

# 8

## Labour and managerial skills

Human capital is the most important factor that constrains a firm's technological innovation and commercial success. This chapter discusses the skill profiles of managers and workers in sample firms. We then turn to the constraints that limit the sample firms' capacities to obtain and retain skilled labour. It then discusses wage differentials in size and geographic distributions. It concludes with observations on the implications of the recently introduced social security system on private firms.

### Skill profiles of managers and workers

The CEO and firm surveys revealed information on the educational profiles of the sample firms' management and the background of their top managers.<sup>1</sup> Table 8.1 shows the educational profiles of the management by firm size and city. Overall, 86 per cent of people in the management has at least junior high school education, and 59 per cent have at least senior high school education. In particular, with a percentage of 34 per cent, people with a college education are the largest educational group in the sample. In addition, there are also a small percentage of people who have masters or Phd degrees, and 0.5 per cent have foreign education. These results indicate that the educational levels of the managers in the sample firms are reasonably high.

In terms of size distribution, the educational concentration of managers in the smallest firms is at the junior high school level (34 per cent) while it jumps to the college level for the larger firms. In particular, nearly 50 per cent of the managers in firms of 100 to 500 employees have a college degree. Nevertheless, the smallest firms do not have a lower proportion of managers with a Master or Phd degree than larger firms do. They even have the largest percentage of managers with Phds (5 per cent).

Table 8.1 also puts the educational distribution into a geographic dimension. There is an overwhelming concentration, a hefty 45 per cent, of the managers in Shunde with junior high school level education. Beijing has 34 per cent at

the same level although it also has 28 per cent of college graduates. In all the other four cities, the percentage of managers who graduated from college is above 40 per cent. Five per cent of managers each of Beijing and Chengdu have a Phd degree while there are almost none in the other cities. This contrast makes sense because those two cities have many top universities while the others have none.<sup>2</sup> In terms of managers with foreign education, Wenzhou has 2.3 per cent, the highest percentage.

Table 8.2 reports the former working experience of managers based on the survey results from the CEO questionnaires. Overall, 75 per cent of CEOs had management experience before they had taken the current job (last column). The high percentage of amateur entrepreneurs may be taken as a sign for easy entrance into the private sector. In terms of sectoral experience in the past, 74 per cent of the CEOs were working in the industrial sector, 14 per cent in government, 5 per cent in industrial associations, 4 per cent in agriculture, 1 per cent in party organisations, and 3 per cent in other sectors.

The results indicate that besides the industrial sector itself, government is also a significant source of entrepreneurs for the private sector. In Chengdu, the research team interviewed a CEO (previously working as an official at metropolitan BICM) who set up a private firm to produce pharmaceuticals and later successfully took over a large SOE in the city. When asked whether his previous working experience in government was helpful for running a private business, he said it was very helpful without further elaboration. Presumably, advantages for ex-government officials to run private firms include familiarity with government policies and structure, good connections with government officials and departments including financial institutions, useful connections in certain industries, wider sources of information and government experience and the SOE link.

Fortythree per cent of the CEOs had had past experience of working in private firms, 33 per cent in state-owned firms (46 per cent in Chengdu), 13 per cent in collective firms (25 per cent in Shunde), and 10 per cent in others. Thus, the private sector itself and the state sector are both very important in training and fostering entrepreneurs. With further reform on SOEs, it is expected that more entrepreneurs will be seen to have emerged from the state sector. However, the largest percentage for the private sector shows that the sector itself has been becoming a source for generating human capital.

We are unable to present satisfactory statistics on ordinary employees' educational profiles because many private firms do not keep relevant records. However, education levels of ordinary workers are low because most have come from the countryside in inland provinces and most have only finished junior high or elementary school. For a firm like MD, employees with junior high or less education made up 34 per cent of its total workforce in 1998 (Box 2.2).

**Table 8.1** Educational profile of managers by firm size and city (%)

	No formal education	Elementary	Junior High	Senior High*	College	Master	Phd	Foreign education
By firm size								
<51	1.7	1.6	33.7	24.6	27.2	3.4	5.1	0.3
51-100	-	1.4	23.9	27.5	37.3	3.8	2.6	1.0
101-500	2.0	1.8	12.6	24.8	49.6	4.3	1.2	0.4
>500	0.8	2.0	16.8	20.6	44.4	1.3	2.4	0.7
By city								
Beijing	2.1	2.0	33.5	23.9	28.2	3.3	4.9	0.2
Shunde	-	12.4	45.3	4.4	16.9	-	0.9	-
Chengdu	0.4	0.2	8.5	30.9	41.8	4.3	5.0	0.7
Wenzhou	1.5	1.8	23.1	25.9	42.4	1.3	0.3	2.3
Mianyang	-	8.3	16.7	30.3	55.0	6.4	-	0.2
Deyang	0.2	0.5	25.0	25.8	41.0	2.3	1.1	0.2
Total	1.4	2.1	26.8	25.0	34.2	3.1	3.6	0.5

