Chapter 4

The Current Status of SME Labor Utilization

Following a two-year economic downturn, by 2002 the economy both in Taiwan and overseas was gradually starting to pick up again. However, the unemployment rate in Taiwan continued to rise, climbing to 5.17%. Following the war in Iraq and the SARS epidemic, by August 2003, the unemployment rate rose to 5.21% before falling again.

In response to the increasingly serious unemployment problem, the government encouraged private-sector companies to recruit more employees while at the same time working to create new jobs in the public sector. SMEs that took on additional workers were paid a subsidy of NT$10,000 per employee per month. In the public sector, the government implemented the "Project for the Creation of Employment Opportunities through the Expansion of Public Services," providing temporary work for the unemployed for six-month periods. It was anticipated that, in addition to providing a temporary solution to the unemployment problem, this measure would also help to revive the economy. By the end of 2003, the unemployment rate had fallen to 4.99%.

In order to gain a better understanding of the state of labor utilization among Taiwan's SMEs in 2003, this chapter will examine the impact of human resources, working conditions and the government's labor policy on SMEs, along with the issue of SME manpower cultivation.

In principle, enterprise scale is defined according to the

number of employees. Enterprises in the mining and quarrying, manufacturing and construction sector with less than 200 employees, and enterprises in other sectors with less than 50 employees, are classified as SMEs. However, in some cases the restrictions imposed by the data make it impossible to use this classification; in such cases, enterprises with less than 100 employees will be regarded as SMEs; this is highlighted where appropriate.

I Labor Usage in SMEs

Taiwan had a total available workforce of 10.08 million in 2003. There were 9.57 million people in work, 6.90 million directly employed persons and about 503,000 unemployed. The labor participation rate was 57.34%; the average unemployment rate was 4.99%.

Both the workforce and the number of persons in work increased in 2003 compared to 2002. Thanks to the various measures adopted by the government to boost employment, the number of unemployed fell by 12,000 compared to 2002. The labor market thus displayed more vitality in 2003 than it had done in 2002. The following section examines labor usage in Taiwan's SMEs in 2003.

1. An Increase in the Number of Persons Working in SMEs, but a Decline in SMEs' Share of the Working Population

In 2003, a total of 7.43 million people were working in SMEs in Taiwan, about 64,000 up on the 2002 total of 7.36 million (Table 4-1-1). The share of people in work held by people

working for SMEs fell from 77.86% in 2002 to 77.56% in 2003, mainly because the implementation of the "Project for the Creation of Employment Opportunities Through the Expansion of Public Services" led to a dramatic increase in the number of people employed by the government.

SME employees tend to be concentrated within the 25–55 age band. However, in large enterprises the level of concentration within this age group is even more pronounced. People in the prime of life thus continue to account for the lion's share of the employed population in Taiwan. As for the gender and educational structure of the employed population, there was little change in 2003 compared to 2002. Males continued to account for nearly 60% of SME employees, with more than 50% having completed senior vocational school, senior or junior high school. The gender makeup of large enterprises is more evenly balanced than in SMEs.

2. An Increase in the Percentage of Female SME Owners

In 2003, the number of SME owners increased by nearly 4,000 compared to 2002, rising to about 493,000. Most were aged between 25 and 55 (Table 4-1-2), about the share of SME owners who were female had risen slightly compared to 2002. The long-term trend is for the ratio of female SME owners to rise, reflecting a gradual increase in entrepreneurial drive among women. By contrast, the number of large business owners declined by around 520 in 2003, and the percentage of large business owners who were female fell by three percentage points. Besides the fact that building up a large enterprise is an extremely difficult task, this decline may be related to the fact that Taiwan's economic recovery is not yet

complete.

Table 4-1-1 Characteristics of Persons in Work, 2002 – 2003

Units: thousand persons ; %

Item	2002			2003		
	SMEs	Large Enterprises	Government Employees	SMEs	Large Enterprises	Government Employees
Total No. of Persons (percentage)	7,361 (77.86)	1,147 (12.13)	946 (10.01)	7,425 (77.56)	1,159 (12.11)	988 (10.32)
Age						
15~24	12.04	12.17	4.61	11.30	11.22	4.43
25~40	46.33	59.32	44.95	45.84	60.10	44.26
41~55	33.25	25.96	43.59	34.53	26.17	44.75
56~65	6.72	2.39	6.54	6.65	2.27	6.36
65 or over	1.66	0.16	0.30	1.68	0.25	0.20
Sex						
Male	59.99	52.29	56.20	59.52	53.20	54.90
Female	40.01	47.71	43.80	40.48	46.80	45.10
Education						
Illiterate	1.53	0.09	0.22	1.35	0.15	0.20
Self-taught	0.40	0.04	0.08	0.32	0.05	0.03
Primary school	17.67	3.95	4.18	16.71	3.39	4.38
Junior high school	20.71	6.98	4.54	20.03	6.59	4.75
Senior high school	9.40	7.61	8.26	9.49	7.40	7.88
Senior vocational school	28.51	25.93	18.02	29.03	25.06	17.81
Junior college	14.02	26.61	25.71	14.42	26.50	25.34
University	6.83	21.60	31.73	7.67	22.94	31.65
Masters	0.86	5.94	5.71	0.90	6.41	6.34
Ph.D.	0.07	1.25	1.56	0.07	1.52	1.62

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, *Monthly Bulletin of Manpower Statistics, Taiwan Area*, original data, 2002 – 2003.

