China Employment Strategy Report 2006-2007: Development of Labor Market Intermediaries and Employment Promotion

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Abstract: Based on the literature review, questionnaire surveys (questionnaire from 284 recruiting companies, 3165 employees, 1321 job-hunters (882 of them are unemployed)) and in-depth interviews (with part of the companies and job seekers), from the theoretical and empirical perspective, the report conducts a systematic and comprehensive analysis on the following issues of Chinese labor market intermediaries: 'The History and Current Situation of Chinese Labor Market Intermediaries', 'The Choice of Job-search Channels by Both The Employed and Unemployed and Its Determinants', 'The Use of Social Network, Public Employment Intermediary, Labor Dispatch, and Websites in Individual's Job Search, and Their Impact on Employment Promotion', and 'The Prominent Problems Faced by Chinese Public Employment Service Agencies'. The research shows that, as Chinese labor market becomes more and more open, the way of job matching changes and the importance of employment intermediary increases gradually. Social network becomes an important channel for job seekers to get employment information, but the effects vary for different people. Job seekers choose different channels based on their individual characteristics. The labor market intermediaries promote employment by providing job information, while some factors, such as unreliable credit, insufficient information and unfocused service, greatly restrain the effectiveness of Chinese intermediaries on employment promotion. Series of suggestions are put forward to strengthen the infrastructure and platform of Chinese human resource management, construct public employment service organizations and professional teams, introduce performance management in public employment service, enhance the publicity of public employment

service organizations, and improve relevant laws and regulations.

Key words: labor market intermediaries, employment strategy, employment promotion

1. Research Background

China used to be a planned economic country, which adopted planned personnel management. Therefore, the system of labor market intermediaries is rather immature. Nowadays, even with the rapid economic growth, this problem remains prominent. Previous research has found that, the proportion of natural unemployment to total unemployment is very high (Zeng & Yu, 2006), which means that frictional and structural unemployment is the main component of unemployment. For job seekers, effective job-search methods can reduce both job-search time and cost, improve the efficiency of job-person match, and eventually reduce frictional unemployment. Thus, it is of theoretical and practical significance to carry out study on labor market intermediaries thoroughly and systematically.

Based on the review of previous studies on labor market intermediaries and by conducting literature review, questionnaire surveys and in-depth interviews, this report does a systematic and comprehensive theoretical and empirical research on the origin and development of labor market intermediaries both in China and abroad, its function and role, credit system, team building, performance management, regulation and legislations, channels of job-search used by job seekers in different regions and their determinants, and the use of intermediary in insurance industry. This study is expected to provide valuable suggestions for identifying the current situation of Chinese labor market intermediaries, helping job seekers, especially the unemployed to choose appropriate job-search channels, pushing the construction of labor market intermediaries, and implementing effective employment strategy.

2. Literature Review

As specialized agencies for human capital allocation, labor market intermediaries reduce search costs and risk. Meanwhile, economies of scale in the collection and processing of information can be achieved (Osterman, 1999). In theoretical research, the

introduction of information economics in the 1970s "broke through" the intermediary inefficiency derived of theory from the main framework classical economics—Arrow-Debreu Paradigm. From then on economics has begun to show its real concern about labor market intermediaries. Since the 1970s, making use of different analytical frameworks including job search theory, adverse selection theory, the principal-agent theory and institutional change theory, researchers have discussed and explained the reasons for the existence of labor market intermediaries, their impact on employment and on general welfare, and their relationship with enterprises, workers and the government.

Empirical researches abroad on labor market intermediaries are involved with the determinants of job seekers' choice among different labor market intermediaries, the relationship between labor market intermediaries and employment, and the performance appraisal of labor market intermediaries. Hereinto, empirical Researches on the determinants of job seekers' choice among different labor market intermediaries are abundant, especially the determinants of job-search channel choice. The United States Current Population Survey (CPS) data (Eberts & Holzer, 2005), European Labor Force Survey data (ELFS) (Mosley, 1997) and the Ford Foundation (Pastor et al., 2001) study are the most representative. It was found that, compared with the formal search channels (e.g. labor market intermediaries), informal search channels (e.g. social network) is the main job search method. In general, and job-seekers may attain higher wages through informal rather than formal search channels like the PES. There is substitution between social network and the labor market intermediaries. Based on the working-age population survey in UK, Böheim & Taylor (2001) investigated the use of different search channels and their impact on employment. They found that the choice of job search channels is affected by demographic factors (e.g. age, skill level, educational level, family income, unemployment duration) and the local unemployment rate. The research on the users of Italian public employment services (PES) and its effectiveness by Giann Barbieri, Pietro Gennari and Paolo Sestito (2001) found the factors that influence the application of public employment services are mainly related to demographic factors (including gender, age, education, family status, employment situation of other family members, years after education, job search channels chosen by other family members, work experience, and the reasons for

unemployment, etc.), labor market characteristics and geographical factors. According to the research of the current employed and unemployed job seekers in Russian labor market, S. Y. Roshchin and K. V. Markova (2004) find that demographic factors (e.g. age, gender, ethnicity, educational level, status of employment or unemployment) and local unemployment rate have a significant impact on the choice of job search channels. Taking the data of 1994-2002 from the Venezuelan Household Survey, a semi-annual survey collected by the Oficina Central de Estad stica e Inform ática (OCEI) since 1976, Gustavo M árquez and Crist obal M. Ruiz-Tagle V. (2004) find that demographic factors (including gender, age, level of education, unemployment duration, etc.) and previous employment environment have a different degree of impact on the choice of job search channels.