**Note:** \* Includes vocational education.

**Source:** Firm survey

**Table 8.2** Former experience of managers by city and firm size (%)

	Sector										% with managerial experience
	Farm	Industry	Business association	Government	Party organ	Other	SOEs	Collective	Private	Other	
Total	3.7	74.3	4.6	13.3	0.9	3.3	33.5	13.0	43.3	10.2	75.5
By city											
Beijing	4.8	69.4	3.2	19.4	-	3.2	39.7	9.5	36.5	14.3	73.7
Shunde	18.2	81.8	-	-	-	-	33.3	25.0	41.7	-	4.0
Chengdu	2.1	66.7	6.3	18.8	2.1	4.2	45.7	8.7	39.1	6.5	68.8
Wenzhou	4.2	95.8	-	-	-	-	28.6	19.0	38.1	14.3	78.9
Mianyang	-	73.3	-	26.7	-	-	14.3	21.4	57.1	7.1	1.0
Deyang	4.2	70.8	16.7	8.3	-	-	8.3	12.5	79.2	-	1.0
By size											
<51	7.2	63.8	5.8	18.8	-	4.3	31.8	7.6	48.5	12.1	63.0
51-100	-	82.8	6.9	10.3	-	-	25.9	14.8	55.6	3.7	77.8
100-500	2.5	7.0	2.5	22.5	2.5	-	32.4	16.2	43.2	8.1	96.2
>500	-	93.3	6.7	-	-	-	29.4	23.5	47.1	-	83.3

Source: CEO survey.

This large presence of workers with minimum education is a rational choice for firms because most of their tasks require minimum skills. The real challenge is the lack of people with higher education levels and capable of technological innovations. This is pertinent to large firms that are engaged in fast technological innovations and market expansion than small and medium firms that want to have a unique product advantage. Among the 11,020 employees in MD, about 1 per cent had a master or Phd degree, 25 per cent have a college degree.

### **Training and impediments to obtaining and retaining skilled workers**

What kinds of training are most demanded by private firms? The CEO survey revealed that technical training, accounting and marketing, and quality control are the three areas for training in most demand. Among the 338 CEOs interviewed, the percentages that identified these three kinds of training were, respectively, 59 per cent, 57 per cent, and 46 per cent. Only eight firms said that they did not need training.

Several factors impede a private firm in obtaining and retaining skilled workers. First, many college graduates do not want to work in a Chinese private firm even if it pays a higher wage than a state firm. This is more prevalent in Beijing and Chengdu where the first choices of university graduates are foreign companies, joint ventures, and government institutions.

Second, private firms generally cannot compete with the above three kinds of employers either because they have limited resources, or because they are reluctant to offer comparable wages and benefits to those employers. Private firms generally have worse working conditions and fewer benefits than the other kinds of employers. In addition, they also tend to have few college graduates, reducing the incentive for new graduates to join because of the limited opportunity to interact with people of the same background.

Private firms tend to adopt a pragmatic attitude towards human capital. While this helps them to avoid the costs of getting a wrong person, it hinders them in hiring qualified graduates. For example, MD only pays a masters graduate 3,000 yuan per month in the tryout period when a low level office manager can get more than 8,000 yuan per month. The tryout period is helpful for the firm to identify qualified people, but also discourages highly talented people. This is potentially a problem since the firm needs people with exceptional capacities. For example, the firm needs people for its overseas business.

With the offer of such a wage, it is almost impossible to get qualified people. The problem here is that private firms put too much emphasis on firm-specific factors and ignore the role of the economy and the educational system as a screening device for identifying talents. For example, there are many MBA programs in China now. All of them require work experience as

well as a college diploma for entrance. Therefore, a good MBA degree itself can be taken as a sign of qualification and warrant the payment of a high salary.

Third, a high turnover rate is a factor that discourages firms to invest in training, which in turn reduces the quality of its labour force. This is more of a problem for unskilled workers. For them, a 0.5 yuan higher daily wage will draw them to a neighbouring factory. As a result, the annual turnover rate in the sample firms was between 15 per cent and 20 per cent. Such a high turnover rate makes the training of workers unattractive for private firms.