As can be seen from Table 4-1-2, the owners of SMEs tend to be younger than the owners of large enterprises, and their average educational level tends to be lower.

Table 4-1-2 Characteristics of SME Owners, 2002 – 2003

Units: thousand persons ; %

Item	2002		2003	
	SMEs	Large Enterprises	SMEs	Large Enterprises
Total No. of Persons (percentage)	488.97 (99.20)	3.91 (0.80)	492.94 (99.32)	3.39 (0.68)
Age				
15~24	0.74	–	0.55	–
25~40	36.40	24.78	34.88	13.12
41~55	53.17	48.33	54.64	65.83
56~65	7.98	16.07	8.29	10.93
65 or over	1.70	10.82	1.64	10.11
Sex				
Male	84.20	88.14	83.45	91.38
Female	15.80	11.86	16.55	8.62
Education				
Illiterate	0.25	–	0.15	–
Self-taught	0.09	–	0.08	–
Primary school	12.35	1.75	12.07	4.85
Junior high school	17.78	7.76	17.73	18.90
Senior high school	12.50	16.16	12.13	3.84
Senior vocational school	26.14	5.38	26.19	11.88
Junior college	15.95	11.51	16.65	20.40
University	12.76	42.38	13.01	34.91
Masters	1.87	11.23	1.66	5.22
Ph.D.	0.31	3.82	0.32	–

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, *Monthly Bulletin of Manpower Statistics, Taiwan Area*, original data, 2002 – 2003.

3. A Slight Decrease in the Number of Self-employed Persons Compared to 2002

Self-employed persons are those who run their own business, either alone or in partnership, with no paid employees; the scale of operation of their businesses thus tends to be relatively

small. In 2003 there were over 1.48 million self-employed persons in Taiwan (Table 4-1-3), all of whose businesses fell under the category of SMEs. While the total number of self-employed persons was slightly lower than in 2002, the share held by those in the 41–55 age band increased. A possible explanation is that the high unemployment rate is encouraging middle-aged people who have lost of their jobs to start their own businesses.

Table 4-1-3 Characteristics of Self-employed Persons, 2002 – 2003

Unit: thousand persons ; %

Item \ Year	2002	2003
Total No. of Persons	1,496	1,484
Age		
15~24	1.38	1.18
25~40	29.98	28.07
41~55	46.08	48.09
56~65	17.20	17.01
65 or over	5.36	5.64
Sex		
Male	78.59	77.95
Female	21.41	22.05
Education		
Illiterate	3.45	3.14
Self-taught	1.07	0.88
Primary school	33.20	32.48
Junior high school	23.94	23.40
Senior high school	9.14	9.38
Senior vocational school	20.37	21.23
Junior college	6.30	6.58
University	2.29	2.67
Masters	0.21	0.21
Ph.D.	0.03	0.02

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, *Monthly Bulletin of Manpower Statistics, Taiwan Area*, original data, 2002 – 2003.

The number of self-employed women has been gradually rising, with more and more women starting their own small-scale businesses. Putting the data for employers and the self-employed together, it is clear that entrepreneurial activity among women is on the rise.

4. The Number of People Employed in SMEs in the Hi-tech Sector Has Reached the 1 Million Mark

Looking at the data for 2003, there were more than 2.28 million people in Taiwan working in the OECD-defined high-tech and knowledge-intensive industries; of these, over 1.29 million worked in SMEs. Most of these employees were aged under 55, with more than 50% being in the 25–40 age bracket; there is thus a higher level of concentration than is normally found in other industries. This phenomenon is even more pronounced among large enterprises, indicating that knowledge-intensive industries have a greater need for younger workers than do traditional industries (Table 4-1-4).

5. SMEs Dominate the Cultural and Creative Industries

Faced with the dawning of a knowledge-economy era and the impact of economic globalization, the government has been working to speed up the development of Taiwan into a "Green Silicon Island," establish a first-rate investment environment, and also create unique sources of competitive advantage. Particular emphasis is being given to the development of industries that are distinctively Taiwanese, and that reflect the wisdom and culture of the Taiwanese people, so as to avoid the unbalanced emphasis on technology at the expense of culture that has tended to characterize Taiwan's industrial development in the past. The "Challenge 2008 National

Development Plan" formulated by the government in 2002 incorporated a "Cultural and Creative Industry Plan," with the aim of making Taiwan a world leader in these industries.

