2021 with the aim of using digital tools such as mobile payment in the industries of indigenous peoples. The project aims to use smart consumption to expand the scope of sales, improve business efficiency, and increase the satisfaction rate of the services provided by indigenous businesses. The Council will also match reputable online digital platforms and online marketing resources to invigorate the e-commerce market for products of indigenous peoples and increase the recognition of companies and products of indigenous peoples (<http://www.cip-cg.com.tw/GCIP/home/index>).

## **4. Strategic Project of Facilitating Digital Transformation of the Micro, Small and Medium Enterprises**

The SMEA of the MOEA began implementing the “Strategic Project of Facilitating Digital Transformation of the Micro, Small and Medium Enterprises” in 2021. It oversaw the strategic blueprint and overall administration effectiveness of the Project for Digital Transformation in the Cloud Era to help medium, small, and micro enterprises expand cloud services for digital transformation and increase digital competitiveness. The main projects implemented in 2021 included policy planning and evaluation, resource compilation and management, and implementation of task-based issues. The Administration promoted cloud platform services with digital points and provided each enterprise with subsidies of up to NT\$30,000 for points to encourage medium, small, and micro enterprises to adopt appropriate cloud solutions and strengthen their digital operation capacity (<https://www.tcloud.gov.tw/>).

## 5. Micro-enterprises Digital Application Coaching Program

The project was designed for the digital empowerment of small and micro enterprises in Taiwan, to promote the digitalization or digital optimization of small and micro enterprises, introduce digital tools and cloud services, enhance customer service experience, increase the capabilities of enterprises in digital applications and operations, and lay the foundations for digital transformation. The SMEA of the MOEA began implementing the “Micro-enterprises Digital Application Coaching Program” in 2021. It focuses on regional development or themes and works with nearby enterprises to achieve prosperous development, or create connections or form alliances between different industries to enhance unique features for business development. The project increases business efficiency and revenue, promotes economic development, and ensures the sustainable development of the region. Main action plans for 2021: (1) promoting local digital empowerment; (2) promoting and supporting digital applications; (3) project effectiveness communication, diffusion, and analysis.

## 6. Small and Medium Manufacturing Enterprise Digital Transformation Project

In response to the development of the digital economy and changes in international economics and trade, the Industrial Development Bureau of the Ministry of Economic Affairs (IDB of the MOEA) has established the basic environment and common capabilities required for the digital transformation of SMEs in the manufacturing sector since 2021 to help domestic SMEs in the manufacturing sector overcome the challenges of digital transformation brought about by changes in the supply chain and technological advancements. The Administration has prioritized industries in Central and Southern Taiwan in which more than 90% of the enterprises are SMEs to promote the project. Industries include metal products, food processing, textiles, rubber, and plastics. The Administration helps companies use digital technologies such as cloud services and artificial intelligence to obtain market information, provide feedback for production, achieve rapid responses to customer needs, and develop new products or new business models based on the demand (plan site: <https://www.citd.moeaidb.gov.tw/CITDWeb/Web/ATotal.aspx>).

## 7. Establishment of the Retail and Service Sector Data Sharing Innovation Service Project

The Department of Commerce of the Ministry of Economic Affairs (DOC of the MOEA) began implementing the “Establishment of the Retail and Service Sector Data Sharing Innovation Service Project” in 2021 to help retail, food and beverage, recreation, and general service providers respond to new consumption patterns brought about by the epidemic and the development of the digital economy. The major implementation items included: (1) providing consulting services for companies interested in digital transformation; (2) using government subsidies and resources to promote digital transformation case studies in the retail and service sector; and (3) providing NT\$30,000 in subsidies to encourage companies to choose cloud solutions and accelerate the digitalization of the retail and service sector (plan site: <https://www.smebiz.org.tw/>).

## **II Measures Related to Actual / Virtual Integration and Network Resource Applications for SMEs**

### **1. Empowering SMEs to Participate in Digital Transformation**

The SMEA of the MOEA implemented the Digital Outreach Program for SMEs in 2016 to help launch clusters of co-op networks, facilitate digital outreach in rural communities, encourage the use of digital applications among early-stage SMEs, and increase the use of virtual channels and digital business methods by small businesses. The “Empowering SMEs to Participate in Digital Transformation” campaign continued in 2020. Action plans for 2021 included: (1) increasing the degree of participation by businesses, (2) establishing e-clusters, (3) helping businesses in clusters lay a strong foundation for sustainability and digital marketing capabilities, and (4) fostering SMEs’ information technology upgrading (plan site: <https://www.198.org.tw/>).

### **2. SME Mobile Payment Diverse Application Value-Added Service Project**

The SMEA of the MOEA continued to implement the “SME Mobile Payment Diverse Application Value-Added Service Project” to popularize the use of mobile payment tools and develop people’s habits for using mobile payments in Taiwan. Main measures in 2021 included the development of application diffusion settings, the expansion of digital payment application paradigms, and strengthening comprehensive local promotion. The Administration encourages SMEs to incorporate diverse applications of mobile payment to increase business opportunities created by integrating mobile payment across different sectors/settings, and help people experience smart and convenient services that increase convenience.

### **3. SME Digital Broadband Applications Popularization and Promotion Plan**

The SMEA of the MOEA began implementing the SME Digital Broadband Applications Popularization and Promotion Plan in 2017. The purposes of this Plan were to popularize digital broadband applications among SMEs and micro-enterprises in remote areas, and to enhance their digital capabilities, which will drive digital development in such areas. Main work items in 2020 included: (1) promoting digital applications for innovative business models of SMEs and micro-enterprises in remote areas; (2) organizing seminars and training related to digital applications; and (3) reinforcing digital broadband signals. The program ended in 2020.

### **4. SMEs 5G Innovative Application Development Program**

To encourage SMEs to adopt 5G applications and services, the SMEA of the MOEA launched the “SMEs 5G Innovative Application Development Program” in 2020. The project focuses on business domains (shopping districts and promenades) for the installation and authentication of 5G smart services in 2021. It creates a 5G service application ecosystem for collaboration. The goal is to build a model of smart business, create opportunities, and improve vendors’ digital capabilities.

## 5. Manufacturing Value Chain Application Project

To help manufacturers make the shift from centralized large-scale production to customization and rapid and demand-driven production development, the IT service industry is encouraged to develop locally-built evidence-based smart manufacturing solutions. These solutions are expected to effectively jump start the development of smart manufacturing in the domestic manufacturing sector. The IDB of the MOEA created the Manufacturing Value Chain Application Project in 2017. The smart manufacturing integrated service value chain ecosystem was formed through the systemic integration of the services industry in 2021 (plan site: <https://www.ecos.org.tw>).

## 6. Enhancing Digital Trade and E-Commerce Measures

The Bureau of Foreign Trade of the Ministry of Economic Affairs (BOFT of the MOEA) launched the “Measures for Enhancing Digital Trade and E-Commerce” in 2020 in response to the impact of the COVID-19 epidemic on businesses. The Measures comprehensively accelerated the support for the digital transformation of SMEs, thereby helping businesses win cross-border business opportunities. In 2021, the Bureau continued to provide each company with subsidies of up to NT\$20,000 or NT\$60,000 for digital trade counseling services and opened the Digital Trade Academy. It also set up the epidemic prevention and stay-at-home economy section on the Taiwantrade website, created online exhibitions/image galleries, organized a video conference for product launch/procurement negotiations, promoted diverse digital applications, and enhanced the use of innovative technologies for marketing (plan site: <https://digitalcommerce.taiwantrade.com/>).

# III Promoting Operational Excellence and Innovation

## 1. SME IP Value-added Program

The SMEA of the MOEA integrated the “SME IP Value-added Program” and the “Small Business Innovation Research (SBIR) Program” in 2018 to provide consulting and assistance to enterprises in the product or service development process. The Program helps enterprises gain the ability and mechanisms necessary for managing and using their IP, and also enhances their R&D efficiency. Main action plans for 2021: (1) customized IP consulting services; and (2) common IP and knowledge promotion services (plan site: <https://ipcc.moeasmea.gov.tw/>).

## 2. Project of Promoting Service Innovation for SMEs

The SMEA of the MOEA began actively implementing the Project of Promoting Service Innovation for SMEs in 2018. The project utilizes ICT applications and service innovation to help micro and small businesses innovate and transform. Main work items in 2020 included: (1) diagnosis of a company’s capability for service innovation; (2) providing guidance for micro enterprise clusters; (3) individual/cluster assistance for digital innovation of consumer experience; (4) new services and assistance for digital technology; and (5) organizing innovation service experience and exchange activities. The program ended in 2020.

### **3. SME Digital Transformation and Smart Manufacturing Promotion Program**

The SMEA of the MOEA implemented the SME Digital Transformation and Smart Manufacturing Promotion Program in 2018 to enhance SMEs and help them transition to innovative business models. Main work items in 2020 included: (1) digital transformation and smart manufacturing innovative application diagnosis for small and medium manufacturing enterprises; and (2) organizing a series of activities for the manufacturing industry such as enterprise seminars or lectures and encouraging SMEs to observe and learn. It provided them with guidance through success stories in the transformation to smart manufacturing or the knowledge for achieving high-growth development (<https://myconsultant.tw/>).

### **4. Promotion of Smart Business Projects**

In 2017, the DOC of the MOEA 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. The “Smart Circulation Service Promotion Project” was started in 2021 and its main tasks include: (1) the development of innovative circulation service models and solutions; (2) the promotion of the integrated demonstration of smart circulation service solutions; and (3) the expansion of smart circulation service solutions and export of services (plan site: <https://like.logistics.org.tw/>).

## **IV Guidance to SMEs on Energy Conservation, Green Opportunities, and Carbon Emissions**

### **1. SMEs’ Circular Economy Capacity Enhancement and Application Project**

The SMEA of the MOEA continued to execute the “SMEs’ Circular Economy Capacity Enhancement and Application Project” to help SMEs attain green sustainable value, innovation, and development. Action plans for 2021 include: (1) promoting sustainable materials and the circular economy; (2) promoting innovative applications in a green circular economy; and (3) exploring global supply chain opportunities for the SME circular economy (plan site: <https://green.pidc.org.tw/index.php?lang=tw#/home>).

### **2. Green Technology Advancement Program**

The IDB of the MOEA launched the “Green Technology Advancement Program” to help various industries develop green technologies and comply with environmental regulations and standards. Action plans for 2021 include: (1) guidance to help various industries upgrade and reinforce their environmental protection policies; (2) studying and formulating response measures

to the latest trends in environmental regulations; (3) investigating and examining relevant environmental issues; and (4) advocacy and promotion (plan site: <https://proj.ftis.org.tw/eta/>).

### **3. Promoting Commercial Energy Conservation and Carbon Emissions Reduction Guidance**

The DOC of the MOEA began promoting commercial energy conservation and carbon emissions reduction guidance in 2008 to help commercial service providers implement energy conservation measures and use improvements in energy efficiency to increase the competitiveness of the industry. Action plans for 2021 include: (1) energy conservation guidance, implementation, and promotion; (2) analysis of energy saving and low carbon emission stores; (3) voluntary GHG reduction by business and trade associations; and (4) promotion of an inter-agency consultation platform for commercial operations (plan site: <https://escs.cdri.org.tw>).