Most studies abroad show that the labor market intermediaries have a positive and significant impact on employment. As a nonprofit organization, employment intermediary has a positive impact on reducing unemployment and increasing the employment rate (Thomas, 1997; Martin, 1997; Denis, 2005; Lee, 2007). In a competitive allocation market, the public and private labor market intermediaries will increase the re-employment rate (Etienne Campens et al., 2005). In particular, public employment agencies may increase the re-employment rate of the group with low education level and low skills (Denis Foug être et al., 2005). Some scholars hold that private employment intermediaries are more efficient and of higher quality than public intermediaries, and also the development of private employment agencies should be encouraged (Pissarides, 1979; William Clark, 1988; Peter, 1996). Strengthening the government's market-oriented functions and encouraging the joint operation in private employment agencies seem to be a trend (Etienne, 2005). The studies on employability enhancement by the labor market intermediaries focus on the impact of intermediaries on career development, staff training and wages. Relying on a survey of telecommunications contractor firms and case studies of eleven labor market intermediaries in three metropolitan regions, Wolf-Powers (2004) analyzed the effect of labor market intermediaries on the employment of the disadvantaged. The results show that LMIs' success is predicated chiefly on their connections with employers, their adherence to industry-wide skills standards, and their ability to offer ongoing support to clients in the form of occupational networking and continuing skills training. Grubb (1996) argued that, according to the evaluation of many public and

non-profit training programs, labor market intermediaries have a significant impact on the workers' income, whereas the Ford Foundation (Ford, 2003) showed that the intermediaries have a small impact on wages after conducting the comparative study on the representative of the knowledge-based economy -- the Silicon Valley and the representative of the traditional economy -- Milwaukee.

Labor dispatch, as a new relation between intermediary organizations and employment, gains high attention of academia abroad. However, it is controversial about the impact of labor dispatch on the scale of employment. Through an early general equilibrium analysis, Burda (1992), Hopenhayn & Rogerson (1993), Saint-Paul (1995) found that the reduced dismissal cost has a negative impact on employment scale, whereas, later by conducting a general equilibrium study, Alvarez & Veracierto (1998), Mortensen & Pissarides (1999) drew the conclusion that reduction of dismissal cost has a positive impact on the employment scale. As to the impact of labor dispatch on frictional unemployment, there is a general agreement on the conclusion obtained. Most scholars believe that labor dispatch agencies can effectively help the unemployed, especially the temporary unemployed, find new jobs (Segal & Sullivan, 1997; Otoo, 1999; Garc á-P érez & Muñoz-Bullón, 2005). During 1990s, ten percent of the new jobs in the USA owe to Labor Dispatch Agency (David, 2004), and the development of this agency is one of the main labor market factors for the low unemployment rate in the late 1990s (Lawrence F.Katz et al., 1999). Their development will not squeeze out formal jobs (Neugart et al., 2002). The impact of labor dispatch on employment quality of dispatched workers is a complex issue. Current research paid more attention to wages and benefits, job security and career development of the dispatched workers. As to the impact on wages and welfare, most studies argue that dispatched workers receive lower wages than the formal staff (Nollen, 1996; Segal, 1997; Rudolph & Schröder, 1997). While in the early 1990s, the study found wages of some dispatched staff (such as typists and bookkeepers) are almost the same as those of their formal counterparts. (Cohen & Haberfeld, 1993). Current research also state that dispatched workers have generally low job security (Melchionno, 1999; Houseman & Polivka, 1999; Garc á-P érez & Muñoz-Bullón, 2005). In regard to the influence of labor dispatch on the career development of dispatched workers, foreign scholars regard "stable or long-term employment" as the best career development prospect.

Many literatures indicate the job opportunity that labor dispatching offers is a stepping stone to permanent employment (Booth et al, 2002; Neugart & Storrie, 2002; Ichino et al., 2004; Garc á-P érez & Mu ñoz-Bullón, , 2003; Houseman. 1997). However, Catalina (2005) reaches a different conclusion that most dispatched work is low-technique, and without development potential. The benefit for being engaged in this intermediary translates into an easier access to permanent contracts for individuals in highest occupational category. On the contrary, results also indicate the existence of negative agency workers in the lowest qualification group(Nollen, 1996; J.Ignacio Garc á-P érez & Fernando Segal& Sullivan, 1997).

In the 1980s, OECD conducted a survey on the performance appraisal of the services provided by public employment service agencies in different countries (OECD, 1984), and suggested some methods of performance appraisal. From the early 1990s, OECD conducted three surveys of several countries with emphasis on a different issue for each time. The first survey examined the performance of public employment services of Japan, Norway, Spain and U.K. The second survey examined that of Denmark, Finland and Italy. And the third examined that of Australia, Germany and Sweden. OECD's performance evaluation mainly focuses on the management practice of public employment agencies. Besides, the World Association of Public Employment Services (WAPES) also launched a symposium to discuss the performance appraisal, and published many reports in which different methods of performance appraisal targeting different countries are suggested (WAPES, 1995). In addition, as part of the "International Handbook of Labour Market Policy and Evaluation", edited by researchers from the Wissenschaftszentrum für Sozialforschung Berlin (WZB), a chapter has been prepared focusing particularly on the evaluation of placement services as a means to improve job matching. It concentrates on the methodology as well as on the findings of studies on performance and impact evaluation of PES in different countries (Walwei, 1995b). In times of budgetary constraints causing financial pressures public services are required (much more than in the past) to practice "management by results": to focus on outputs in terms of better "value for money" and to improve organizational responsiveness to clients. Performance appraisal has become a key issue to be concerned by public services. As a part of "the International Handbook of Labor Market Policies and Evaluation ", the symposium discussed the