Table 4-1-4 Characteristics of Persons Working in High-tech and Knowledge-intensive Industries, 2002 – 2003

Units: thousand persons ; %

Item	2002			2003		
	SMEs	Large Enterprises	Government Employees	SMEs	Large Enterprises	Government Employees
Total No. of Persons (percentage)	1,222.5 (56.40)	507.8 (23.43)	437.1 (20.17)	1,297.74 (56.78)	539.59 (23.61)	448.40 (19.62)
Age						
15~24	14.46	11.73	5.82	13.66	10.76	6.07
25~40	56.84	62.57	47.52	56.97	62.25	47.65
41~55	25.59	23.30	40.87	26.17	24.48	41.32
56~65	2.62	2.25	5.61	2.79	2.21	4.84
65 or over	0.49	0.15	0.18	0.41	0.30	0.12
Sex						
Male	52.51	45.60	42.81	52.85	47.78	41.51
Female	47.49	54.40	57.19	47.15	52.22	58.49
Education						
Illiterate	0.16	0.02	0.06	0.11	0.08	0.05
Self-taught	0.08	0.04	0.04	0.03	0.06	0.01
Primary school	5.51	1.88	1.99	5.15	1.60	1.98
Junior high school	9.69	3.79	2.62	9.10	3.85	2.59
Senior high school	8.19	5.41	5.13	7.77	5.43	5.02
Senior vocational school	28.65	19.49	11.55	28.44	18.95	11.05
Junior college	26.71	30.36	19.77	26.73	29.21	19.60
University	17.85	27.75	48.07	19.50	28.54	47.80
Masters	2.94	8.82	7.93	2.92	9.27	9.04
Ph.D.	0.21	2.42	2.85	0.24	2.99	2.86

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, *Monthly Bulletin of Manpower Statistics, Taiwan Area*, original data, 2002 – 2003.

In 2003 the Taiwanese government selected 13 key industries as the main focus in developing cultural and creative industry. In 2002 and 2003 the number of people working in the cultural and creative industries was about 269,000 and 266,000 respectively; in both years the number of people working in SMEs was around 205,000 (Table 4-1-5), accounting for 76.27% and 77.15% of the total respectively.

However, the scope of the cultural and creative industries does not directly match regular industry classifications. What is more, it includes many "compound" industries, such as the innovative lifestyles industry, designer branding and the fashion industry, to name a few. Extending as it does over food, clothing, accommodation, travel, education and entertainment, there is no clear standard for deciding which industries should be included within the cultural and creative industry rubric. Table 4-1-5 merely provides an analysis of those industries that are closely related to the cultural and creative industry, including the artistic and sporting services industries, the film industry, the broadcasting industry, the publishing industry, the advertising industry, the specialist design services industry, and the construction and engineering services industry, etc.

6. A Slight Fall in the Percentage of the Unemployed Who Previously Worked in SMEs

Both the unemployment rate and the absolute number of unemployed were lower in 2003 than in 2002. The number of unemployed who had previously worked for SMEs declined from about 383,000 to 368,000, while the number who had worked for large enterprises fell from about 39,000 to 37,000 (Table 4-1-6). However, the number of unemployed who had previously worked for the government

Table 4-1-5 Characteristics of Employees in the Cultural and Creative Industries, 2002 – 2003

Units: thousand persons ; %

Item	2002			2003		
	SMEs	Large Enterprises	Government	SMEs	Large Enterprises	Government
Total Number of Persons (thousands)	205.27 (76.27)	59.68 (22.17)	4.20 (1.56)	205.50 (77.15)	55.75 (20.93)	5.11 (1.92)
Industry						
Artistic and sporting services	10.62	9.43	34.03	11.40	10.93	28.71
Film industry	1.63	2.28	–	1.86	1.77	–
Broadcasting	6.25	30.18	12.76	5.43	33.23	15.83
Publishing	10.97	29.95	1.70	11.59	28.85	2.14
Advertising	19.24	3.96	–	18.87	2.52	–
Specialist design services	8.72	4.40	–	8.51	4.37	0.95
Construction and engineering services	11.84	8.61	13.85	11.12	7.67	24.89
Leisure services	30.73	11.20	37.66	31.21	10.66	27.48
Sex						
Male	54.20	58.00	62.15	53.65	55.89	77.31
Female	45.80	42.00	37.85	46.35	44.11	22.69
Education						
Illiterate	0.19	0.11	–	0.21	0.46	1.57
Self-taught	0.02	0.07	2.05	0.08	–	–
Primary school	5.45	5.00	7.11	4.80	4.65	9.12
Junior high school	12.67	6.17	7.62	11.89	6.33	5.63
Senior high school	10.03	8.44	9.52	9.65	7.60	18.15
Senior vocational school	32.81	22.40	22.21	32.15	23.78	17.78
Junior college	20.18	22.11	30.36	22.16	21.38	18.70
University	15.13	28.98	15.54	16.07	27.76	19.65
Masters	3.36	6.37	5.12	2.85	7.82	7.91
Ph.D.	0.16	0.34	0.46	0.13	0.21	1.48

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, *Monthly Bulletin of Manpower Statistics, Taiwan Area*, original data, 2002 – 2003.

rose, probably due to the expiry of temporary contracts under the government's "Project for the Creation of Employment Opportunities through the Expansion of Public Services."