## **V SMEs: R&D Enhancement and Technology Upgrading**

### **1. Small Business Innovation Research Program (SBIR)**

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

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

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

The Administration planned and launched the 3-phase rewards and subsidies mechanisms in the "Small Business Innovation Research Program (SBIR) - Entrepreneurship SBIR" to encourage domestic startups to create new ideas, and help them attain successful commercialization and business creation. The Administration continued to organize the "Entrepreneurship SBIR - Entrepreneurship Concept Selection (Stage 1)" in 2021. The selection was divided into different regions with "celebrity teams" and "rookie teams" (plan site: <https://www.sbir.org.tw/>).

### **2. Industrial Safety Smart Assistance Project**

To reduce accidents and disasters in domestic industry, actively improve the investment and development environment, create new competitive advantages, and reduce overall operational risks,

the IDB of the MOEA has helped industries improve their work environment with industrial safety and health technology support teams since 1990. In response to the rapid development of AI technologies, the project was renamed “Industrial Safety Smart Assistance Project” in 2021. Action plans for 2021 included: (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: <https://www.cesh.twmail.org/>).

### **3. Conventional Industry Technology Development (CITD)**

The IDB of the MOEA launched the “Traditional Industry Technology Development Assistance Plans” in 1991 to provide subsidies to traditional industries for research and development and encourage enterprises to conduct independent research and development, enhance the capabilities for innovation and R&D of traditional industries in Taiwan, accelerate upgrading and transformation, and improve competitiveness. The 2020 priorities were: (1) product development, (2) product design, (3) R&D alliances, and (4) industry-academic R&D cooperation (plan site: <https://www.citd.moeaidb.gov.tw/CITDweb/Web/Default.aspx>).

### **4. Industrial Upgrading and Innovation Platform Counseling Program**

In order to help industries upgrade and transform, the IDB of the MOEA has launched the “Industrial Upgrading and Innovation Platform Counseling Program” and an industry promotion measure to help firms to develop competitive products and services, and further increase the added value of industries to help firms connect with international markets. The main areas of the program in 2021 are: (1) the high-end products plan (for improving added value and shaping the high-value product image), (2) the innovation and optimization plan (for encouraging firms to own core technologies and products and build up systematic solution methods), (3) the new industry development plan (for encouraging firms to develop new products and services), and (4) the theme-based development plan (themes initiated by the IDB) (plan site: <https://tiip.itnet.org.tw/>).

### **5. A<sup>+</sup> Industrial Innovation R&D Program**

The Department of Industrial Technology of the Ministry of Economic Affairs (DOIT of the MOEA) launched the “A<sup>+</sup> Industrial Innovation R&D Program” in 2014 to encourage enterprises to invest in the development of valuable forward-looking industrial technologies and facilitate industry chain integration. It also helps companies establish R&D organizations and teams, create R&D management systems, and develop core technical capabilities or unique business models. The project helps companies build up their R&D capacity and enhance talent development to improve domestic industrial development.

In 2021, the A<sup>+</sup> Industrial Innovation R&D Program can be divided into four types of programs: the Industrial Technology Foresight Research Program, the Program for Encouraging Domestic Companies to Set Up R&D Centers, Special Programs, and the Global R&D Innovation Partner Program (plan site: <https://aiip.tdp.org.tw/index.php>).

## 6. Methods for Promoting Technical Innovation in Traditional Industries

The DOIT of the MOEA implemented the “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. Key tasks in 2021 include: Promotion of local industrial technology value-added innovation by legal persons and academia.

## 7. 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 DOC of the MOEA 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 2021, there are two subsidy categories, which are “innovative operations” and “integrated alliance,” and four added main themes for subsidies (smart business, brand creativity, digital life, and leisure experience) as the strategy for promoting industrial development (plan site: <https://gcis.nat.gov.tw/neo-s/Web/Default.aspx>).

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

The CIP began providing innovation R&D subsidies for the first time in 2018 under the Value-added Program for Industry by Indigenous People. The subsidies aim to help indigenous enterprises engage in technology or service innovation and thereby create a competitive advantage. The Program provides subsidies to industry alliances formed under the Industry Demonstration Zone Project previously implemented by the Council of Indigenous Peoples, or to indigenous enterprises (including individual cases and syndicates) in 2021 (plan site: <https://www.cip.gov.tw>).

# CHAPTER 6

## Strengthening Start-ups and Incubation & Acceleration Mechanisms

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

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

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

#### 1. Startup Hubs and Website

To allow full utilization of entrepreneurial services located on online platforms, the Small and Medium Enterprise Administration of the Ministry of Economic Affairs (SMEA of the MOEA) established a physical location (Start-up Hub) in 2015 to provide startups with comprehensive resources and support services, based on the concept of a one-stop service. The Start-up Hub website (<https://sme.moeasmea.gov.tw/startup/>) has enabled the government to fulfill its role as a medium for promoting innovation and startups via an online platform. Concrete methods in 2021: (1) operations of the Taiwan Start-up Hub and the toll-free entrepreneurship consulting hotline (0800-589-168); (2) maintenance and optimization of the International Entrepreneur Initiative Taiwan and Start-up Hub fan page; (3) global entrepreneurship observation and continuous analysis of development of the domestic entrepreneurship ecosystem; and (4) promotion of the exchange of ideas between startups and enterprises.

#### 2. Project for Value Increase of Social Innovation Enterprises

The SMEA of the MOEA used the “Project for Value Increase of Social Innovation Enterprises” to connect cross-agency, industrial, and business resources to create a friendly social innovation and development environment and help social innovation enterprises increase their capacity for operations and expand business opportunities in the market. Concrete methods in 2021: (1) providing diverse consultation services with social innovation mentor support groups; (2) constructing a social innovation registration database, and including social innovation products in

common supply contracts; (3) implementing the Buying Power – Social Innovation Product and Service Procurement Incentive Mechanism; and (4) connecting with the international social innovation network. “Social Innovation Lab” website: <https://si.taiwan.gov.tw/>.

### 3. Social Innovation Lab

The Social Innovation Lab was opened on October 18, 2017 as a directly operated service location for social innovation. People can gather together in this open space to discuss and focus on social and environmental issues, and resources such as guidance and social networks are provided to realize and optimize creative ideas, from which solutions for sustainability can be found. “Social Innovation Lab” website: <https://silab.sme.gov.tw/>.

## II Strengthening the Incubation Support System

### 1. Project for the Great Entrepreneurs Academy

The SMEA of the MOEA established the Great Entrepreneurs Academy in 2003 to enable all citizens to achieve lifelong learning. The academy is an integrated portal for e-learning and physical courses, and operates a one-stop charging station for SMEs in Taiwan. Work items in 2021 include: (1) offering over 800 free online courses; (2) providing an organization learning area for enterprises, diverse e-learning services and lifelong learning electronic passport services; and (3) offering startup-related courses and family business successor training. (<https://www.smelearning.org.tw/>)

### 2. Start-up Demonstration Development Program

The SMEA of the MOEA began implementing the Start-up Demonstration Development Program in 2018 to drive the development of startups and guide them into the government market; procurements from startups have been made under the program using common supply contracts. The Program provides convenience, and increases the government authorities’ willingness to experience innovative products and services. Work items in 2021 included: (1) assisting startups in acquiring common government supply contracts; and (2) satisfying government needs with startup solutions: allowing businesses to plan and adjust products or services in accordance with the requirements of government authorities (<https://www.spp.org.tw/spp/>).

### 3. SME Incubator Institutions

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

#### (1) Current Status of Incubators

## A. Innovative Approach

In response to diverse innovation and entrepreneurial demand, the SMEA of the MOEA actively supported the transformation of incubation centers into the “Small and Medium Enterprise Incubators” in 2018. It also developed the “Technical Entrepreneurship Amplifier” (TEA), Local Enterprise Innovation (LEI), and “International Startup Accelerator” (ISA) to make full use of the innovation and entrepreneurial support systems in Taiwan.

The SMEA continued to promote incubators in 2021 with the aim of focusing on the transformation of R&D, local connections, and international incubators. It guides incubators in diverse incubation development through technology development, local development, and international connections. It also used the “Local Youth Entrepreneurs Incubator Program” to create a support system for local youth. By directly connecting with local youth communities, it uses resources for local youth development requirements to empower youth and develop local economies, thereby promoting local innovation and development, and improving the overall incubation and support ecosystem.

## B. Incubation and Support Performance

As of the end of 2020, the SMEA had provided subsidies to 149 incubators, which have provided SMEs with support in 4,145 cases (including 2,575 cases for startups), and facilitated increased investments totaling NT\$21.7 billion, and has maintained or added approximately 54 employment opportunities in the last three years. It has also helped incubated companies in obtaining 300 patents or technology transfers, and has successfully facilitated international cooperation or helped foreign startups start operations in Taiwan in 51 cases (<https://incubator.moeasmea.gov.tw/>).

### (2) Incubation Centers Operated Directly by the SMEA of the MOEA

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

## 4. Promoting the Value Chain of Startup and Incubation Institution Program

The SMEA of the MOEA began implementing the “Promoting the Value Chain of Startup and Incubation Institution Program” in 2018 to integrate Taiwan’s entrepreneurial resources, create an incubation ecosystem with innovation and startups at its core, and fully integrate different industries’ capacities. Work items in 2021 included: (1) release of “the 2021 Taiwan Incubation Industry Report;” (2) encouraging enterprises to invest in start-up industries; and (3) promoting international strategic cooperation in incubation.

## 5. Startup Accelerator and Jumpstart Plan

The SMEA of the MOEA began implementing the “Startup Accelerator and Jumpstart Plan” in 2021 to use total solutions for the cloud connected by innovative cloud-based tools for accelerating

the adoption of cloud tools by SMEs and expanding innovative products/services to domestic and foreign markets. Specific measures include: (1) facilitating the matchmaking of the supply and demand of cloud tools for startups/SMEs; (2) co-creation connection and verification for cloud tools of startups/SMEs; and (3) leveraging the participation of major cloud companies to help startups/SMEs use the cloud co-creation team for international expansion (plan site: <https://www.smefast.org.tw/>).

## 6. Women's Entrepreneurship Flying Geese Program

The SMEA of the MOEA began implementing the Women's Entrepreneurship Flying Geese Program in 2013, which provides customized and integrated services to female entrepreneurs based on their needs at different stages. The program creates a friendly entrepreneurial environment to enhance women's economic strength and competitiveness. Action plans for 2021 included: (1) women entrepreneurship knowledge courses and after-course group entrepreneurship consultation; (2) continuous accelerated assistance over 6 months with the exclusive women entrepreneurship accelerator; (3) women entrepreneurship elite contests, media promotion for successful model cases, and elite gathering events; (4) working with Facebook, Google, and Amazon on digital marketing and training courses; and (5) working with the American Institute in Taiwan (AIT) in organizing the Academy for Women Entrepreneurs (AWE) to promote business development opportunities for women entrepreneurs in Taiwan and the United States (plan site: <https://woman.sysme.org.tw/>).