methods on assessing employment service performance, and furthermore evaluated the effects of employment service in different countries (Walwei, 1995). Due to the constraint of budget management, public service tends to be "result-oriented", emphasizing the actual output of input and clients' satisfaction. Performance appraisal has become a key issue to be concerned by public services. Moreover, it has been introduced into the employment services as an important issue of labor market intermediaries research (Walwei, 1996). But what should be noted is that, in labor economics literature, studies on performance appraisal and empirical analysis on it are mostly needed (Zimmermann, 2004).

Although rigid academic research on labor market intermediaries and on their impact on job seekers is still rare in China, there are some relevant practical investigations and academic discussions. Li & Zhang (2003) did an analysis of the public employment agencies of Guangdong Province by drawing data from the statistical yearbook and population census, and provided a report on the number, classification and functions of public employment agencies, and on characteristics of job seekers. In June 2003, "the report on China's employment agencies development" was published by the Training and Employment Department, Labor and Social Security Ministry, which investigated the development of public employment agencies authorized by the labor and social security branches at all levels. The public agencies they investigated included those affiliated to streets, towns and counties. A total of 12,713 responses were collected from the questionnaire survey (excluding Shanghai). The survey items included basic description, service items, source and release of supply and demand information, and service guarantee of employment agencies. Some Chinese scholars have analyzed and discussed particular intermediaries including social network, campus recruitment and labor dispatch, and have figured out that social network is the main support and channel for labor force migration (Bu, 2004). Research on social network focuses on the impact of social network on migrant workers, laid-off workers and other disadvantaged groups. The mobility of Chinese peasants is mostly based on strong trust, and public employment services for peasant workers are seriously deficient (Zhai, 2003). During the social transition, social networks do not necessarily help the laid-off workers get better jobs (Zhao, 2006). Although campus recruitment, which remains the main channel for graduate job seekers, it has many notable advantages, there are many problems (Zhao, 2007). There are certain debates on labor dispatch among Chinese scholars. Some believe that labor dispatch makes flexible employment organizable, which will help solve the problem of supply and demand mismatch, and therefore be conducive to collecting information from the demand side, reduce the transactional costs, and improve the efficiency of the labor market allocation as well(Zhang, 2003, Xia & Qiu, 2005). Labor dispatch not only provides low-cost employees for enterprises, but also is a new way to alleviate the current severe employment pressure (Zhao, 2006). Others argue that labor dispatch amplifies job instability and unemployment risk. Unemployment will further increase as employers sign direct labor contracts only with core employees only to keep a minimum number of employees while the employment scale changes with the business cycle, which in turn will increase unemployment (Wang & Hou, 2004; Chang & Li, 2006). Dispatched workers get relatively low wages, and to some extent, "dispatched" has become an identity of lower wages compared with their formal counterparts (Wang, 2005).

As a whole, research on labor market intermediaries abroad is made in a systematic and in-depth way. Some achievement has been obtained wherever in developed countries, developing countries or countries in economic transformation. In contrast, only a limited amount of domestic research on labor market intermediaries has been conducted by Chinese academia. Although some investigations on labor market intermediaries and certain analysis on specific labor market intermediaries have been carried in China, generally speaking, both theoretically and empirically, it is still short of comprehensive and systematic studies on the choice of job search channels and its determinants. The credit building, professional team building and performance appraisal of labor market intermediary organizations are scarce as well.

3. Research Questions and Methodology

3.1 Research Questions

Based on literature review both in China and abroad, the report focuses on three research areas and proposes corresponding questions:

Current situation of intermediary organization

• The development of Chinese labor market intermediaries, especially the public employment service organizations in present stage

• The role of Chinese labor market intermediary organization in employment promotion

Empirical studies on job search channels

• Job search channels used by employed and unemployed job seekers in Chinese labor market

- The change of job search channels
- The determinants of individual choice of job search channels
- The proportion and role of social network, public employment intermediary, labor dispatch and websites in individual job search

• The effect of social network, public employment intermediary, labor dispatch and websites on employment promotion

System construction of Chinese labor market intermediaries

• The prominent problems faced by Chinese public employment service organizations

• The barriers inhibiting the effect of Chinese public employment service organizations on employment promotion

- What should the government do to strengthen the intermediary management?
- What can be done to further improve the regulation and legislation system of Chinese intermediary service?

3.2 Research Methodology

The methodologies adopted in the report include literature review, questionnaire, statistical analysis and on-site interview.

Literature review. More than 100 foreign papers and monographs on labor market intermediaries have been read. In addition, the relative regulations and policies on Chinese intermediary, and some archives of intermediary agents have been deep analyzed.