Table 4-1-6 Characteristics of the Unemployed, 2002 – 2003

Units: thousand persons ; %

Item \ Year	2002			2003		
	Previous Employer was SME	Previous Employer was Large Enterprise	Previous Employer was the Government	Previous Employer was SME	Previous Employer was Large Enterprise	Previous Employer was the Government
Total No. of Persons	383.32 (74.41)	38.53 (7.48)	93.29 (18.11)	367.80 (73.13)	36.99 (7.36)	98.12 (19.51)
Age						
15~24	19.23	19.31	68.03	17.91	14.98	60.57
25~40	49.31	50.89	26.13	46.82	51.21	29.52
41~55	28.65	27.84	5.36	31.18	29.47	7.99
56~65	2.78	1.96	0.48	4.06	4.27	1.92
65 or over	0.03	–	–	0.04	0.07	–
Sex						
Male	70.69	56.37	59.55	68.53	53.45	54.76
Female	29.31	43.63	40.45	31.47	46.55	45.24
Education						
Illiterate	0.53	0.10	0.06	0.50	0.19	0.26
Self-taught	0.10	–	–	0.12	–	0.01
Primary school	14.22	5.10	2.84	14.47	5.91	4.19
Junior high school	25.24	11.00	10.11	24.75	10.06	10.27
Senior high school	10.14	11.97	7.34	9.90	10.91	8.11
Senior vocational school	31.76	27.72	35.02	31.69	35.08	29.89
Junior college	12.41	26.06	19.94	12.59	22.60	19.18
University	5.03	15.51	22.44	5.57	13.25	25.28
Master's	0.57	2.27	2.24	0.40	1.97	2.81
Ph.D.	–	0.27	0.01	0.03	0.04	–

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, *Monthly Bulletin of Manpower Statistics, Taiwan Area*, original data, 2002 – 2003.

7. A Fall of Around 1,000 in the Number of Foreign Laborers Employed by SMEs

In order to avoid creating a situation where foreign workers and Taiwanese citizens are competing for the same jobs, starting in 2001 the Council of Labor Affairs began to restrict the entry of foreign laborers, with the aim of reducing the unemployment rate in Taiwan. The number of foreign laborers in the country has thus been gradually falling. The number of approved foreign laborers fell by 6,597 in 2003 compared to 2002, with SMEs accounting for 2,643 (Table 4-1-7) and large enterprises for 3,954, while the number of foreign laborers actually in Taiwan fell by 1,022 and 2,860 respectively.

Table 4-1-7 Number of Foreign Laborers Employed by Large Enterprises and SMEs

Units: persons ; %

Item \ Year/ Size	2001		2002		2003	
	SMEs	Large Enterprises	SMEs	Large Enterprises	SMEs	Large Enterprises
Approved foreign laborers	104,481	134,601	85,965	117,270	83,322	113,316
Percentage of total	43.70	56.30	42.30	57.70	42.37	57.63
Actually in Taiwan	83,094	107,328	76,846	103,192	75,824	100,332
Percentage of total	43.64	56.36	42.68	57.32	43.04	56.96

Notes: 1. Includes only foreign laborers imported by manufacturing and construction firms.
2. SMEs are defined as firms with less than 200 employees.
Source: Bureau of Employment and Vocational Training, Council of Labor Affairs, Executive Yuan.

8. Around 10,000 SMEs Have Benefited from the Government's "SME Manpower Assistance Program"

In an effort to help Taiwan's approximately 1 million SMEs recover from the economic downturn as quickly as possible, and to provide them with assistance in the areas of financing

and human resources, on June 18, 2003 the Executive Yuan commenced implementation of the "SME Manpower Assistance Program." Under this program, SMEs that recruit new employees can receive a government subsidy of NT$10,000 per month for each employee for a period of not more than 12 months. A total of NT$3 billion has been budgeted for the project to provide subsidies for the employment of 25,000 new personnel.

Initially, the subsidies were available to SMEs (excluding those in seven specially designated industries) that recruited unemployed workers aged 30–65. However, it was found that there was a significant disparity between the high-level manpower that SMEs were seeking to recruit and the types of unemployed worker registering with the government. Beginning in early August, therefore, the restrictions were relaxed to allow SMEs to apply for subsidies when recruiting persons aged 18–30, in line with the changes in Taiwan's industrial structure and the nature of supply and demand on the labor market. However, for recruits aged 18–30, the subsidy is available for only six months.

Over the period from June 18, 2003 to December 31, 2003 subsidies were granted for a total of 41,386 new employees at 10,992 SMEs. The number of people who actually took up their new positions was 34,680, an average of 3.16 per SME. However, the number of new employees still employed as of December 31, 2003 was 31,559, equivalent to 2.9 per SME.

II Labor Conditions in SMEs

1. Higher Average Salaries in 2003 for Employees in Some Industries

By 2003, Taiwan's economy was starting to pick up again compared to 2002, and in some industries average salaries were higher than in 2002. However, in the water, electricity and gas industry, transportation, warehousing and communications industry, finance and insurance industry and educational services industry, average wages fell compared to 2002. Clearly, at the time of the survey (May 2003), the economy had not yet fully recovered (Table 4-2-1).