## 7. Business Startup Phoenix Plan for Microenterprises

The Ministry of Labor (MOL) has promoted the "Business Startup Phoenix Plan for Microenterprises" since 2007 to create a friendly environment for entrepreneurship and resolve challenges in business management. Action plans for 2021 included: (1) organizing entrepreneurship courses and providing people with free comprehensive entrepreneurship consultation and assistance services before, during, and after starting their businesses; (2) targeting businesses set up by women aged 20 to 65, residents of remote islands, middle-aged to elderly people aged 45 to 65, and the unemployed covered by employment insurance, and providing up to NT\$2 million in low-interest entrepreneurship loan and interest subsidies. A nationwide toll-free service hotline at 0800-092-957 and the Business Startup Phoenix Plan for Microenterprises website (<https://beboss.wda.gov.tw/>) are provided for people to access more information.

## 8. Entrepreneurship Studies, Consultation, and Guidance

To encourage people to start businesses and stabilize business management, the MOL has promoted entrepreneurship studies and consultation and guidance that encompass the following in 2021: (1) providing beginner courses, advanced courses, and improvement courses for entrepreneurship as well as online marketing courses; (2) establishing digital entrepreneurship courses on labor development digital service platforms to provide people with methods for learning across different points in time, places, and platforms; and (3) organizing entrepreneurship consultants to provide people with free entrepreneurship consultation and assistance services before, during, and after starting their businesses (plan site: <https://portal.wda.gov.tw/>).

## **9. Angel Investor Program**

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

## **10. U-start Innovation and Startup Program**

The Youth Development Administration of the Ministry of Education (YDA of the MOE) has implemented U-start to create a culture of innovation and entrepreneurship on campuses, encourage universities to optimize the campus entrepreneurship environment, integrate school incubation and assistance resources, provide young entrepreneurs with space and resources for experiments, cultivate talents with entrepreneurial capabilities, and assist young students in entrepreneurship and implementation. The project provides entrepreneurship teams with two stages of subsidies (rewards) (plan site: <https://ustart.yda.gov.tw/bin/home.php>).

## **11. U-start Plan for Indigenous Innovation and Entrepreneurship**

To take advantage of the resources under the U-start Innovation and Startup Program, support is given to help young indigenous people start new businesses or propose and implement innovations based on tribal traditions, cultures, local produce and social relationships. The aim is to empower young indigenous people as entrepreneurs and facilitate economic development for the tribes. The YDA of the MOE and the Council of Indigenous Peoples (CIP) are teaming up for the first time in 2021 to launch the U-start Plan for Indigenous Innovation and Entrepreneurship, which offers startups subsidies/prizes in two stages (plan site: <https://ustart.yda.gov.tw/files/11-1000-122.php>).

## **12. Lean Startup Guidance Program for Indigenous People of Taiwan**

The CIP began implementing the Lean Startup Guidance Program for Indigenous People of Taiwan in 2015 to support indigenous people in engaging in indigenous industries, and thereby create more industrial development opportunities. The program in 2021 provides entrepreneurship subsidies, further guides indigenous startups to use innovative business models and improve their knowledge in business and financial management, and also facilitates visits to business locations. Business diagnosis is conducted to understand gaps in the market, so that the startups can improve upon their weaknesses and show their strengths (<https://www.cip.gov.tw/portal/index.html>).

# **III Strategy Optimization to Meet International Standards**

## **1. Entrepreneur Visa**

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

## 2. Startup Terrace Connection Project

To combine startup resources in the domestic and international markets, the SMEA of the MOEA has built the Startup Terrace into a world-class startup cluster since 2018. Areas in which to invest resources in 2021: (1) strategic startups: to accelerate the commercialization of technologies, products or service models; and (2) international accelerators and startup talent incubators: to entice entry into the Startup Terrace, where assistance and training will be available. The “Asia New Bay Area 5G AIoT Innovation Park” is expected to be established in Kaohsiung Software Technology Park at the end of 2021 to recruit international accelerators and promote startup growth. International Entrepreneur Initiative Taiwan (IEIT) English Portal: <https://startup.sme.gov.tw/>. “Startup Terrace” website: <https://www.startupterrace.tw>.

## 3. Taiwan Tech Arena (TTA)

To help startups in Taiwan to grow and adopt international standards, the Ministry of Science and Technology created the Taiwan Tech Arena (TTA) at the Taipei Arena in 2018 as a startup hub where startups meet and collaborate with each other. Key tasks for 2021 included: (1) to manage a world class tech startup hub: bringing in global accelerators, tech startups from all over the world, establishing links with supply chains of major companies, and strengthening connections between academic and research startups, accelerators, and investors; and (2) to establish links with resources in international startup ecosystems such as Silicon Valley: recruiting successful international entrepreneurs and investors for the TTA, and bringing teams to attend benchmark startup conventions. “Taiwan Tech Arena” website: <https://www.taiwanarena.tech/>.

# CHAPTER 7

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

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

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

### I Promoting the Development of Local Industrial Clusters

#### 1. The Project for the Development of Village Industry

The Small and Medium Enterprise Administration of the Ministry of Economic Affairs (SMEA of the MOEA) began actively investing resources to assist in the development of village industries in 1989. The SMEA began utilizing the special budget of the Forward-Looking Infrastructure Development Program in 2018 to drive industrial development, revitalize the economy, and provide stable employment opportunities. The SMEA subsidized the construction of industrial parks by county and city governments for village industries that form clusters, play key roles in their areas, and drive the development of related industries. The SMEA further optimized public spaces and hardware industrial parks to help production-scale SMEs move in. This project uses a competitive proposal mechanism and subsidizes the needs of special municipalities and county and city governments for industrial development, with a view to driving the development of surrounding village industries. “One Town One Product Taiwan” website: <https://www.otop.tw/>.

#### 2. Township Revitalization Project for Small and Medium Enterprises

The SMEA of the MOEA began implementing the “Township Revitalization Project for Small and Medium Enterprises” in 2018 to help SMEs apply the concepts of the circular economy, the digital economy, and the experiential economy. The project increases enterprise robustness through production processes and innovative business models, thus guiding enterprises towards the superior local, industrial, and human resources of townships to be utilized for industrial transformation, create new value, and achieve the vision of “township revitalization.” Proposals for this project in

2021 are divided into two categories: Individual Enterprises (Category A), and Collaborative Enterprises (Category B) (plan site: <https://share.sbtr.org.tw/>).

### **3. Industry Transformation and Upgrading Program for Local Industrial Clusters**

The Industrial Development Bureau of the Ministry of Economic Affairs (IDB of the MOEA) has promoted the “Industry Transformation and Upgrading Program for Local Industrial Clusters” since 2014 to help transform traditional factories into “tourism factories” and help unique factories improve their educational and entertainment tourism value and new business model. Contents of the plans for 2021: (1) tourism factory evaluation and promotion; (2) selection of high-quality tourism factories and tourism factories with an international appeal; and (3) inter-regional integration, value-added assistance, etc.

### **4. Creative Life Industry Development Program**

In order to help businesses combine creative and cultural elements into the development of creative products and services encompassing merchandise, locations, services, and events, as well as go on to create innovative new business models which lead to greater value-added economic activity and more business opportunities, the IDB of the MOEA launched the “Creative Life Industry Development Program.” Action plans for the program in 2021 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: <https://www.creativelife.org.tw/>).

## **II Helping Local Industries Build Marketing Capabilities and Regional Brands**

### **1. OTOP (One Town One Product) Program**

In 1989, the SMEA of the MOEA launched a policy for providing guidance to local cultural industries. Through cooperation between specialized guidance teams and businesses, the policy helps local industries work toward adopting boutique and specialized business models. Under Taiwan’s “One Town One Product” (OTOP) brand image, the policy also promotes products in Taiwan with local characteristics and a reputation for high quality. Main action plans for 2021: (1) organizing or participating in domestic and overseas exhibition events, and local industry OTOP design awards and award ceremony activities; (2) promoting cross-domain platforms, planning and promoting tours with unique local features; (3) providing training and demonstration assistance for commercial/shopping districts; and (4) subsidizing development and environmental cleanup tasks in relation to COVID-19. “One Town One Product Taiwan” website: <https://www.otop.tw/>.

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

The SMEA of the MOEA has promoted the “Counseling Project for Internationalization of Local Cultural Industries” since 2007, which features the use of Taiwan’s joint OTOP brand, selects companies and products with international market development potential, enhances overseas identification and localization, and integrates relevant industry alliances and matchmaking for the collaborative development of global channels. The SMEA has participated in Taiwan Expos in New Southbound countries and expanded overseas exhibition and sales outlets to enable unique local industries in Taiwan to expand into international markets. Main action plans for 2021 include: (1) talent cultivation, matchmaking for business opportunities, and expansion of channels; (2) providing diagnosis and assistance services to enterprises with development potential; and (3) organizing overseas exhibitions, trade shows and conventions to keep advertising OTOP products in countries listed in the New Southbound Policy and other potential markets. “One Town One Product Taiwan” website: <https://www.otop.tw/>.

## **III SME Business Matchmaking and Export Expansion**

### **1. Project of Digital Innovation and International Marketing for SMEs**

The SMEA of the MOEA began implementing the “Project of Digital Innovation and International Marketing for SMEs” in 2019 to use high-tech digital marketing, e-commerce platforms, and integrated virtual and actual channels to create innovative digital marketing and innovation business models to help small and medium enterprises expand into the international market. Main action plans for 2021 include: (1) organizing alliances for southbound industrial business opportunities and constructing an international collaboration network for SMEs; (2) professional consulting and international market diagnosis services; (3) assisting high-quality digital innovative enterprises; and (4) organizing a series of matchmaking activities to create international business opportunities (plan site: <https://info.moeasmea.gov.tw/masterpage-wpi>).

### **2. Project of Value Co-creation of Escalating SMEs Cross-Domain Ecosystem**

The SMEA of the MOEA executed the “Project of Value Co-creation of Escalating SMEs Cross-Domain Ecosystem” to power new businesses of the future, increase potential for international development, and ensure continuous growth of SMEs in new regional economies. In 2021, it focused on 3 major strategies including “creation” with co-creation of value by the industry, government, academia, and research institutions, “innovation” with strengthened applications of emerging technologies, and “high growth” with enhancements for corporate business development. Its aim is to create a value co-creation ecosystem, use emerging technologies or information service

platforms, power the high-speed growth of SMEs, and help them attain high profitability (plan site: <https://smefuture.org.tw/masterpage-smecosystem>).

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

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

(<https://technomart.moeasmea.gov.tw/masterpage-technomart>)

### **4. Trade Promotion Working Plan**

The Bureau of Foreign Trade of the Ministry of Economic Affairs (BOFT of the MOEA) has launched the Trade Promotion Working Plan to promote export market diversification, with a particular focus on increasing Taiwan’s exports share in emerging markets. Related activities are taking place online instead in response to COVID-19.