Questionnaire. Based on literature review and pilot interview, according to the contents and requirements of the research, the research group designed 4 questionnaires, namely, "Questionnaire on Enterprises' Use of Employment Intermediary", "Questionnaire on Current Employees' Use of Employment Intermediary ", "Questionnaire on Job Seekers' Use of Employment Intermediary in Public Employment Agencies" and "Questionnaire on Choices of Job Search Channels for the Registered

Unemployed ". The survey is carried in Beijing, Shanghai, and Shijiazhuang. 3165 current employees (1166 of them from insurance companies), 284 recruiting units (22 of them are insurance companies) and 1321 job seekers (882 of them are unemployed) are surveyed

Statistical and econometric analysis. After statistical analysis of the completed questionnaires, six reports are produced. (See details in Appendix "*Report on Chinese enterprises' use of employment intermediary*" etc.). Through logistic regression analysis, we test the impact of demographic factors, geographic factors and labor market environment on job seekers' choice of job search channels. (See the econometric model and its results in "*Job search, labor market intermediaries and employment promotion – An empirical study on job seekers' choice of job search channels in Beijing, Shanghai and Shijiazhuang* " by Xiangquan Zeng & Yuxue Cui.)

In-depth interviews. The research group conducted in-depth interviews with various organizations, including the Employment Department of the Labor and Social Security Ministry of China, the Talent Exchange Association of National Ministry of Personnel, the Job Center of Beijing Labor Bureau, Haidian Job Center in Beijing, Labor and Social Security Agency of Haidian District in Beijing, Beijing Xinliqiang Employment Service Center, Haidian Trade Union Employment Service Center in Beijing, Beijing Jingyi Co., Ltd., ABB, Beijing Sino-Tech Ocean Sci-Tech Development Co., Ltd, Shijiazhuang Employment Service Center, Suzhou Employment Service Center, Human Resources Development Co. of Suzhou Industrial Park, and Wuxi Municipal Employment Service Center. An interview report with more than 100,000 words are produced

4. Conclusion

4.1 More open of Labor Market, fundamental changes of person-and-job matching, and more important role of intermediary

After 30 years of development, China's labor market intermediary has had a certain scale. Chinese labor market intermediary organizations have experienced four stages: period of bud from 1978 to the early 1980s, period of the initial development during the 1980s, period of rapidly further development during the 1990s, and period of open competition since 2000. In other words, after 30 years' development, Chinese labor

market intermediaries have reached a certain scale, with the employment agency under the Ministry of Labor and the talent exchange center under the Ministry of Personnel as its main part, and the private and foreign-invested intermediaries as its key components. Shortly after the beginning of open competition, a number of website-based labor market intermediaries have emerged, such as 51job.com, Chinahr.com, and Zhaopin.com. They take advantage of their brands, and form competition and complementation with the public labor market intermediaries. The number of private intermediaries is increasing rapidly. Foreign-invested intermediaries have quickly dominated the high talented market through joint ventures, merger and acquisitions, and combination with private capital. Some data show that by the end of 2001, there were only 419 private talented intermediaries with 2,596 employees in the whole country. While in October 2004, the number of private talented intermediaries attained at 1100, and there were 26 joint-venture talented intermediaries: *History, Experience and Prospects* " by Jian Wang).

The public labor market intermediary becomes more and more open. With the development of industrialization and urbanization, rural labor force migrates to urban areas continuously. Moreover, due to the adjustment of economic structure and the regional imbalance of economic development, the regional migration of labor force is increasing, which speeds up the labor market development and increases the degree of openness. The survey on job seekers of public intermediaries in Beijing indicates that labor market in Beijing has demonstrated a great degree of openness, with 60.0% job seekers from outside of Beijing and only 40. 0% from Beijing. (See Appendix 3 "Statistical analysis report on job seekers' choice of job search channels in Beijing "). Beijing is the political and economic center of China, labor market in Beijing enjoys a high degree of openness. This also shows that, in order to meet the new demand of economic development, public intermediaries have played a key role in promoting employment and reemployment.

The job search channels of employed have changed greatly. In the early stage of reform and opening, influenced by the "planned recruitment and job allocation" ideology and system, job information and person-to-job fit were achieved through traditional "graduates job allocation" or "planned recruitment". With the development of the labor market, job search channels for individuals and the way of person-to-job matching have

undergone changes. The survey conducted in Beijing et al indicates that job search channels have gone through dramatic change compared to 5 years ago. The proportion of the usage of websites increased by 8.5%, while the usage of traditional enterprise recruitment and graduates job allocation dropped by 11.5%. In particular, the survey indicates that, most of the employees with a tenure of more than 10 years found the current jobs through the traditional way, as is shown in Table 1.

	Less th	an 5 years	More t	han 5 years	Т	otal
	Number	Percent(%	Number	Percent(%)	Number	Change
Employment agency	114	14.6	62	12.1	176	+2.5%
Campus recruitment	62	7.9	14	2.7	76	+5.2%
Web site	229	29.2	106	20.7	335	+8.5%
Social network	204	26.1	168	32.9	372	-6.8%
Paper-based media	54	6.9	24	4.7	78	+2.2%
Others	120	15.3	137	26.8	257	-11.5% (firm recruitment, and graduate job allocation)
Total	783	100	511	100	1294	

Table 1 Information Channels for the Current Job by Different Tenure (%)

4.2 The social network is an important information search channel for job seekers, but the effect is different from person to person.