Overall, for workers in SMEs average salaries are highest in the medical, healthcare and social services industry. As a rule, salaries tend to be higher in large enterprises, but in this industry the reverse is true. In 2002 and 2003 average salaries in SMEs in this industry were over NT$46,000 and NT$48,000 respectively, compared to NT$41,000 and NT$46,000 for large enterprises.

Government employees also tend to have higher salaries than the employees of SMEs. However, in the medical, healthcare and social services industry the salaries of government employees are slightly lower than those of SME employees.

2. A Slight Fall in Wage Share of Total Operating Expenses

Operating expenses include wages, rental, travel expenses, advertising, water, electricity and gas bills, postal and

telecommunications charges, insurance premiums, entertainment expenses, training expenses, etc. In 2002 personnel expenses accounted for 44.59% of SMEs' total operating expenses, while for large enterprises the figure was 36.07% (Table 4-2-2). For SMEs, the share of total operating expenses accounted for by wages is highest in the construction industry, at 51.23%, and lowest in the mining and quarrying industry. Among large enterprises, the percentage is highest in the water, electricity and gas industry, and lowest in the mining and quarrying industry.

Table 4-2-1 Average Monthly Salary by Industry

Unit: NT$ thousands

Industry \ Size	SMEs		Large Enterprises		Government	
	2002	2003	2002	2003	2002	2003
Agriculture, forestry and fisheries	13.29	17.85	41.36	39.99	36.54	32.15
Mining and quarrying	35.59	33.62	–	–	55.65	46.72
Manufacturing	30.09	31.17	36.43	37.14	51.89	48.31
Water, electricity and gas	40.31	33.80	45.31	39.59	51.92	52.55
Construction	32.08	32.38	60.92	55.34	42.10	41.63
Wholesale and retail	28.42	32.84	37.93	40.43	32.79	40.26
Hotel and restaurant	23.13	28.24	32.10	34.57	44.01	45.61
Transportation, warehousing and communications	34.44	32.88	47.40	45.56	48.22	50.49
Finance and insurance	40.37	39.88	45.21	42.85	53.09	49.82
Real estate and rental	32.08	33.89	36.97	47.95	32.80	50.97
Specialist, scientific and technical services	35.61	38.46	50.24	54.16	49.53	41.63
Educational services	30.14	29.48	53.03	49.10	46.90	46.30
Medical, healthcare and social services	46.68	48.01	41.40	46.16	42.45	46.66
Cultural, sporting and leisure services	29.24	29.78	38.44	39.92	31.34	39.32
Other service industries	26.30	27.30	33.29	32.12	33.25	30.06
Public administration	–	–	–	32.00	44.54	45.36

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, *Manpower Utilization Survey, Taiwan Area*, original data, 2002 and 2003.

Table 4-2-2 Wages as Percentage of Operating Expenses, 2001 – 2002

Unit: %

Industry \ Size	SMEs		Large Enterprises	
	2001	2002	2001	2002
Agriculture, forestry and fisheries	29.65	31.42	39.49	43.17
Mining and quarrying	19.93	18.91	36.55	26.94
Manufacturing	38.33	38.29	27.92	27.41
Water, electricity and gas	49.57	45.26	66.72	62.97
Construction	50.89	51.23	42.74	43.64
Wholesale, retail and restaurant	62.82	48.63	36.52	37.53
Transportation, warehousing and communications	45.42	44.73	46.80	42.52
Finance, insurance and real estate	42.68	40.48	36.01	36.15
Business services	49.94	50.10	45.41	37.43
Social and personal services	46.75	45.81	38.61	36.79
Average for all industries	50.01	44.59	36.24	36.07

Note: Operating costs include both business costs and operating expenses.
Source: Ministry of Finance Tax Data Center, Business Income Tax Data.

3. Average Working Hours per Week Remain More or Less the Same in All Industries

2003 saw little change in the average number of hours worked per week in all industries. By and large, average working hours per week still tend to be higher in SMEs than in large enterprises or government agencies, although there are exceptions, such as SMEs in the agriculture, forestry and fisheries sector, the manufacturing sector and the construction industry. As can be seen from Table 4-2-3, service industries tend to have longer working hours per week than the agricultural and manufacturing sectors. For SMEs, the highest

average number of working hours per week is found in the hotel and restaurant industry (49.61 hours), followed by the wholesale and retail industry (48.32 hours).