#### **(1) Trade Promotion Working Plan**

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

#### **(2) Integrating Private Sector Resources for Market Development**

The main activities of the BOFT of the MOEA in 2021 included forming delegations for expanding trade in foreign countries, participating in commercial exhibitions, inviting foreign trade associations to visit, and organizing and/or attending international economic and trade conferences. The Bureau also provided individual companies or businesses with subsidies for participating in international exhibitions in response to the export expansion requirements of individual companies. The subsidy programs and procedures are modified to allow for more flexibility in response to COVID-19 (<https://tspsp.trade.gov.tw/tppo/home/notice/front>).

#### **(3) Launching Various Projects and Programs**

##### **A. New Southbound Market Innovation Marketing Development Project**

To help companies grasp business opportunities in consumer markets in ASEAN and South Asia, the BOFT of the MOEA implemented the “New Southbound Market Innovation Marketing Development Project”. Specific approaches in 2021 include: (1) providing business opportunity information services through diverse channels; (2) promoting cross-industry cluster guidance alliances for “commercial channels” to provide related professional consultation and guidance; and (3) assisting companies in using digital technologies and new media for online product tests and social media marketing promotion, and organizing precision buyer matchmaking events (plan site: <https://mvp-plan.cdri.org.tw/>).

## B. Helping Companies Win Green Business Opportunities Across the Globe

To help Taiwanese companies follow the international environmental protection trends and win green business opportunities across the globe, the BOFT of the MOEA in 2021 continued the operations of the “Taiwan Greening Your Life” network to collect information on international green regulations and business opportunities, provide counseling on international green certifications, organize physical and online exhibitions to expand sales, promote green ecosystems, and provide carbon footprint guidelines and counseling for companies to obtain international carbon footprint certifications (plan site: <https://www.greentrade.org.tw/>).

## C. Taiwan Industrial Image Promotion Project

To enhance the recognition and favorable image of Taiwanese products and high-quality industries for target markets and consumers and thus improve the international image of Taiwan’s industries and promote export growth, the BOFT of the MOEA continuously promotes the “Taiwan Industrial Image Promotion Project.” The main projects in 2021 consisted of diverse and integrated marketing and promotional activities including: (1) selection and promotion of Taiwan Excellence products; (2) management and promotion of the virtual/physical Taiwan Excellence Pavilion; and (3) adopting virtual/physical exhibition marketing, digital marketing, and localized integrated marketing campaigns for target markets (plan site: <https://www.taiwanexcellence.org/tw>).

## D. Securing Business Opportunities in Global Government Procurement

To help companies win direct procurement projects or subcontract business opportunities from foreign governments, the BOFT of the MOEA continued to organize seminars on business opportunities, form delegations for developing business opportunities, invite buyers for consultation, and perform other promotion activities in 2021. (plan site: <https://gpa.taiwantrade.com.tw/zh/home>)

## E. Smart Machinery Overseas Promotion Project

To showcase Taiwan’s turnkey smart machine solutions and competitive advantages in differentiation and to support domestic smart machine manufacturers in securing opportunities overseas, the BOFT of the MOEA is promoting the Smart Machinery Overseas Promotion Project. The project was implemented in 11 target cities in the United States, Germany, and Japan in 2021. The contents included: (1) promoting Taiwan’s smart machinery through multiple digital marketing methods in conjunction with professional exhibitions in foreign countries; (2) using product launch events, trade delegations, and matchmaking events to connect Taiwanese companies with buyers;

and (3) digital business analysis and information diffusion.  
(plan site: <https://twmt.tw.taiwantrade.com/>)

#### F. International Market Development Subsidy Plan

The BOFT of the 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 subsidies. Subsidies were provided in 43 cases in 2021, including 29 SMEs which accounted for 67% (plan site: <https://www.imdp.org.tw/>).

#### G. Textile Export Promotion Project

To help Taiwan's textile companies expand in foreign markets, the BOFT of the MOEA is promoting the Textile Export Promotion Project. The range of assistance being provided in 2021 includes (1) integrated marketing and opportunity development; (2) international marketing consulting and other services; and (3) customized marketing assistance (plan site: <https://export.textiles.org.tw>).

# CHAPTER 8

## Other Government Measures to Support SMEs

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

This chapter comprises five sections that will discuss other SME-supporting resources and measures not covered in previous chapters. Section I presents the utilization of government resources to assist SMEs, such as government procurement and SME financing. Section II examines the government's regulatory flexibility related 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 focuses on manpower cultivation in SMEs. Finally, Section V covers national SME awards from the Ministry of Economic Affairs.

### I Government Resources Allocated to SMEs

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

#### 1. Assistance to SMEs Totaled NT\$27.144 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 of the Ministry of Economic Affairs (SMEA of the MOEA), Industrial Development Bureau (IDB), Bureau of Foreign Trade (BOFT), Department of Commerce (DOC), Department of Industrial Technology (DOIT), and financial institutions and credit cooperatives that make donations to the Taiwan SMEG, as well as training expenses of the Ministry of Labor (MOL).

Based on the final budget for MOEA units, a budget totaling NT\$32.556 billion was approved for 2020 and NT\$24.185 billion was allocated to SMEs. It accounted for 74.29% of the final budget which was 1.08 percent lower than in 2019. The overall funding for 2020 was \$1.842 billion lower than for 2019, and the funding for SME counseling was also \$1.742 billion lower. The main reason was the 25.02% decrease in the amount of funding used by the BOFT for SMEs in 2020. The top 3 providers of funding for supporting SMEs were: DOIT (NT\$9.541 billion), the SMEA (NT\$5.719 billion), and the IDB (NT\$4.974 billion). (Table 8-1-1).

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

**2019-2020**

Unit: 100 million NT\$; %

Organizer	Annual funding	Fiscal year final accounts		Total amount allocated to SMEs		Increase (decrease) ③ = ② - ①
		2019	2020	2019①	2020②	
SMEA (SME Development Fund included)		54.64	57.19	54.64 (100.00)	57.19 (100.00)	2.55
IDB (Industrial technology guidance and Industrial Park Development and Management Fund included)		80.25	82.04	52.58 (65.51)	49.74 (60.63)	-2.83
BOFT (Overseas marketing and marketing consultation, and Trade Promotion Fund included)		50.13	38.34	44.52 (88.81)	33.38 (87.05)	-11.14
DOC (Promotion of trade modernization and commercial technology development included)		8.72	8.79	5.74 (65.82)	6.14 (69.81)	0.40
DOIT		150.25	139.19	101.80 (67.76)	95.41 (68.54)	-6.39
<b>Total</b>		343.98	325.56	259.27 (75.37)	241.85 (74.29)	-17.42

Notes:

1. SMEA stands for the Small and Medium Enterprise Administration; IDB stands for the Industrial Development Bureau; BOFT stands for the Bureau of Foreign Trade; DOC stands for the Department of Commerce; and DOIT stands for the Department of Industrial Technology.
2. Figures in parentheses represent the percentages in the final accounts.

Source: Various government agencies, 2020.

In 2020, in addition to the relevant government resources allocated to SMEs by agencies such as the MOEA, 36 financial institutions and 6 credit cooperatives also contributed a total of NT\$2.601 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\$0.358 billion. Therefore, government guidance resources allocated to SMEs totaled NT\$27.144 billion in 2020.

## 2. Providing SMEs with Special Loans Totaling NT\$0.988 Billion

Eligible SMEs in Taiwan have access to the following various types of special loans: Small and Medium Enterprises Development Fund Supported Export Loans, Overseas Investment Loans, Overseas Construction Project Loans, SME Development Fund Special Loans, Indigenous Integrated Development Fund Loans and Micro-Business Start-up Phoenix Loans and Employment Insurance Startup Loans for the Jobless (MOL). A total of NT\$0.988 billion in government-funded

SMEs loans were excluded in 2020 (Table 8-1-2).

**Table 8-1-2 Special Loans to SMEs Funded by the Government, 2020**

Unit: 100 million NTS

Name of loan	Eligible applicant	Structure	Status	
			Total loan amount	Government funding
Small and Medium Enterprises Development Fund Supported Export Loans Overseas Investment Loans Overseas Construction Project Loans	SMEs	SME Development Fund	5.00	5.00
Special Loan Assistance for SMEs to Take Root	SMEs	Supported with long-term special funding allocation of the National Development Council or banks with proprietary funds	15.76	0.00
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	4.79	4.79
Micro-Business Start-up Phoenix Loan Employment Insurance Startup Loans for the Jobless	Women aged 20-65, offshore islands residents and women aged 45-65 and the jobless with employment insurance	Loans provided by banks' own funds and interests subsidized by the Ministry of Labor	4.67	0.09
<b>Total</b>			59.67	33.21

Source: Various government agencies, 2020.

### 3. Government Procurement from SMEs Reached NT\$499.5 Billion

According to Government Procurement System statistics on awarded contracts published in 2021, in 2020 the total amount of government procurement totaled NT\$510.7 billion, while the total amount contracted or subcontracted by SMEs in government procurement totaled NT\$499.5 billion. The share of government procurement from SMEs in 2020 was 87.62%.

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

### 1. Regulatory Affairs Concerning Small and Medium Enterprises

#### (1) Establishment of the Regulations for Business Financial Relief by the Ministry of Economic Affairs for Businesses with Operational Difficulties Due to COVID-19

The Ministry of Economic Affairs established the “Regulations for Business Financial Relief by the Ministry of Economic Affairs for Businesses with Operational Difficulties Due to COVID-19” on March 12, 2020 to help businesses affected by the COVID-19 epidemic through difficult times.

The Regulations provided funding relief, industry upgrading, digital transformation, consumption promotion, improvements to the environment, talent training, reduced water and electricity charges, and other financial relief measures. SMEs with difficulties in operations are provided with extensions for their existing loans as well as subsidies for the interest on operating fund loans and loans for revitalization. These measures have increased the amount of funds available to SMEs and have helped them meet the challenges of the epidemic and the post-epidemic era.

## **(2) Amendment of the Standards for Identifying Small and Medium-sized Enterprises**

In response to the industry upgrading and transformation as well as the intensified and accelerated development of the capital of SMEs, the Ministry of Economic Affairs amended the Standards for Identifying Small and Medium-sized Enterprises on June 24, 2020 and increased the maximum paid-in capital from NT\$80 million to NT\$100 million. In response to the continuous innovations in business models used for the integration of different sectors and the increased ambiguity in the boundaries between industries, the amendment also changed the maximum number of regular employees so that SMEs in different industries will be determined based on the same standards. The maximum number of employees was increased from 100 to 200 to simplify the determination criteria, help SMEs understand their qualifications, and increase administration efficiency.

## **2. Helping SMEs Adapt to Critical Regulatory Frameworks**

### **(1) Clarification of the Procedures for the Issuance of Invoices by Food Delivery Platforms**

The regulations for the issuance of invoices by operators of food delivery platforms were not clarified in the past and may create consumer disputes regarding the requirements for platform operators to issue full-amount invoices. In response, the SMEA of the MOEA invited the National Taxation Bureaus of the Ministry of Finance and related businesses to coordination meetings and recommended the procedures for the issuance of invoices by the operators. The National Taxation Bureau of Taipei subsequently promulgated the administrative guidelines in the “Regulations on the Issuance of Certificates for Food Delivery Services Provided by Delivery Platforms and Related Operators” on February 3, 2020. Regulations are provided based on the nature of the operator and an explanation for how delivery platforms operated by foreign e-commerce businesses or domestic operators should issue invoices was provided to help platform operators comply with regulations and pay a reasonable amount of taxes.