The investigation of employees in Beijing and Shanghai shows, "social network" is mostly used by employees to obtain their current job information, which is the most effective way. Table 2 demonstrates the channels used by employees surveyed in Beijing and Shanghai, to get their current job information.

Table 2 Channels Used by Employees to Get their Current Job Information

	Frequency	Percentage	Valid	Cumulative
Job search Channels		(%)	percentage (%)	percentage
Social network	528	26.4	27.8	27.8
Web site	406	20.3	21.4	49.3
Others	345	17.3	18.2	67.5
Campus recruitment	264	13.2	13.9	81.4
Employment agency	254	12.7	13.4	94.8

Paper-based media	99	5.0	5.2	100.0
Total	1896	94.8	100.0	
Missing values	103	5.2		
Total	1999	100.0		

The report chooses Beijing insurance industry to analyze the use of labor market intermediaries and its influencing factors by Logistic models from micro level. The results show that: (1) For the insurance industry practitioners, the significant factors affecting the choice of job search channels are the type of products, the practitioners' age, education level and working experience in insurance companies; (2) The basic characteristics of the labor market intermediaries in Beijing are consistent with that in cities of developed countries and regions, such as the United States and the European Union; (3) As a job search channel, social network is the main substitute for labor market intermediaries. The main competitors of the public employment service agencies are the social network and other informal job search channels, rather than private employment service agencies; (4) Labor market intermediaries play an important role in promoting the employment of the disadvantaged such as life insurance sale persons.

The social network is also very important for the unemployed. The surveys conducted both in Beijing and Shanghai suggest that, as for the effect of job search channel, relatives and friends are the most helpful, although the employment service agencies are the most highly used. The survey conducted in Beijing suggests that 34.9% job seekers consider relatives and friends as the most valuable source, correspondingly, 26% in Shijiazhuang.

 Table 3
 The Most Helpful Job Search Channels for The Unemployed

	E	Beijing	Shijiazhuang	
Job seeking channels	Frequency	Percentage (%)	Frequency	Percentage (%)
Employment agency	222	44.8	136	40.2
Social network	173	34.9	88	26.0
Paper-based media	26	5.2	30	8.9
Website	43	8.7	32	9.5
Others	27	5.4	32	9.5
Campus recruitment	5	1.0	20	5.9

Table 4 shows the results from a Logistic regression analysis, demonstrating the influencing factors of choosing social network as the job search channel by the unemployed in Beijing and Shijiazhuang. It demonstrates that the lower education level the unemployed have, the more likely they are to use social network to search jobs.

Table 4 Logistic Regression Analysis of the Influencing Factors of the Unemployed 'sChoice of Social Network

	Social network		
	В	Exp(B)	
gender (male=1)			
Age			
Hukou1 (non-agricultural=1)			
Hukou2 (local=1)			
Education Loyal	 .412*** .608*** 	1.662	
Education Level	2608 ***	2.545	
Working Experience (yes =1)			
Cumulative Tenure			
Unemployment duration			

Note :

(1) *p<0.10; ** p<0.05; *** p<0.01.

(2) ① Beijing; ② Shijiazhuang.

(3) Hukou1: household registration classified into two groups - agricultural and non-agricultural.

(4) Hukou2: household registration classified into two groups: local and non-local.

The results in the report are similar to the results in B öhei and Taylor (2001). B öhei and Taylor consider, as other conditions are the same, the unemployed who have experienced unemployment recently are less likely to use informal channels (friends and relatives, and social network) to seek jobs. This may be explained as that, such individuals have less social contacts because of being unemployed, or perhaps they have already exhausted their social networks in previous spells of unemployment. The research on the registered unemployed in Venezuelan by M árquez & Ruiz-Tagle (2004) also shows that, without considering the previous job positions, individuals prefer to use "other" channels, rather than formal ones to seek jobs. However, Zhao (2006) suggests that using social networks won't help the laid-off employees to get better jobs during social transformation. Zhai (2003) proposes that strong trust is the basis for peasant workers composed of relatives and co-villagers, which creates a special landscape of "numerous floating villages

in the cities ". The survey of the unemployed in Beijing and Shijiazhuang shows that the employment service agencies, especially the public employment service agencies, is in shortage of quality service for the undereducated unemployed. In Beijing, the unemployed with low education are less likely to choose employment service agencies to obtain job information, whereas in Shijiazhuang, the lower education level the job seeker has, the more likely he/she is to choose for-profit job centers. If the unemployed can't find suitable jobs from employment service agencies, they will rely on their relatives who they think are more trustful, more reliable and more helpful. Thus, although the unemployed consider the social network as the most helpful way to get employment information, it might not be able to help the disadvantaged, whose human capital is low, to find the most suitable jobs. In order to solve this problem, on the one hand, things should be done to enlarge the coverage of public employment services and improve the quality of employment service in order to fundamentally change the disadvantaged group's heavy dependence on social network for job seeking; on the other hand, they should be trained to increase their human capital so as to enhance their competence to meet the demand of the labor market.

For current employees, social network is the most effective channel to get their current job information. But the use of social network by employees in Beijing and Shanghai shows some differences. In Beijing, the longer tenure the employee has, the more likely he/she is to use social network to get job information, whereas in Shanghai, the choice of social network as a job search channel is only correlated with the applicant's education level. It is worth noting that, for job seekers with low education level, social network does not necessarily have positive impact on his/her employment. For employees with long tenure and higher education, social network, which has been built, can help him/her find appropriate jobs, reducing job searching cost and improving efficiency. For this group, instead of guiding them to choose different job search channels based on their education, sex and age, they should be advised to reinforce their social network which has been established and is conducive to their job seeking(Márquez & Ruiz-Tagle, 2004).