Table 4-2-3 Working Hours per Week by Industry, 2002 – 2003

Unit: hours per week

Industry \ Size	SMEs		Large Enterprises		Government	
	2002	2003	2002	2003	2002	2003
Agriculture, forestry and fisheries	40.46	40.46	44.14	44.24	41.51	41.17
Mining and quarrying	45.05	45.14	–	40.00	38.28	40.78
Manufacturing	43.17	43.10	43.31	43.58	41.70	41.15
Water, electricity and gas	45.13	44.39	42.61	43.65	40.17	41.56
Construction	40.02	40.82	43.36	43.68	40.68	40.98
Wholesale and retail	47.99	48.32	44.78	44.19	40.24	42.25
Hotel and restaurant	49.51	49.61	45.46	45.86	42.29	46.62
Transportation, warehousing and communications	46.54	45.98	44.71	45.19	40.04	41.00
Finance and insurance	45.28	44.34	42.38	42.98	40.24	39.84
Real estate and rental	46.46	47.00	46.72	45.73	41.20	41.01
Specialist, scientific and technical services	43.11	43.40	42.69	43.15	40.11	40.09
Educational services	39.36	40.85	35.27	36.49	37.22	37.00
Medical, healthcare and social services	46.97	46.95	44.13	44.66	42.10	41.95
Cultural, sporting and leisure services	47.65	47.31	46.17	44.52	41.62	41.11
Other service industries	48.01	47.39	46.86	45.92	41.58	42.01
Public administration	40.36	43.33	–	44.00	41.03	41.22

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, *Monthly Bulletin of Manpower Statistics, Taiwan Area*, original data, 2002 and 2003.

In the private sector, average working hours for SME employees decline with age (Table 4-2-4). Those educated to vocational high school level have the longest working hours, averaging 44.35 hours per week. For other educational levels, both above and below vocational high school level, average working hours per week are lower. Among the employees of large enterprises, those educated to senior high school level or below have longer working hours than those with higher education level.

Table 4-2-4 Weekly Working Hours for Employees in the Private Sector, 2002 – 2003

Unit: hours per week

Item \ Size	SMEs		Large Enterprises	
	2002	2003	2002	2003
Average working hours	43.37	43.32	43.44	43.46
Age				
15~24	44.01	44.14	43.94	42.84
25~40	43.79	43.70	43.98	44.31
41~55	43.30	43.55	43.09	43.95
56~65	42.43	42.13	42.62	42.07
65 or over	43.03	41.84	43.09	37.97
Sex				
Male	43.81	43.74	44.09	43.79
Female	42.89	42.87	42.71	43.11
Education				
Illiterate	40.74	41.83	46.20	44.05
Self-taught	42.66	39.07	51.02	46.79
Primary school	43.07	42.80	44.56	44.29
Junior high school	44.58	44.17	45.57	45.46
Senior high school	44.58	44.19	43.91	45.05
Senior vocational school	44.36	44.35	44.26	44.51
Junior college	43.85	43.88	43.22	42.94
University	41.35	42.11	41.71	41.42
Masters	41.77	42.08	40.39	40.90
Ph.D.	38.47	41.11	37.64	38.17

Source: Directorate General of Budget, Accounting and Statistics, Executive Yuan, *Monthly Bulletin of Manpower Statistics, Taiwan Area*, original data, 2002 and 2003.

4. A Dramatic Fall in the Number of Labor Disputes

In 2003 the number of labor disputes reported to government agencies fell dramatically compared to 2002. The number of disputes declined by 4,546, and the number of people involved fell by 17,012. The number of disputes reported to private arbitration organizations increased compared to 2002, but the number of people involved fell slightly (Table 4-2-5). For

SMEs, both the number of labor disputes reported to private arbitration organizations and the number of people involved in such disputes rose, but the number of disputes reported to government agencies and the number of people involved in such disputes was substantially lower than in 2002. It appears

Table 4-2-5 Number of Labor Disputes and Number of Persons Involved, 1997 – 2003

Units: disputes ; persons ; %

Size / Year	Disputes Reported to the Government			Disputes Reported to Private Arbitration Organizations		
	Total	Large enterprises	SMEs	Total	Large enterprises	SMEs
No. of Labor Disputes						
1997	2,532	478 (18.88)	2,054 (81.12)	68	13 (19.12)	55 (80.88)
1998	4,043	813 (20.11)	3,230 (79.89)	95	3 (3.16)	92 (96.84)
1999	5,806	1,087 (18.72)	4,719 (81.28)	54	4 (7.41)	50 (92.59)
2000	6,579	1,242 (18.88)	5,337 (81.12)	1,447	211 (14.58)	1,236 (85.42)
2001	7,405	1,238 (16.72)	6,167 (83.28)	3,550	532 (14.99)	3,018 (85.01)
2002	7,768	1,428 (18.38)	6,340 (81.62)	4,625	683 (14.77)	3,942 (85.23)
2003	4,546	724 (15.93)	3,822 (84.07)	5,323	740 (13.90)	4,583 (86.10)
No. of Persons Involved						
1997	80,816	76,196 (94.28)	4,620 (5.72)	188	91 (48.40)	97 (51.60)
1998	103,206	96,548 (93.55)	6,658 (6.45)	362	192 (53.04)	170 (46.96)
1999	30,363	20,780 (68.44)	9,583 (31.56)	77	6 (7.79)	71 (92.21)
2000	53,790	41,931 (77.95)	11,859 (22.05)	2,753	877 (31.86)	1,876 (68.14)
2001	51,961	37,272 (71.73)	14,689 (28.27)	4,975	1,707 (25.55)	4,975 (74.45)
2002	89,242	74,813 (83.83)	14,429 (16.17)	8,278	2,879 (34.78)	5,399 (65.22)
2003	17,012	8,385 (49.29)	8,627 (50.71)	8,019	1,865 (23.26)	6,154 (76.74)

Notes: 1. Firms with under 100 employees are classified as SMEs; all other firms are classified as large enterprises.
2. Figures in parentheses are percentages of the total number of cases or persons.
Source: Department of Statistics, Council of Labor Affairs, Executive Yuan.

that enterprises and workers may have become more receptive to the idea of resorting to private arbitration.