Finally, certain local policies discourage firms from obtaining qualified employees, especially college graduates. For example, most of the cities have very restrictive policies governing the granting of resident status to outside people, including college graduates of the universities in the city. Getting resident status has become very difficult for a person with only a college diploma. In Beijing, only people with a Phd degree and their dependents can get free residence status. In Shunde, resident status could be granted to people with a college diploma. Now, these people are no longer welcomed. As Box 6.1 shows, a graduate cannot get resident status and has to pay to stay.<sup>3</sup> As solving the local unemployment problem is a high priority of local governments, setting barriers to outsiders may seem to be a rational choice on the government's side. However, the efficiency loss thus created may well outweigh the benefits.

## Wage differentials

From the information provided by firms with usable entries, the average firm wage rate of the sample firms was 7,936 yuan in 1995, and 8,227 yuan in 1998, increasing by only 4 per cent. The average real wage of the sample firms could have decreased. However, for the 132 firms providing data for both years, the average of each firm's wage growth rate was 32 per cent. The contrast seems to have been caused by the fact that firms providing usable entries for 1995 and 1998 were not all the same, with many firms established between 1995 and 1998 paying lower wages in 1998 than firms established earlier.

In both years, firms' average wage ranged from near zero to tens of thousands. Wages were higher in larger than in smaller firms, although the differences were moderate. For example, in 1998, the average wage rate for the four groups of firms had a range of from 7,548 yuan for the group with 100 to 500 employees to 9,097 yuan for the group of more than 500 employees, that is the latter was only 21 per cent higher than the former.

There were large differences among the six cities. In 1995, the average wage rates in interviewed firms in Beijing, Shunde, Chengdu, Wenzhou, Mianyang, and Deyang were 5,272 yuan, 8,560 yuan, 6,070 yuan, 12,628 yuan, 5,515 yuan, and 8,587 yuan, respectively. Wenzhou had the highest wage rate which was 2.4 times that of Beijing which was the lowest. Through

the period of 1995 to 1998, wage rates in Beijing, Shunde, and Chengdu increased by 43 per cent, 11 per cent, and 36 per cent, respectively, but decreased slightly in the other three cities.

The average wages for the six cities were, respectively, 7,540 yuan, 9,505 yuan, 8,266 yuan, 12,244 yuan, 4,993 yuan, and 8,497 yuan. Wenzhou still took the number one position, but Mianyang replaced Beijing as the lowest. Although the difference between the highest and the lowest remained basically steady, the wage distribution became more compact except for Mianyang, which stays far behind the average.<sup>4</sup>

The relatively small differences among firms with different sizes suggest that regional labour markets in the four cities are working efficiently. The large differences among the six cities, on the other hand, indicate that labour mobility is far from perfect in China. As in any country, we do not expect the regional wage differences to disappear in China, but the current large disparities among several relatively advanced cities show that there is plenty of room for change.

### **The new social security system and its impact on private firms**

Starting in 1986, China has been gradually moving from a pay-as-you-go system for retirement to a more differentiated system. This movement was finally defined on 16 July, 1997 when the State Council issued the 26th document of the year *Decisions on Establishing a Unified Basic Enterprise Pension System*. In this document, frequently called the 26<sup>th</sup> document, a new social security system for urban residents was defined. This new system divides old-age support into a mandatory basic system and a voluntary commercial system. In the commercial system, a worker or a firm can buy retirement insurance on a voluntary basis. Our discussion will concentrate on the basic system.

In the basic system, both the firm and the worker are required to pay for the insurance. An individual account is set up for each worker at a bank. The contribution to this account is set at 11 per cent of the worker's wage. Both the worker and his firm are required to contribute to it. The 26<sup>th</sup> document stipulated that individual contributions could not be less than 4 per cent of the wage by the end of 1997. This percentage would be raised by one percentage point every two years until the individual contributions reached 8 per cent. In the course of the transition, the firm would fill in the gap between individual contributions, and 8 per cent.

In addition to the individual account, there is a public account contributed solely by the firm. The 26<sup>th</sup> document stipulates that the total firm contribution (including its contribution to the individual account) normally should not exceed 20 per cent of the total payroll. Funds in the individual account belong to the worker and are to be inherited. Funds in the public account are pooled together. Assuming a life expectancy of 70 years of age, a wage growth rate

equal to the interest rate, and a contribution of 35 years, the two accounts added together will provide a replacement rate of 59 per cent of the prevailing wage rate at the worker's retirement. A more efficient investment system, generating high rates of return, would raise this ratio.

The transition from the old system to the new system has commenced. However, implementation is not even across the country. For example, Beijing requires a firm's contribution of 19 per cent and an individual's contribution of 5 per cent. In Shunde, firm contribution is set at 13 per cent, and individual's contribution is the same as in Beijing. The coverage in Shunde is 80 per cent for local people, 30 per cent for migrants. Since the 26<sup>th</sup> document only governs people with an urban residency, the 30 per cent might have captured a fairly large portion of the urban migrants in Shunde because like any other place, most of the migrants come from the countryside. However, the local social security bureau still complains that the coverage is low because there is a deficit of more than 20 million yuan each year.