The survey of college students in Sichuan Province suggests that when using social network to search jobs, most college students' first choice is their parents, followed by relatives and friends (More details can be found in the sub-report: *"The research on application of social network by college graduate job seekers*" by Dong Yang, etc.).

4.3 Job seekers with different demographics choose different job search channels

The empirical study shows that the level of education, among all the demographic factors, has the most significant impact on individuals' use of different job search channels: the higher education level the job seeker has, the more likely he/she is to choose the campus recruitment and the Internet; the lower education level the job seeker has, the more likely he/she is to choose to make use of the social network. This conclusion has confirmed the findings both from the study in Venezuela by M árquez & Ruiz-Tagle (2004) and from the study in U.K by B öheim & Taylor (2001), both of which show that job seekers with high level of education are less likely to use informal search channels. B öheim & Taylor (2001) pointed out that the high educated unemployed are less likely to use advertisement than the low educated ones. In China, high educated job seekers often find their jobs through campus recruitments and Internet. Campus recruitment is the most popular channel for graduates from all kinds of universities, colleges and vocational schools. Internet is used as one kind of online job searching intermediaries in recent years, and its clients are always those with high education level, high technical and high management skills.

The survey shows that Hukou (household registration) does not have significant impact on job seeker's choice of job search channels. Only the employees with rural Hukou in Shanghai are liable to get their current jobs' information through paper-based media, which may be explained by their limited Internet skills. This implies that with Hukou disappearing gradually, Hukou is no longer a main factor for job seekers to consider. Besides, the birth place (where are the jobseekers from) is another factor to influence the job seeker's choice of channels. For instance, in Shanghai and Shijiazhuang, the local job seekers are more likely to use employment service agencies, which is a special phenomenon in China. For one thing, the service offered to the migrant workers by the employment service agency is limited; for another, there is still discrimination towards the migrant workers in the labor market. Some companies still require local Hukou and because of this unreasonable requirement, labor force mobility is restricted.

The age of the job-seeker, the tenure of the employee and the duration of unemployment all have significant impact on the choice of job search channels. The impact of other demographic factors is contingent on different areas and different labor markets. Therefore, it is suggested that job seekers should choose the appropriate channels according to their own situations so as to avoid ineffective employment information searching and reduce the searching time and unemployment opportunity costs, and finally reduce the frictional unemployment.

What is worth noting is that, although there is still gender discrimination in the labor market, the findings suggest that gender has no significant impact on the choice of job search channels, and only in Beijing the unemployed male are more likely to use employment service agencies, which is largely inconsistent to the findings from studies conducted in other countries. (Specifically), in Venezuela, male job seekers are more likely to make use of media advertisements and apply directly to the firm for jobs (M árquez & Ruiz-Tagle, 2004); in Russia, unemployed female are prone to hunt for jobs through public employment service agencies and though the help from friends (Roshchin & Markova, 2004). Although in these countries, gender has a certain influence on the choice of job search channels, in China, male and female job seekers don't need to take their gender difference into consideration when choosing job seeking channels.

4.4 The employment intermediary organizations play a role in promoting employment by providing employment information

A prominent feature of our labor market is the short-term unemployment caused by the lack of job vacancy information. Analysis on macro data has shown that natural unemployment is the main component of the total unemployment in China, among which frictional unemployment accounts for a sizeable proportion. The investigation of the unemployed in the public employment service agencies has proved this point. The survey demonstrates that in Beijing the average unemployment duration is 8.94 months, of which 75.2% of the unemployed lost their jobs 1-6 months before, whereas 16.3% lost their jobs more than 1 year before. Even in Shijiazhuang, an underdeveloped area, the case is almost the same. In Shijiazhuang, the average unemployment duration is 5.5 months, and 88.2% of the unemployed lost their jobs 1-6 months before, whereas only 6.9% lost their jobs more than 1 year before. (See Appendix 3 "Statistical analysis report of the use of employment intermediaries by job seekers in Beijing" and Appendix 4 "Statistical Analysis Report of the use of intermediary employment intermediaries by job seekers in

Shijiazhuang ")

Different employment intermediaries have different impact on different groups' employment. Due to the fact that most of the disadvantaged in the labor market have only received low level of education, they have great dependence on the public employment intermediary service system. The survey has shown that the lower education level the job-seeker has, the more likely he/she is to use employment agencies, relatives, direct contact with enterprises, road sign job advertisement and labor dispatch agencies for job information. And the higher education level the job-seeker has, the more likely he/she is to use campus recruitment, websites and headhunting for information, as is shown in Table 4. Table 5 Choice of Different Channels by the Unemployed with Different Education Levels (%)