III Personnel Training in SMEs

1. Fewer SME Employees Participating in Professional Training

In 2002, the total number of instances of participation in professional training in Taiwan declined by approximately 21,000 compared to 2001. The number of instances of participation in professional training by employees of public and private business enterprises with 200 or more employees declined by over 43,000 (Table 4-3-1), while the number of instances of participation by employees of public and private business enterprises with fewer than 200 employees fell by only 3,000.

2. Enterprise Spending on Professional Training Remains Very Low

As a rule, employee salaries account for a higher percentage of operating expenses and operating costs in SMEs than they do in large enterprises. However, the amount spent on training does not necessarily correlate with enterprise size. For SMEs as a whole, on average training expenses account for 0.21‰ of operating costs, whereas for large enterprises the figure is only 0.1‰. Viewed as a percentage of operating expenses, on the other hand, the figures are 1.13‰ for SMEs and 2.03‰ for large enterprises (Table 4-3-2). For SMEs in the transportation, warehousing and communications industry, finance, insurance and real estate industry and business services industry, training

expenses account for a higher percentage of operating costs than they do for large enterprises in the same industries. In other industries the percentage is lower for large enterprises than for SMEs. In terms of operating expenses, however, with the exception of the agriculture, forestry and fisheries industry and the mining and quarrying industry, training expenses account for a lower share of operating expenses among SMEs than they do among large enterprises in the same industry.

Table 4-3-1 The Number of Employees Participating in Professional Training, 1996 – 2002

Unit: instances of participation in training

Item / Year	Total Instances of Participation in Professional Training	Employees of public or private companies/ agencies with less than 200 employees	Employees of public or private companies/ agencies with 200 or more employees
1996	610,898	101,630	414,058
1997	631,764	133,977	413,479
1998	623,495	139,376	392,753
1999	669,561	113,038	429,880
2000	757,670	155,153	464,555
2001	759,142	163,698	442,490
2002	738,580	160,498	399,128

Notes: 1. The category "public or private companies/agencies with 200 or more employees" includes training organized by public and private companies and agencies with 200 or more employees or staff.
2. The category "public or private companies/agencies with less than 200 employees" includes training organized by public and private companies and agencies with less than 200 employees or staff; it also includes training provided by training facilities attached to universities, foundations, public training institutions, etc.
3. The category "total instances of participation in professional training" includes the above two categories and also training provided by government training institutions and by training facilities attached to universities, foundations, public training institutions, etc.

Source: Bureau of Employment and Vocational Training, Council of Labor Affairs.

Table 4-3-2 Expenditure on Training as Percentage of Operating Costs and Operating Expenses in 2002

Unit: %

Size / Industry	SMEs		Large Enterprises	
	Expenditure on Training as % of Operating Costs	Expenditure on Training as % of Operating Expenses	Expenditure on Training as % of Operating Costs	Expenditure on Training as % of Operating Expenses
Agriculture, forestry and fisheries	0.08	0.65	0.05	0.40
Mining and quarrying	0.05	0.23	0.00	0.00
Manufacturing	0.19	1.35	0.18	1.78
Water, electricity and gas	0.12	0.51	0.78	7.21
Construction	0.12	0.95	0.12	2.44
Wholesale, retail and restaurant	0.16	0.76	0.20	1.62
Transportation, warehousing and communications	0.31	0.91	0.25	1.54
Finance, insurance and real estate	0.45	1.80	0.06	2.41
Business services	1.15	2.21	0.63	2.97
Social and personal services	0.42	0.90	0.58	1.58
Average for all industries	0.21	1.13	0.10	2.03

Source: Ministry of Finance Tax Data Center, Business Income Tax Data for 2002.

3. The Main Motivation for Organizing Training is to Meet the Organization's Development Needs

SMEs in Central Taiwan felt that the main reasons for organizing training were, meeting the organization's development needs, cultivating first-rate managers, and raising overall employee quality (Table 4-3-3). Clearly, the main focus in education and training is the needs of the company; meeting employees' needs and boosting their morale is not a very important consideration. When SMEs organize training programs, they are oriented towards the company's development objectives; if employees want to enhance their

own skills and abilities they are expected to register for courses themselves outside the company.