### **(2) Relaxing Restrictions Prohibiting Travel Agencies from Using the Same Business Premises as Other Profit-making Enterprises**

Most tourism startups in remote rural areas operate jointly with home stay facilities or restaurants to overcome difficulties of limited resources. However, the “Regulations Governing Travel Agencies” state that travel agencies must have physical business premises and they may not operate other profit-making enterprises on the same premises. In response, the SMEA of the MOEA began organizing meetings and issuing letters in 2018, and convinced the Tourism Bureau

of the Ministry of Transportation and Communications to revise Article 16 of the “Regulations Governing Travel Agencies” on October 22, 2020 to relax restrictions on the business premises of travel agencies. If a travel agency has a clear separation space between its business premises and other profit-making enterprises, the same premises may be shared for use.

### **3. SME Innovation Application Experiment**

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

Many SMEs have adopted bonus points and point collection cards as digital marketing tools in recent years. If the emerging point issuance model fits the definitions of gift certificates, it must comply with the requirements in the Mandatory and Prohibitory Provisions of Standard Form Contract for Product (Service) Gift Certificates, which will have a significant impact on their cost of operations.

To clarify whether electronic points are gift certificates, the SMEA of the MOEA helped facilitate communication meetings between related operators and the competent authority. They reached a conclusion that gift certificates are characterized by prepayment and circulation, and the substantive recognition must be implemented on a case-by-case basis. If electronic points cannot be directly used in exchange for products or services and are more likely used for deducting payment, and if the points are bound to the account of specific individuals and cannot be transferred, they are less likely to be governed by regulations on gift certificates. The differences between electronic points and gift certificates are thus clarified to reduce the entry barriers of companies in emerging markets. This approach helps reduce operators’ risks of violation of laws and promotes innovative development.

## **III Participating in International SME Meetings and Events**

### **1. Participating in APEC**

#### **(1) Attending the 26th APEC Small and Medium Enterprises Ministerial Meeting**

Taiwan’s representative participated in the 26th APEC Small and Medium Enterprises Ministerial Meeting by video conference on October 23, 2020, and gave a speech on “Small and Medium Enterprise Digitalization Strategy in the Post-Pandemic World” in discussions on the “Digitalization of Micro, Small, and Medium Enterprises through Inclusiveness and Sustainability in the New Normal.” The speech focused on the application of digital technologies in Taiwan for epidemic prevention, and the use of public-private collaboration to build a favorable environment for the development of SMEs. It also addressed the relief and revitalization measures employed to

help build the capacity of MSMEs and create digital and international business opportunities to eliminate the uneven development brought about by the epidemic.

## **(2) Organization of the “APEC Cross-Domain Innovation Ecosystem Forum”**

The “APEC Cross-Domain Innovation Ecosystem Forum” was held in Taipei on August 12, 2020. Its core themes included “collaborative innovation,” “add-value technologies,” and “cross-sector platforms,” and it explored how SMEs must continue to innovate, connect the core capacity of industries, and find cross-sector partners and business opportunities in the era of the digital economy. The event included best practices from cross-domain innovation ecosystems to provide the public sector with ideas to optimize the policy environment. It also included innovative solutions from SMEs and startups to achieve the goals of cross-domain innovation, exchange of knowledge, and international connections.

## **(3) Organization of the “APEC Women-Led Start-Up Accelerator Workshop and International Forum”**

The “APEC Women-Led Start-Up Accelerator Workshop” was held at the Startup Terrace on August 26-27, October 19-20, and November 16-17, 2020. The event was held via online video conference and attended by more than 570 participants from 22 economies. They received training from mentors and watched commercial demonstrations which strengthened women entrepreneurs’ access to funding for entrepreneurship and the market.

The “APEC Women-Led Start-Up Accelerator International Forum” was held at the 1919 Creative Center on November 18, 2020. It focused on “market access” and “access to funding” and participants shared their insights and recommendations for expanding startup fundraising business opportunities, and shared accelerator resources. It was attended by more than 340 participants from 10 economies.

## **2. New Southbound Industrial Collaboration Summit**

The Chinese National Federation of Industries and the IDB of the MOEA began co-organizing the New Southbound Industrial Collaboration Summit in 2017. SMEs can use this platform to gain information on ASEAN markets, and create new business opportunities. A total of six forums were organized in 2020 including Industrial Collaboration Summits between Taiwan and Thailand, Taiwan and Indonesia, Taiwan and India, Taiwan and Malaysia, Taiwan and Vietnam, and Taiwan and the Philippines. Taiwan continued to use the collaboration platforms with the six nations to identify target industries for development in 2021 and focus on key bilateral industrial collaboration to promote more highlighted cases, conduct in-depth discussions on issues, and help remove obstacles for industrial collaboration to intensify bilateral cooperation.

## **3. Promoting SME International Exchange and Collaboration**

### **(1) Promoting Bilateral and Multilateral Cooperation and Cross-border Exchange and Collaboration**

- A. Promoting bilateral SME cooperation with key partner countries including the Philippines, Malaysia, India, Japan, the United States, Poland, Czechia, France, Austria, and the European Union.
- B. Attending annual bilateral conferences in the Philippines, India, Poland, Czechia, France, Austria, and the European Union.
- C. Cooperating with the World Trade Organization (WTO) in organizing informal working groups on MSMEs and other multilateral issues.

## **(2) Signing Memorandums of Understanding and Letters of Intent for Cooperation**

- A. Contributing to the Memorandum of Understanding for SMEs between the Republic of China and Turkey and the Memorandum of Understanding for Innovation and Startups between the Republic of China and Poland.
- B. Facilitating communication and information exchange via the annual meeting of the Malaysia-Taiwan Economic Cooperation Committee (MTECC).

**(3) Performance in SME International Exchanges:** Hosted 2 delegations totaling 55 visitors from foreign countries in 2020.

# **IV Manpower Cultivation in SMEs**

## **1. SME Management and Entrepreneur Talent Cultivation**

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

The SMEA of the MOEA focused on effective consultation through the “theory-practice-theory” approach and established the NexTech Academy to accelerate the establishment of corporate succession and digital transformation concepts in SMEs, promote the digital transformation of SMEs, and nurture succession teams. It customizes the resources necessary for digital applications in enterprises, promotes digital learning, community learning, and counseling, makes hidden knowledge visible and digital, promotes corporate succession and next-generation digital leadership development, and helps enterprises accumulate energy for transformation and enhance their competitive advantages.

## **2. Talent Training Programs in the Manufacturing Industry**

To train talents necessary for industrial upgrading and transformation and construct a professional talent training environment, the IDB of the MOEA continues to promote professional talent development programs for industries to organize short-term professional courses and medium- to long-term cultivation training programs, establish baselines and evaluation of

professional skills, and cooperate with industries and academia for talent cultivation. Furthermore, related units have engaged in cross-departmental collaboration in coordination with developments in the digital economy and the 5+2 innovative industries since 2017 to promote “interdisciplinary digital talent cultivation” by integrating with universities and legal person research institutions to train innovation and application talents for industry (<https://idbtrain.stpi.narl.org.tw/classinfo.htm>).

### **3. Talent Training Programs in the Service Industry**

The DOC of the MOEA has planned courses on big data analysis, digital marketing, and the Internet of Things for retail and integrated service industries (e.g., logistics and information and technology services) since 2017. It has also leveraged resources of trade associations to offer courses for training talents required for the promotion of smart business services and to establish a foundation for large-scale domestic smart business services. The Bureau plans to offer the Business Service Digital Transformation Leadership Training Program (10 courses) in 2021.

### **4. International Business Management Talent Cultivation**

#### **(1) International Business Management Talent Training Program**

In response to the industry’s demand for foreign trade talents, the BOFT of the MOEA began training work in two categories, namely, specialized training and on-the-job training. To support the bilingual nation and industrial development policies, the Bureau added the Industry English Talent Program in 2021. The Program focuses on the 6 core strategic industries and the 5+2 innovation industries, and is expected to provide training for 2,285 attendees along with the International Business Management Talent Training Program and professional on-the-job training courses (plan site: <https://www.iti.org.tw/index.php>).

#### **(2) Cultivation and certification of MICE talents**

The BOFT of the MOEA has promoted the training and certification of MICE talents since 2009 to provide training for the professional skills of MICE talents in Taiwan. It plans to train 1,185 participants in 2021 (plan site: <https://mice.iti.org.tw/>).

#### **(3) Funding for Taiwanese Student Internships in Emerging Markets**

The BOFT of the MOEA organized the “Funding for Taiwanese Student Internships in Emerging Markets” project to cultivate students’ understanding of international trade processes, international marketing, and the cross-cultural business administration of emerging markets in Southeast Asia. The program was organized as an online internship in 2021 due to the epidemic and was attended by 107 students (plan site: <http://www.tradepioneer.org.tw/>).

### **5. Cooperating with Industries and Academia for Talent Cultivation**

The Ministry of Education (MOE) has offered industrial technology graduate programs since the spring of 2011. Enterprises and schools jointly submitted program applications based on industry needs, and the programs were offered after gaining approval from the Ministry of

Education, thereby increasing the supply of the master's-level talent needed by enterprises. In 2021, the Ministry approved spring programs for 11 schools totaling 15 programs with 178 students and fall programs for 18 schools totaling 36 programs for 549 students.

To encourage technical and vocational colleges to focus on the key industries of the country, and to provide job matching, the Guidelines for the Implementation of an Industry College were revised in 2020 to adjust the categories of programs eligible for subsidies. The Industry College Cooperation and Talent Development Platform of the MOE is used to provide talent development programs through customized models to help students find employment immediately after graduation and enhance the capacity for industry-academic cooperation.

(<https://imaster.moe.gov.tw/home>)

## **6. Enterprise Talent Improvement and Independent Studies for Workers**

### **(1) Enterprises Human Resource Upgrading Plan and Small Enterprises Talent Skill Progressive Program**

The Workforce Development Agency of the MOL has promoted the “Enterprises Human Resource Upgrading Plan” since 2004 to help business units plan and provide training for their employees in accordance with their organizational and operational strategies, or in conjunction with business units with operational connections, and provide subsidies for part of the cost of training. The Agency also activated the “Small Enterprises Talent Skill Progressive Program” in 2014 to provide small enterprises with fewer than 50 employees with professional and customized assistance and consultation services, and assist in the execution of training programs (<https://onjobtraining.wda.gov.tw/>).

### **(2) Industrial Human Resource Investment Plan**

The Plan has been implemented since 2005 to improve the knowledge, skills, and attitude of on-the-job workers. It works with private training organizations to provide a diverse range of practical training courses and provides up to NT\$70,000 in training fees per person over 3 years. It encourages workers to learn independently and accumulate human capital to increase the overall human capital of the country (<https://ojt.wda.gov.tw/>).