	Education			
	Junior middle school or under	Seniormiddleschool,technicalsecondaryschoolandvocational	Three-year college and advanced vocational	Four-year college or above
		school	college	
Employment agency	77.0	73.0	65.4	50.0
Campus recruitment	1.6	3.7	27.8	35.4
Social recruitment	23.0	28.5	57.0	60.4
Applying directly to the firm	14.8	13.6	16.3	18.8
Website	8.7	31.7	57.4	64.6
Advertisement in newspapers and magazines	42.1	49.5	57.0	50.0
Advertisement on the radio and TV	6.6	5.8	8.7	4.2
Advertisement on the road signs	8.7	3.9	1.9	
Relatives & friends	63.4	57.1	40.3	25.0
Headhunting			1.1	
Labor dispatch companies	4.9	1.8	0.4	
Others	2.7	1.3	0.8	

Public intermediaries remain to be an important channel for the unemployed to *obtain job vacancy information.* Frictional unemployment results from dynamic nature of the labor market. Therefore, how to provide adequate and valid job vacancy information to job seekers is the key problem to be resolved. The labor market intermediaries, especially the public employment intermediaries, should shoulder the main responsibility and carry on the mission. The survey conducted in Beijing indicates, although different individuals face different problems, as a whole, apart from 46.7% of the unemployed who regard low education level as the detriment for them to find appropriate jobs, 32.5% of the unemployed fail to find appropriate jobs because of lack of job vacancy information. In Shijiazhuang, the situation is different. 35.2% of the unemployed lost their jobs because of lack of work experience rather than low education level. Nevertheless, 33.1% of the unemployed failed to find jobs due to lack of information. Therefore, the validity of job vacancy information has proved to be of great importance. The survey also shows that, at present, employment intermediaries in Beijing play an important role in helping the unemployed to get job vacancy information. In Beijing, the five most frequently used channels for job vacancy information are employment intermediaries, friends and relatives, job advertisements in newspapers and magazines, public recruitment and websites, of which 84.7% job seekers choose to go to employment agencies. In Shijiazhuang, the top five channels for the unemployed to use are employment intermediaries, job advertisements in newspapers and magazines, friends and relatives, websites and public recruitments. Although there is a slight difference in ranking order compared with Beijing, the employment intermediary still ranks the top as 79.9% of job seekers choose to use it. Undoubtedly, Chinese labor market intermediaries have played an important role in reducing frictional unemployment by providing job vacancy information, as is shown in Table 5.

	Beijing		Shijiazhuang	
	Frequency	Percentage(%)	Frequency	Percentage(%)
Employment agency	455	84.7	275	79.9
Social networks	302	56.2	155	45.1
Advertisements in Magazines &				
Newspapers	243	45.3	198	57.6

Table 6 Distribution of Job-search Channels Chosen by the Unemployed

Website	176	32.8	146	42.4
Others	116	21.6	106	30.8
Campus recruitment	37	6.9	71	20.6

Labor dispatch is a rapidly developing new labor market intermediary. Theoretical analysis shows that labor dispatch can create more employment opportunities and expand the employment scale by releasing the institutional staffing restriction, reducing overtime work and the substitution of capital and technology for labor, expanding the scale of production, and attracting more investment. The survey shows that, as a whole, the impact of labor dispatch on employment is positive and is therefore conducive to expanding the scale of employment. However, different situations exist in different firms. The survey of enterprises shows that 31.2% of the sample enterprises argue that making use of labor dispatch services increases employment, whereas 17.5% of the sample enterprises think that it causes the reduction of employment, 12.5% of the sample enterprises believe that sometimes it causes increase in employment, and sometimes it causes reduction in employment. Otherwise, 38.8% of the sample enterprises believe that the development of labor dispatch hasn't caused any change on the total number of employees. 13.8% more firms believe that labor dispatch increases employment scale compared to those who believe that labor dispatch reduces employment scale. (See details in "Analysis on the impact of labor dispatch on employment—employment, matching cost and employment quality", by Hongjian Li and Ziyan Yuan).

The websites play an increasingly important role in modern labor market intermediaries. The survey of the current employees in Beijing and Shanghai indicates that for almost all employees surveyed, social networks and websites are the two most effective ways to find jobs. 21.4% of the employees surveyed found the vacancy information on their current jobs through websites, which ranked second after social networks through which 27.8% of the employees found their current jobs. The survey of job seekers conducted both in Beijing and Shijiazhuang indicates that website is also an important channel for the unemployed to get vacancy information (32.8% in Beijing and 42.4% in Shijiazhuang). The study of the website recruitment by intermediaries shows that recruiting websites operated by intermediaries will reduce frictional unemployment and will have positive impact on regional employment with their higher contact ratio, lower cost and more affluent information. Websites provide job seekers with rich job vacancy information without geographic restriction. Furthermore, web-based job search provides individuals with more affluent information on the current labor market, its demand for specific skills and working conditions. Meanwhile, Internet also provides a shortcut for job seekers to contact enterprises and other people through e-mail or on-line chatting, and therefore improves the efficiency of job searching. Finally, Internet also makes it easier for those passive job seekers to join in the casual job information searching. For the majority of job seekers, the web-based job search is a complement for traditional job search activities rather than a substitute.

As the reduction of job search and recruitment costs, tens of thousands of organizations and individuals use Internet to recruit staff or seek jobs, which implies that both enterprises and job seekers have more choices than in the past. Before reaching a successful match, enterprises can have more and better information of their candidates and job seekers can also have more and better information of their potential employers. By browsing a company's website, a job-seeker can obtain more information to make his/her application decision. Also, enterprises can screen CVs (curriculum vitae) online, and verify the educational background and other credentials of the candidates more easily. Consequently, the matching quality — the lowest acceptable productivity for the firm and the lowest acceptable wage for the individual, will be improved. (See details in "*Strategy to enhance the network recruitment capacity of intermediaries – A study on network recruitment and employment promotion*" by Fang Xu).