Table 4-3-3 The Main Factors Motivating SMEs to Organize Training for Employees

Unit: %

Ranking	Motivating Factor	Percentage of Effective Sample Reporting this Motivation
1	To meet the organization's development needs	24.9
2	To cultivate first-rate managerial talent	23.0
3	To enhance employee quality	21.6
4	To improve working efficiency	18.3
5	To meet employees' personal needs	8.0
6	To improve employee morale	4.2

Source: Wang Pen-Cheng, Survey of Manpower Cultivation Needs – Report on Training Needs Among SMEs in Central Taiwan in 2003, SME Training Center (Northern Region), College of Business, National Chengchi University, October 25, 2003.

4. e-Learning Continues to Present Problems

Promotion of e-learning in Taiwan has been underway for at least three years now, but the results so far have been only a limited success. According to interviews and surveys conducted by the Southern Taiwan SME Training Center, e-learning implementation in most SMEs is still limited to the adoption of electronic methods for data exchange. Some SMEs were under the impression that establishing an internal database was an example of e-learning adoption, while in most cases the flow of information in e-learning is still one-way; enterprises have failed to adopt bi-directional interaction methods. The main limiting factors here are inadequate bandwidth and IT hardware and software. In addition, the cost of establishing a bi-directional interactive platform is too high for many SMEs.

The Southern Taiwan SME Training Center undertook a survey of SMEs' motivation for promoting e-learning within their enterprise, and found that the main emphasis was on integrating internal company data, ensuring that this data could be accessed quickly, and reducing the costs that result from duplicated action. SMEs did not emphasize the utilization of e-learning to upgrade the quality of human resources. As a result, 30% of SME employees were dissatisfied with their company's internal e-learning culture, mainly because most employees were still unwilling to share their knowledge with others.

The Central Taiwan SME Training Center discovered that 76% of the SMEs surveyed had yet to adopt e-learning. 73.8% had yet to draw up a plan for e-learning adoption, and 24.8% felt that the establishment of an e-learning platform would present difficulties.

5. Emphasis on Cultivating the Professional Expertise of SME Employees

A survey of SMEs' manpower cultivation needs undertaken by the North Taiwan SME Training Center found that the area that SMEs felt was most in need of cultivation was employees' specialist skills. In 42.4% of cases, SMEs believed that this was an area on which special emphasis should be placed (Table 4-3-4); it has consistently ranked higher than any other manpower cultivation area in this respect, reflecting a more or less unanimous recognition among SMEs of the importance of cultivating specialist expertise.

Besides specialist skills, communications skills were another area where SMEs felt that there was a need for active

cultivation. However, there was a big gap between the perceived importance of communication skills and that of specialist expertise, and this gap has shown little sign of narrowing in the last three years. There is thus a well-established consensus among SMEs as to the priority for cultivating skills.

Table 4-3-4 SME Manpower Cultivation Needs, 2000 – 2003

Unit: %

Areas to be Strengthening	2003		2002		2001		2000	
	%	Ranking	%	Ranking	%	Ranking	%	Ranking
Specialist skills	42.4	1	40.3	1	35.6	1	50.1	1
Leadership ability	5.5	6	4.6	6	3.1	7	6.4	4
Teamwork	9.5	5	11.4	5	6.4	6	17.5	3
Self-management	9.6	4	11.9	4	8.2	5	21.7	2
Communication skills	10.0	3	12.0	3	10.2	3	–	–
None	16.4	2	13.4	2	27.9	2	1.9	5
Other	2.9	8	2.8	8	0.1	8	1.3	–
Don't know / No response	3.7	7	3.6	7	8.5	4	1.1	6
Total	100	–	100	–	100	–	100	–

Source: Yu Chuo-Min, *Survey of SME Manpower Cultivation Needs in 2003*, SME Training Center (Northern Region), College of Business, National Chengchi University, October 25, 2003.

6. Specialist Talent Will be the Greatest Need for SMEs in the Future

Nearly 50% of SMES reported that, in the future, specialist talent would continue to be in greatest demand, followed by managerial talent at 18.2% (Table 4-3-5). As for "ancillary" talent in the areas of administrative services and e-business services, demand for these categories of human talent among SMEs is far lower than the level of demand for specialist and managerial talent. The government should therefore continue to

place the main emphasis in its cultivation of human resources on specialist expertise and managerial expertise.

Table 4-3-5 The Types of Human Talent Needed the Most by SMEs in the Future

Unit: %

Types	2003		2002		2001		2000	
	%	Ranking	%	Ranking	%	Ranking	%	Ranking
Specialist talent	49.2	1	49.2	1	43.9	1	51.1	1
Managerial talent	18.2	2	25.1	2	15.7	3	19.3	2
Administrative services talent	5.5	5	4.9	5	4.2	6	3.7	5
e-business services talent	6.4	4	9.5	3	11.6	4	15.4	3
None	15.8	3	2.5	6	4.8	5	3.0	6
Other	0.6	7	2.1	7	–	–	1.2	7
Don't know / No response	4.3	6	6.7	4	19.8	2	6.3	4
Total	100	–	100	–	100	–	100	–

Source: Yu Chuo-Min, *Survey of SME Manpower Cultivation Needs in 2003*, SME Training Center (Northern Region), College of Business, National Chengchi University, October 25, 2003.