Discussion is underway to include rural migrants into the current pension system. Shunde is attempting to do this. Beijing is implementing this policy. In addition, a major reform in healthcare has been announced. This will also be a three-pillar system of health care. In Shunde, a preliminary system has been established with contributions divided into one third for each of government, enterprise, and individual. Currently, the total premium for a worker is 47.5 yuan/month, and 400 thousand people (about one third of the local population) have joined the system. The system only pays a worker when he has to stay in the hospital to get treatment, but running at a deficit.

The two new systems have received strong resistance from private firms, especially when they are required to cover rural migrants. There are internal inconsistencies for rural migrants entering into the pension system. Because this group of people has a high mobility rate, a major problem arises when they leave a job about whether to cash their and their firms' contribution or to transfer the contributions to their own provinces. Both options have problems. In the first option, the firm incurs large losses. In the second option, the migrant incurs a loss because he or she is not going to get the benefit after returning to the countryside in the home province because of the major costs involved in claiming the money in the future.

There are also problems of how to balance the interests of different provinces. To private firms, the immediate consequence is that their operational costs will increase considerably. In most cases, pension contributions and health insurance are used by them to reward loyalty. As a result, only local people and migrants whose qualifications are in demand have these benefits.

In the Survey, cases of pension and healthcare are scant. Among the 628 sample firms, only 90 firms provided a figure for the amount of pension in

1998, and their average of pensions as a percentage of the total payroll was only 7 per cent. In addition, 102 firms provided information for their healthcare expenditures, and the corresponding average percentage was 8 per cent. As for regional differences, Chengdu and Beijing had the highest percentages of about 10 per cent for both pension and healthcare. But in terms of coverage measured by the percentage of firms providing usable entries, they were the lowest. For example, the pension coverage was 16 per cent and 8 per cent, respectively, whereas in other cities it was above 20 per cent. The highest was Wenzhou (31 per cent).

The research team found only a few cases in Beijing in which benefits were extended to all the migrants. However, the benefits are not specific to an individual. A firm purchases the benefits for a fixed number of employees. When an employee leaves the firm, the newly hired employee takes the slot. By doing so, the firm fulfils the government requirement and saves its money. In Shunde, almost no rural migrants obtain the benefits. However, each firm buys mandatory accident insurance for all of its workers. The insurance itself exempts the firm from liability in work accidents, which sometimes can be highly expensive to settle.

To a large extent, Beijing and Shunde's early extension of the coverage of both the pension and healthcare systems to rural migrants was prompted either by the pressure to remedy the deficit, or by their desire to limit the number of migrants in the cities. While the first factor is understandable, yet not justifiable, the second factor may have been misguided. A comprehensive study shows substitution effects of migrants workers for local's jobs are low (Li, 1997). In light of this, the policy to limit the presence of rural migrants cannot be justified. Rural people have land as the last resort. The current egalitarian land distribution serves as an in-kind social security system for the rural population (Yao, 1999). The rural population will still rely on this system for a long period of time basic old age support as well as current income insurance against adverse shocks.

In summary, the sample firms have strong profiles in terms of educational levels and past managerial experiences. The impediments to their obtaining and retaining well trained workers are related to their cautious approach to compensation of new employees, high turnover rates, the reluctance of people to work in private firms, and local government protection of local employment. The study of the wage differentials showed that local labour markets are quite efficient, but a more unified national labour market is yet to come. Finally, the speeding up of the implementation of the new pension and healthcare systems has met strong resistance from the sample firms. In light of its internal inconsistency, the resistance shown by firms, and the fact that the rural population has some insurance through the egalitarian land tenure system means, the extension of the coverage to rural migrants will not come soon.

**Notes**

1. Due to different understanding of what 'management' meant to the respondents, the management could include only the top managers or these managers plus medium-level managers.
2. Cities like Beijing and Chengdu have also set up high-tech development areas or zones with special policy packages in place to attract Chinese students or scholars overseas to work there.
3. In some small size towns, people paid around 6,000 yuan to have a permit to live in cities a few years ago. But for large cities like Beijing, there is no such policy due to the tight control over the inflow of population.
4. Of course, there are differences in living costs across regions. For example general price levels in Chengdu and the other two cities in Sichuan Province are lower than that in the coastal cities such as Beijing and Wenzhou. These differences in living costs should be considered when comparisons are made across regions in wages.