## **V National SME Awards from the Ministry of Economic Affairs**

### **1. National Award for Outstanding Small and Medium Enterprises**

The SMEA of the MOEA established the “National Award for Outstanding Small and Medium Enterprises” in 1992 for the purpose of selecting SMEs with outstanding performance in management, innovation, branding, quality, and image as well as specific contributions to society as models of industry. Such SMEs receive public commendation to promote the establishment of

SME benchmark models to create a model for all SMEs in Taiwan to learn from each other's successes, help inspire each other, and accelerate business upgrades. 12 SMEs are expected to win the Award in 2021. As of the end of 2020, 314 SMEs had won the award (award site: <https://smeaward.moeasmea.gov.tw/masterpage-smea>).

## 2. Rising Star Award

The SMEA of the MOEA established the “Rising Star Award” in 1998 to use selection and commendation activities to select outstanding SMEs with high levels of competitiveness, outstanding export performance, and comprehensive management systems that make them role models for other domestic enterprises. The SMEA also hopes to use related events to disperse the role model effect and continue to promote cooperation within and between industries and encourage more SMEs that mainly operate in Taiwan to expand into international markets. As of the end of 2020, 327 SMEs had been recognized as “Rising Stars” (award site: <https://award.moeasmea.gov.tw/masterpage-rsa>).

## 3. SMEs Innovation Award

The SMEA of the MOEA has organized the “SMEs Innovation Award” since 1993 to continue to reward outstanding SMEs with specific performance in innovation and research through organized and systematic methods. The Award encourages enterprises to continue to accumulate R&D capacity to achieve local technological development and attain the goals for industrial upgrading and healthy development. Innovative products from a total of 30 SMEs are expected to be selected in 2021. As of 2020, a total of 932 innovative SME products had been selected and 46 enterprises that had won awards had been listed on the Taiwan Stock Exchange or Taipei Exchange, 16 enterprises had been listed on the emerging markets, and 8 SMEs were listed on GISA (award site: <https://tsia.moeasmea.gov.tw/masterpage-tsia>).

## 4. Business Startup Awards

The SMEA of the MOEA began the “Business Startup Award” in 2002 and it became the only national award for startups that have been established for less than five years. The Award seeks startups with innovative technologies, products, services, or business models to develop startups with high-quality operating models, establish successful cases for success, and invigorate domestic innovation and entrepreneurship. As of 2020, a total of 272 enterprises had won the award and at least 30 enterprises had been listed on the Taiwan Stock Exchange or Taipei Exchange, or had become public companies. In addition, 69 enterprises had received venture capital investment or had merged with other enterprises (award site: <https://startupaward.sme.gov.tw/>).

## 5. Model of Entrepreneurs Award

In 2005, the SMEA of the MOEA began providing subsidies to the “Model of Entrepreneurs Award” organized by the National Innovation and Entrepreneurship Association to encourage the private sector to organize events that recognize model entrepreneurs, encourage entrepreneurs to pursue their passions and take courageous steps, promote positive cycles for the sustainable

development of society and enterprises, and improve Taiwan's competitiveness. A total of 665 individuals have won the award since 1978 including 456 winners in the country and 209 winners overseas (award site: <https://www.careernet.org.tw/modules.php?name=kaimo>).

# Appendix



**Appendix A Act for Development of Small and Medium Enterprises**

**Appendix B Standards for Identifying Small and Medium-sized  
Enterprises**

**Appendix C SME Statistics by Industry**

# APPENDIX A

## Act for Development of Small and Medium Enterprises

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

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

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

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

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

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

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

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

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

### Chapter 1 General Principles

#### Article 1

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

#### Article 2

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

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

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

### Article 3

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

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

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

### Article 4

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

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

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

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

### Article 5

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

## Article 6

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

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

## Article 7

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

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

## Article 8

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

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

## Article 9

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

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

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

## Article 10

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

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

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

## Article 11

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

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

## **Article 12**

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

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

## **Article 12-1**

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

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

## **Chapter 2 Financing Facilities and Guaranty**

### **Article 13**

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

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

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

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

### **Article 14**

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

### **Article 15**

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

### **Article 16**

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

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

### **Article 17**

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

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

### **Article 18**

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

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

### **Article 19**

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

With regard to the bad debts resulted from causes which are not attributable to the intentional act, gross negligence or malpractice of the personnel handing 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, merger, 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-sized 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.

Revision approved by Executive Yuan Order Yuan Tai Jing #1090015419 on June 11, 2020.

Revision promulgated by Ministry of Economic Affairs Order Jing Chi Tzu #10904602890 on June 24, 2020.

## 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 “Small and Medium-sized Enterprise (SME)” as referred to under the Standards shall mean an enterprise which has completed company registration or business registration in accordance with relevant laws, and whose paid-in capital is no more than NT\$100 million, or which hires fewer than 200 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

Deleted

## Article 5

The number of regular employees under the Standards refers to the average monthly number of insured employees that an enterprise has registered with the Bureau of Labor Insurance, Ministry of Labor 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

Table C-1	Number of SMEs by Industry, 2020 .....	127
Table C-2	Total Sales Value of SMEs by Industry, 2020 .....	128
Table C-3	Domestic Sales Value of SMEs by Industry, 2020 .....	129
Table C-4	Export Sales Value of SMEs by Industry, 2020.....	130
Table C-5	Number of SME Employees by Industry, 2020 .....	131
Table C-6	Number of Paid SME Employees by Industry, 2020.....	132
Table C-7	Number and Sales Performance of Newly-established SMEs by Industry, 2020 .....	133
Table C-8	Number and Sales Performance of SMEs by Sex of Business Owner and Industry, 2020 .....	135
Table C-9	Export Sales Value of SMEs by Manufacturing Industry, 2020 .....	137

Table C-1 Number of SMEs by Industry, 2020

Unit: Enterprises; %

Industry	Enterprise size	Total (1)	SMEs (2)		
				(2)/(1)	Share
Total		1,565,637	1,548,835	98.93	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		11,864	11,779	99.28	0.76
Mining and Quarrying		1,067	1,043	97.75	0.07
Manufacturing		149,844	144,647	96.53	9.34
Electricity and Gas Supply		2,134	1,992	93.35	0.13
Water Supply and Remediation Activities		8,015	7,907	98.65	0.51
Construction		139,612	138,757	99.39	8.96
Wholesale and Retail Trade		724,420	720,674	99.48	46.53
Transportation and Storage		35,205	34,877	99.07	2.25
Accommodation and Food Service Activities		176,034	175,580	99.74	11.34
Information and Communication		25,599	25,042	97.82	1.62
Financial and Insurance Activities		22,259	20,320	91.29	1.31
Real Estate Activities		44,059	41,730	94.71	2.69
Professional, Scientific and Technical Activities		56,846	56,247	98.95	3.63
Support Service Activities		34,027	33,854	99.49	2.19
Education		5,067	5,044	99.55	0.33
Human Health and Social Work Activities		1,437	1,411	98.19	0.09
Arts, Entertainment and Recreation		37,717	37,593	99.67	2.43
Other Service Activities		90,431	90,338	99.90	5.83

Note:

1. SMEs refer to enterprises with capital of less than NT\$100 million (inclusive) as defined in the "Standards for Identifying Small and Medium-sized Enterprises" revised and promulgated by the Ministry of Economic Affairs on June 24, 2020.
2. The industries are defined in accordance with the "Standard Industrial Classification System of the Republic of China. (Rev. 10)" of the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan.
3. "(2)/(1)" refers to the ratio of SMEs among all enterprises; "Share" refers to the ratio of individual industries of SMEs among all SMEs.

Source: Fiscal Information Agency, Ministry of Finance, Value-Added Business Tax (VAT) data, 2020.

**Table C-2 Total Sales Value of SMEs by Industry, 2020**

Unit: Million NT\$, %

Enterprise size Industry	Total (1)	SMEs (2)		
			(2)/(1)	Share
Total	43,629,308	23,555,513	53.99	100.00
Agriculture, Forestry, Fishing and Animal Husbandry	56,207	45,217	80.45	0.19
Mining and Quarrying	50,876	33,957	66.74	0.14
Manufacturing	15,001,672	4,557,867	30.38	19.35
Electricity and Gas Supply	908,135	681,745	75.07	2.89
Water Supply and Remediation Activities	204,536	154,464	75.52	0.66
Construction	2,679,866	1,874,204	69.94	7.96
Wholesale and Retail Trade	15,412,079	10,755,870	69.79	45.66
Transportation and Storage	1,184,489	824,114	69.58	3.50
Accommodation and Food Service Activities	688,317	597,578	86.82	2.54
Information and Communication	1,341,008	694,864	51.82	2.95
Financial and Insurance Activities	2,600,165	1,174,889	45.19	4.99
Real Estate Activities	1,711,975	932,865	54.49	3.96
Professional, Scientific and Technical Activities	816,686	541,748	66.33	2.30
Support Service Activities	544,685	309,009	56.73	1.31
Education	23,138	21,001	90.76	0.09
Human Health and Social Work Activities	34,544	30,883	89.40	0.13
Arts, Entertainment and Recreation	120,681	100,994	83.69	0.43
Other Service Activities	250,248	224,244	89.61	0.95

Note:

1. SMEs refer to enterprises with capital of less than NT\$100 million (inclusive) as defined in the “Standards for Identifying Small and Medium-sized Enterprises” revised and promulgated by the Ministry of Economic Affairs on June 24, 2020.
2. The industries are defined in accordance with the “Standard Industrial Classification System of the Republic of China. (Rev. 10)” of the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan.
3. “(2)/(1)” refers to the ratio of SMEs among all enterprises; “Share” refers to the ratio of individual industries of SMEs among all SMEs.

Source: Fiscal Information Agency, Ministry of Finance, Value-Added Business Tax (VAT) data, 2020.

**Table C-3 Domestic Sales Value of SMEs by Industry, 2020**

Unit: Million NT\$, %

Industry	Enterprise size	Total (1)	SMEs (2)		
				(2)/(1)	Share
Total		33,376,329	20,861,339	62.50	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		49,738	40,005	80.43	0.19
Mining and Quarrying		50,629	33,713	66.59	0.16
Manufacturing		7,850,718	3,464,204	44.13	16.61
Electricity and Gas Supply		894,247	681,445	76.20	3.27
Water Supply and Remediation Activities		191,692	147,316	76.85	0.71
Construction		2,642,092	1,862,866	70.51	8.93
Wholesale and Retail Trade		12,942,305	9,482,388	73.27	45.45
Transportation and Storage		923,886	652,595	70.64	3.13
Accommodation and Food Service Activities		686,318	596,855	86.96	2.86
Information and Communication		1,204,021	645,129	53.58	3.09
Financial and Insurance Activities		2,591,800	1,170,010	45.14	5.61
Real Estate Activities		1,709,133	931,854	54.52	4.47
Professional, Scientific and Technical Activities		679,193	477,921	70.37	2.29
Support Service Activities		538,150	303,771	56.45	1.46
Education		23,050	20,943	90.86	0.10
Human Health and Social Work Activities		33,811	30,322	89.68	0.15
Arts, Entertainment and Recreation		120,092	100,407	83.61	0.48
Other Service Activities		245,455	219,595	89.46	1.05

Note:

1. SMEs refer to enterprises with capital of less than NT\$100 million (inclusive) as defined in the "Standards for Identifying Small and Medium-sized Enterprises" revised and promulgated by the Ministry of Economic Affairs on June 24, 2020.
2. The industries are defined in accordance with the "Standard Industrial Classification System of the Republic of China. (Rev. 10)" of the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan.
3. "(2)/(1)" refers to the ratio of SMEs among all enterprises; "Share" refers to the ratio of individual industries of SMEs among all SMEs.

Source: Fiscal Information Agency, Ministry of Finance, Value-Added Business Tax (VAT) data, 2020.

**Table C-4 Export Sales Value of SMEs by Industry, 2020**

Unit: Million NT\$, %

Industry	Enterprise size	Total (1)	SMEs (2)		
				(2)/(1)	Share
Total		10,252,980	2,694,174	26.28	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		6,469	5,212	80.57	0.19
Mining and Quarrying		248	244	98.44	0.01
Manufacturing		7,150,955	1,093,664	15.29	40.59
Electricity and Gas Supply		13,889	300	2.16	0.01
Water Supply and Remediation Activities		12,844	7,148	55.65	0.27
Construction		37,774	11,338	30.02	0.42
Wholesale and Retail Trade		2,469,775	1,273,481	51.56	47.27
Transportation and Storage		260,603	171,518	65.82	6.37
Accommodation and Food Service Activities		1,999	724	36.20	0.03
Information and Communication		136,987	49,735	36.31	1.85
Financial and Insurance Activities		8,366	4,879	58.33	0.18
Real Estate Activities		2,842	1,011	35.58	0.04
Professional, Scientific and Technical Activities		137,493	63,826	46.42	2.37
Support Service Activities		6,535	5,238	80.15	0.19
Education		88	58	65.67	0.00
Human Health and Social Work Activities		733	561	76.46	0.02
Arts, Entertainment and Recreation		588	587	99.74	0.02
Other Service Activities		4,793	4,649	97.00	0.17

Note:

1. SMEs refer to enterprises with capital of less than NT\$100 million (inclusive) as defined in the “Standards for Identifying Small and Medium-sized Enterprises” revised and promulgated by the Ministry of Economic Affairs on June 24, 2020.
2. The industries are defined in accordance with the “Standard Industrial Classification System of the Republic of China. (Rev. 10)” of the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan.
3. “(2)/(1)” refers to the ratio of SMEs among all enterprises; “Share” refers to the ratio of individual industries of SMEs among all SMEs.

Source: Fiscal Information Agency, Ministry of Finance, Value-Added Business Tax (VAT) data, 2020.

Table C-5 Number of SME Employees by Industry, 2020

Unit: Thousand persons; %

Industry	Enterprise size	Total (1)	SMEs (2)		
				(2)/(1)	Share
Total		11,504	9,311	80.94	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		548	544	99.27	5.84
Mining and Quarrying		4	3	75.00	0.03
Manufacturing		3,041	2,190	72.02	23.52
Electricity and Gas Supply		32	5	15.63	0.05
Water Supply and Remediation Activities		85	39	45.88	0.42
Construction		915	901	98.47	9.68
Wholesale and Retail Trade		1,899	1,866	98.26	20.04
Transportation and Storage		455	362	79.56	3.89
Accommodation and Food Service Activities		854	846	99.06	9.09
Information and Communication		266	229	86.09	2.46
Financial and Insurance Activities		434	379	87.33	4.07
Real Estate Activities		106	105	99.06	1.13
Professional, Scientific and Technical Activities		382	323	84.55	3.47
Support Service Activities		298	289	96.98	3.10
Public Administration and Defence; Compulsory Social Security		374	1	0.27	0.01
Education		657	278	42.31	2.99
Human Health and Social Work Activities		474	291	61.39	3.13
Arts, Entertainment and Recreation		117	101	86.32	1.08
Other Service Activities		563	559	99.29	6.00

Note:

1. SMEs refer to enterprises with fewer than 200 regular employees as defined in the "Standards for Identifying Small and Medium-sized Enterprises" revised and promulgated by the Ministry of Economic Affairs on June 24, 2020.
2. The industries are defined in accordance with the "Standard Industrial Classification System of the Republic of China. (Rev. 10)" of the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan.
3. "(2)/(1)" refers to the ratio of SMEs among all enterprises; "Share" refers to the ratio of individual industries of SMEs among all SMEs.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2020.

**Table C-6 Number of Paid SME Employees by Industry, 2020**

Unit: Thousand persons; %

Industry	Enterprise size	Total (1)	SMEs (2)		
				(2)/(1)	Share
Total		9,178	6,986	76.12	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		95	91	95.79	1.30
Mining and Quarrying		3	3	100.00	0.04
Manufacturing		2,831	1,981	69.98	28.36
Electricity and Gas Supply		32	5	15.63	0.07
Water Supply and Remediation Activities		79	34	43.04	0.49
Construction		765	751	98.17	10.75
Wholesale and Retail Trade		1,213	1,180	97.28	16.89
Transportation and Storage		359	266	74.09	3.81
Accommodation and Food Service Activities		558	550	98.57	7.87
Information and Communication		251	214	85.26	3.06
Financial and Insurance Activities		427	372	87.12	5.32
Real Estate Activities		96	94	97.92	1.35
Professional, Scientific and Technical Activities		310	251	80.97	3.59
Support Service Activities		275	267	97.09	3.82
Public Administration and Defence; Compulsory Social Security		374	1	0.27	0.01
Education		628	248	39.49	3.55
Human Health and Social Work Activities		451	268	59.42	3.84
Arts, Entertainment and Recreation		93	78	83.87	1.12
Other Service Activities		335	332	99.10	4.75

Note:

1. SMEs refer to enterprises with fewer than 200 regular employees as defined in the “Standards for Identifying Small and Medium-sized Enterprises” revised and promulgated by the Ministry of Economic Affairs on June 24, 2020.
2. The industries are defined in accordance with the “Standard Industrial Classification System of the Republic of China. (Rev. 10)” of the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan.
3. “(2)/(1)” refers to the ratio of SMEs among all enterprises; “Share” refers to the ratio of individual industries of SMEs among all SMEs.

Source: Directorate-General of Budget, Accounting and Statistics (DGBAS), *Manpower Survey* data, 2020.

**Table C-7 Number and Sales Performance of Newly-established SMEs by Industry, 2020**

Unit: Enterprises; million NT\$, %

Industry	Enterprise size	Total (1)	SMEs (2)		
				(2)/(1)	Share
<b>Number of enterprises</b>					
<b>Total</b>		108,530	108,301	99.79	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		730	729	99.86	0.67
Mining and Quarrying		48	48	100.00	0.04
Manufacturing		4,247	4,206	99.03	3.88
Electricity and Gas Supply		324	318	98.15	0.29
Water Supply and Remediation Activities		448	445	99.33	0.41
Construction		10,401	10,390	99.89	9.59
Wholesale and Retail Trade		42,666	42,640	99.94	39.37
Transportation and Storage		2,049	2,045	99.80	1.89
Accommodation and Food Service Activities		19,711	19,704	99.96	18.19
Information and Communication		2,832	2,829	99.89	2.61
Financial and Insurance Activities		1,241	1,188	95.73	1.10
Real Estate Activities		4,127	4,077	98.79	3.76
Professional, Scientific and Technical Activities		5,563	5,548	99.73	5.12
Support Service Activities		2,371	2,366	99.79	2.18
Education		785	784	99.87	0.72
Human Health and Social Work Activities		223	222	99.55	0.20
Arts, Entertainment and Recreation		4,861	4,860	99.98	4.49
Other Service Activities		5,903	5,902	99.98	5.45
<b>Total sales</b>					
<b>Total</b>		226,299	217,012	95.90	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		409	409	100.00	0.19
Mining and Quarrying		229	229	100.00	0.11
Manufacturing		27,224	24,120	88.60	11.11
Electricity and Gas Supply		374	374	100.00	0.17
Water Supply and Remediation Activities		784	756	96.43	0.35
Construction		33,925	29,056	85.65	13.39
Wholesale and Retail Trade		95,697	95,010	99.28	43.78
Transportation and Storage		5,544	5,363	96.74	2.47
Accommodation and Food Service Activities		22,170	22,150	99.91	10.21
Information and Communication		5,890	5,889	99.98	2.71
Financial and Insurance Activities		2,095	1,898	90.60	0.87
Real Estate Activities		11,390	11,286	99.09	5.20
Professional, Scientific and Technical Activities		8,603	8,557	99.47	3.94
Support Service Activities		4,039	3,989	98.76	1.84
Education		850	850	100.00	0.39
Human Health and Social Work Activities		310	310	100.00	0.14
Arts, Entertainment and Recreation		3,854	3,854	100.00	1.78
Other Service Activities		2,913	2,910	99.90	1.34

**Table C-7 Number and Sales Performance of Newly-established SMEs by Industry, 2020**  
(Continued)

Unit: Million NT\$, %

Industry	Enterprise size	Total (1)	SMEs (2)		
				(2)/(1)	Share
<b>Domestic sales</b>					
<b>Total</b>		205,987	197,011	95.64	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		397	397	100.00	0.20
Mining and Quarrying		229	229	100.00	0.12
Manufacturing		14,743	11,851	80.38	6.02
Electricity and Gas Supply		371	371	100.00	0.19
Water Supply and Remediation Activities		759	732	96.44	0.37
Construction		33,924	29,055	85.65	14.75
Wholesale and Retail Trade		89,883	89,293	99.34	45.32
Transportation and Storage		5,520	5,340	96.74	2.71
Accommodation and Food Service Activities		22,170	22,150	99.91	11.24
Information and Communication		4,402	4,402	100.00	2.23
Financial and Insurance Activities		2,065	1,869	90.51	0.95
Real Estate Activities		11,378	11,274	99.09	5.72
Professional, Scientific and Technical Activities		8,247	8,202	99.45	4.16
Support Service Activities		3,985	3,935	98.75	2.00
Education		850	850	100.00	0.43
Human Health and Social Work Activities		310	310	100.00	0.16
Arts, Entertainment and Recreation		3,842	3,842	100.00	1.95
Other Service Activities		2,908	2,908	100.00	1.48
<b>Export sales</b>					
<b>Total</b>		20,312	20,002	98.47	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		12	12	100.00	0.06
Mining and Quarrying		0	0	-	0.00
Manufacturing		12,480	12,269	98.31	61.34
Electricity and Gas Supply		3	3	100.00	0.01
Water Supply and Remediation Activities		25	25	100.00	0.12
Construction		1	1	100.00	0.00
Wholesale and Retail Trade		5,813	5,717	98.35	28.58
Transportation and Storage		23	23	100.00	0.11
Accommodation and Food Service Activities		0	0	-	0.00
Information and Communication		1,488	1,488	100.00	7.44
Financial and Insurance Activities		29	29	100.00	0.14
Real Estate Activities		12	12	100.00	0.06
Professional, Scientific and Technical Activities		356	356	100.00	1.78
Support Service Activities		53	53	100.00	0.26
Education		0	0	-	0.00
Human Health and Social Work Activities		0	0	-	0.00
Arts, Entertainment and Recreation		12	12	100.00	0.06
Other Service Activities		5	2	40.00	0.01

Note:

1. The data in the table are defined based on the New Standards.
2. "0" represents zero or less than one unit (a million NT\$).
3. "-": not applicable.
4. "(2)/(1)" refers to the ratio of SMEs among all enterprises; "Share" refers to the ratio of individual industries of SMEs among all SMEs.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

**Table C-8 Number and Sales Performance of SMEs by Sex of Business Owner and Industry, 2020**

Unit: Enterprises; million NTS; %

Industry	Sex of business owner	Total	Female-owned enterprises		Male-owned enterprises	
			Share	Share	Share	Share
<b>Number of enterprises</b>						
<b>Total</b>		1,531,197	565,876	100.00	965,321	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		11,770	2,985	0.53	8,785	0.91
Mining and Quarrying		1,038	245	0.04	793	0.08
Manufacturing		143,591	41,026	7.25	102,565	10.62
Electricity and Gas Supply		1,914	534	0.09	1,380	0.14
Water Supply and Remediation Activities		7,889	2,309	0.41	5,580	0.58
Construction		138,502	35,225	6.22	103,277	10.70
Wholesale and Retail Trade		711,490	275,365	48.66	436,125	45.18
Transportation and Storage		33,993	9,320	1.65	24,673	2.56
Accommodation and Food Service Activities		174,180	81,213	14.35	92,967	9.63
Information and Communication		23,853	7,089	1.25	16,764	1.74
Financial and Insurance Activities		19,915	7,135	1.26	12,780	1.32
Real Estate Activities		41,344	12,936	2.29	28,408	2.94
Professional, Scientific and Technical Activities		54,621	20,415	3.61	34,206	3.54
Support Service Activities		33,533	12,935	2.29	20,598	2.13
Education		4,891	2,282	0.40	2,609	0.27
Human Health and Social Work Activities		1,396	576	0.10	820	0.08
Arts, Entertainment and Recreation		37,283	12,565	2.22	24,718	2.56
Other Service Activities		89,994	41,721	7.37	48,273	5.00
<b>Total sales</b>						
<b>Total</b>		21,570,093	5,259,063	100.00	16,311,029	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		45,064	9,422	0.18	35,642	0.22
Mining and Quarrying		33,660	6,559	0.12	27,101	0.17
Manufacturing		4,239,751	772,826	14.70	3,466,925	21.26
Electricity and Gas Supply		679,145	30,326	0.58	648,820	3.98
Water Supply and Remediation Activities		150,989	41,600	0.79	109,389	0.67
Construction		1,808,769	464,476	8.83	1,344,293	8.24
Wholesale and Retail Trade		9,699,027	2,521,573	47.95	7,177,454	44.00
Transportation and Storage		706,084	144,550	2.75	561,534	3.44
Accommodation and Food Service Activities		571,836	229,259	4.36	342,576	2.10
Information and Communication		503,001	75,480	1.44	427,520	2.62
Financial and Insurance Activities		1,167,807	440,893	8.38	726,914	4.46
Real Estate Activities		907,882	216,206	4.11	691,676	4.24
Professional, Scientific and Technical Activities		425,584	133,842	2.54	291,742	1.79
Support Service Activities		275,963	77,508	1.47	198,455	1.22
Education		19,756	6,157	0.12	13,599	0.08
Human Health and Social Work Activities		30,181	6,438	0.12	23,743	0.15
Arts, Entertainment and Recreation		90,970	22,923	0.44	68,047	0.42
Other Service Activities		214,624	59,026	1.12	155,598	0.95

**Table C-8 Number and Sales Performance of SMEs by Sex of Business Owner and Industry, 2020 (Continued)**

Unit: Enterprises; million NT\$; %

Industry	Sex of business owner	Total	Female-owned enterprises		Male-owned enterprises	
			Share	Share	Share	Share
<b>Domestic sales</b>						
<b>Total</b>		19,339,526	4,799,838	100.00	14,539,689	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		39,933	8,041	0.17	31,892	0.22
Mining and Quarrying		33,575	6,535	0.14	27,040	0.19
Manufacturing		3,302,123	624,565	13.01	2,677,557	18.42
Electricity and Gas Supply		678,929	30,300	0.63	648,629	4.46
Water Supply and Remediation Activities		145,139	40,370	0.84	104,769	0.72
Construction		1,802,911	463,377	9.65	1,339,534	9.21
Wholesale and Retail Trade		8,608,181	2,261,242	47.11	6,346,939	43.65
Transportation and Storage		609,148	134,101	2.79	475,047	3.27
Accommodation and Food Service Activities		571,503	229,204	4.78	342,299	2.35
Information and Communication		460,702	64,263	1.34	396,438	2.73
Financial and Insurance Activities		1,163,351	438,486	9.14	724,865	4.99
Real Estate Activities		906,908	215,833	4.50	691,075	4.75
Professional, Scientific and Technical Activities		390,906	113,707	2.37	277,199	1.91
Support Service Activities		272,547	76,403	1.59	196,145	1.35
Education		19,701	6,141	0.13	13,561	0.09
Human Health and Social Work Activities		30,174	6,432	0.13	23,742	0.16
Arts, Entertainment and Recreation		90,387	22,478	0.47	67,909	0.47
Other Service Activities		213,409	58,358	1.22	155,050	1.07
<b>Export sales</b>						
<b>Total</b>		2,230,566	459,226	100.00	1,771,340	100.00
Agriculture, Forestry, Fishing and Animal Husbandry		5,131	1,381	0.30	3,750	0.21
Mining and Quarrying		85	24	0.01	61	0.00
Manufacturing		937,628	148,260	32.28	789,368	44.56
Electricity and Gas Supply		217	26	0.01	191	0.01
Water Supply and Remediation Activities		5,850	1,230	0.27	4,620	0.26
Construction		5,858	1,099	0.24	4,759	0.27
Wholesale and Retail Trade		1,090,845	260,331	56.69	830,515	46.89
Transportation and Storage		96,936	10,449	2.28	86,488	4.88
Accommodation and Food Service Activities		332	55	0.01	277	0.02
Information and Communication		42,299	11,217	2.44	31,082	1.75
Financial and Insurance Activities		4,457	2,407	0.52	2,049	0.12
Real Estate Activities		974	373	0.08	601	0.03
Professional, Scientific and Technical Activities		34,678	20,135	4.38	14,543	0.82
Support Service Activities		3,416	1,105	0.24	2,310	0.13
Education		55	16	0.00	39	0.00
Human Health and Social Work Activities		7	6	0.00	1	0.00
Arts, Entertainment and Recreation		583	445	0.10	138	0.01
Other Service Activities		1,216	667	0.15	548	0.03

Note: 1. The data in the table are defined based on the New Standards.

2. Whether an enterprise should be classified as male-owned or female-owned was determined using the registered identity of the business owner.

3. 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.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

Table C-9 Export Sales Value of SMEs by Manufacturing Industry, 2020

Unit: Million NT\$, %

Industry	Enterprise size	Total (1)	SMEs (2)		
				(2)/(1)	Share
<b>Total</b>		7,150,955	1,093,664	15.29	100.00
Manufacture of Food Products and Prepared Animal Feeds		39,246	13,258	33.78	1.21
Manufacture of Beverages		1,948	514	26.39	0.05
Manufacture of Tobacco Products		2,219	*	*	*
Manufacture of Textiles		144,647	18,785	12.99	1.72
Manufacture of Wearing Apparel and Clothing Accessories		14,700	7,671	52.18	0.70
Manufacture of Leather, Fur and Related Products		25,170	7,732	30.72	0.71
Manufacture of Wood and of Products of Wood and Bamboo		4,600	3,566	77.52	0.33
Manufacture of Paper and Paper Products		30,194	5,946	19.69	0.54
Printing and Reproduction of Recorded Media		60,215	4,111	6.83	0.38
Manufacture of Petroleum and Coal Products		167,778	564	0.34	0.05
Manufacture of Chemical Material, Fertilizers and Nitrogen Compounds, Plastic and Rubber Materials, Man-made Fibres		441,268	33,524	7.60	3.07
Manufacture of Other Chemical Products		85,068	23,477	27.60	2.15
Manufacture of Pharmaceuticals and Medicinal Chemical Products		23,573	2,803	11.89	0.26
Manufacture of Rubber Products		76,465	13,739	17.97	1.26
Manufacture of Plastics Products		130,725	55,513	42.47	5.08
Manufacture of Non-metallic Mineral Products		62,858	19,825	31.54	1.81
Manufacture of Basic Metals		276,819	25,615	9.25	2.34
Manufacture of Fabricated Metal Products		331,962	132,093	39.79	12.08
Manufacture of Electronic Parts and Components		3,443,551	315,633	9.17	28.86
Manufacture of Computers, Electronic and Optical Products		744,535	69,833	9.38	6.39
Manufacture of Electrical Equipment		218,958	32,556	14.87	2.98
Manufacture of Machinery and Equipment		336,636	141,727	42.10	12.96
Manufacture of Motor Vehicles and Parts		103,245	16,969	16.44	1.55
Manufacture of Other Transport Equipment and Parts		189,021	81,776	43.26	7.48
Manufacture of Furniture		31,501	18,508	58.75	1.69
Other Manufacturing		115,005	31,664	27.53	2.90
Repair and Installation of Industrial Machinery and Equipment		49,048	16,261	33.15	1.49

Note:

1. The data in the table are defined based on the New Standards.
2. Where the number of SMEs was 5 or under, the number would be indicated by “\*” to keep the information of individual SMEs confidential.
3. “(2)/(1)” refers to the ratio of SMEs among all enterprises; “Share” refers to the ratio of individual industries of SMEs among all SMEs.

Source: Fiscal Information Agency, Ministry of Finance, VAT data, 2020.

# INDEX

## A

APEC 102-103

## C

COVID-19 Relief Credit Guarantee 70

Current Ratio 36-37

Credit Guarantee Fund 68-69

## D

Debt-to-Net-Worth Ratio 37

Domestic Sales 5-7

## E

Employed Persons 44-50

Export Sales 10-12

## F

Female-owned Enterprise 21-25

## N

Newly-established Enterprises 12-15

## O

OTOP 93

## P

Paid Employees 44-50

Project for Assisting Small and Micro Enterprises  
in Digital Transformation and Innovation  
Service in the Cloud Era 77

Project of Assistance for Micro SMEs by Using  
Cloud Service and Digital Transformation in  
Commercial District 78

## Q

Quick Ratio 36-37

## S

SBIR 83

Self-employed Persons 52-53

SME Employers 50-51

SME Incubator Institutions 87-88

Startup Terrace Connection Project 91

## U

Unemployed Persons 53-55

## W

Welcome Taiwanese Businesses' Investment to  
Taiwan Project Loan Guidelines 73

Women's Entrepreneurship Flying Geese Program  
89