4.5 Certain factors, including poor credit, insufficient information and non-tailor-made services, constraint the employment intermediaries' role in employment promotion

Credit problem is the main cause for the low acceptance of the employment service agencies. The survey on the current employees both in Beijing and Shanghai demonstrates that 56.6% of the sampled employees have never used any employment service agencies, and the primary reason is that they are all doubtful of the credit of the intermediaries. As shown in Table 6, 27.7% of the sampled employees consider lack of good credit as the reason for their not choosing employment intermediaries as their job seeking channels.

 Table 7 The Reasons for the Current Employees not Using the Employment Service

Agency

	Frequency	Percentage (%)
Credit problem	527	27.7
Lack of effective information	441	23.2
Too long waiting	291	15.3
High charge	236	12.4
Bad attitude toward job seekers	113	5.9
Others	292	15.4

Lack of enough and updated information and quick feedback are the prominent problems existing in employment intermediaries. Currently, most labor market intermediaries in China only act as job seekers' archive keepers and general job information distributors. The survey shows that lack of valid job vacancy information becomes another main cause for job seekers' not choosing the employment service agencies (23.2%, compared to 27.7% of the credit problem). Due to deficient regulations on compulsory requirement of job vacancies statistics and release, most intermediaries fail to produce valid job vacancy information. Even the limited obtained information is not well classified. In addition, because of the deferred information updating, job seekers who have registered with the public employment agencies usually need to wait a long time before getting feedback, which has a negative effect on their job seeking. The survey on the current employees about how they found their current jobs shows that the top three channels they made use of were social networks (32.9% of the total sample), others (26.8%) and websites (20.7%). In the last five years, the labor market intermediaries have greatly improved with 26.1% of job vacancy information coming from social networks, which is a decline compared to 32.9% five years ago, as is shown in Table 1.

Public employment services have no clear target. The survey on the unemployed in Beijing and Shijiazhuang shows that, although the public employment services have substantially developed, it doesn't show enough concern about the employment of the disadvantaged. In other words, no effective and concrete measures have been taken to solve the employment problem of this group yet. Such things as the analysis of the reasons for unemployment, following up service, career planning and job seeking counseling are all needed and waited to be done. Because of this, the development of public employment service system benefits the advantaged groups, which causes unnecessary competition between the public labor market intermediaries and their private counterparts, whereas the unemployment of the disadvantaged group is neglected, and this group have not benefited a lot from the public labor market intermediaries as they should have. Tables8 shows the results from Logistic regression analysis of the choice between charging and free employment agencies by the unemployed. The studies find, for the unemployed in Beijing, the choice between charging and free employment agencies as a channel for job seekers has a low correlation with demographic factors, whereas for the unemployed in Shijiazhuang, the choice of employment agencies as a job search channel presents a high relation to the education level of the unemployed. The lower education level the unemployed has, the more likely he/she would be to use charging employment agencies. This reflects from another aspect that public employment services in Shijiazhuang including other free employment agencies don't offer enough service to the unemployed with low education level. The conclusion is consistent with the findings from the site study conducted in Shijiazhuang. (See details in "*Job Seeking, Labor Market Intermediaries and Employment Promotion – An Empirical Study on Choice of Job Seeking Channels by Job Seekers in Beijing, Shanghai and Shijiazhuang* ", by Xiangquan Zeng & Yuxue Cui).

Table8 Logistic Regression Results (of influencing factors of the choices of chargingand free employment service agencies by unemployed job seekers)

	Charging and free employment service agencies		
	В	Exp(B)	
Gender (male =1)			
Age			
Hukou 1 (non-agricultural =1)			
Hukou 2 (local=1)			
Education level	②510**	2.601	
Working experience (yes=1)			
Cumulative Tenure			
Duration of Unemployment			

Note :

(1) * p<0.10; ** p<0.05; *** p<0.01.

(2) ①Beijing; ②Shijiazhuang.

- (3) Hukou1: household registration classified into two groups agricultural and non-agricultural.
 - (4) Hukou2: household registration classified into two groups: local and non-local.

5. Suggestions on Strengthening the Construction of Public Employment Service

System

5.1 It is imperative to construct the infrastructure and platform of human resources management.

The effectiveness of China's employment intermediary largely depends on the development level of the infrastructure and construction of the human resource management in enterprises and institutions, which includes job analysis and job categorizing, surveys and statistics of job vacancies, employment statistical system of an individual firm. The key of the current development of intermediary organizations is the accurate judgment and the statistics of employment supply and employment demand. The employment demand information of companies cannot be true and accurate without a scientific human resources management system. Therefore, strengthening the construction of scientific human resource management and labor market information system is the precondition to develop labor market intermediaries. Thus, it is necessary to continually increase the investment of public employment service, trying to turn the public employment service into a national integrated data and service platform. International standards should be adopted to regulate the relationship between public employment agencies and private employment agencies. Public employment agencies should be changed into the supervising institutions of private employment agencies. In addition, private employment agencies should be required to provide relevant information about their business so as to integrate data collecting, processing and analyzing.

5.2 Great efforts should be put in the construction of China's public employment service institutions and the building of a high-quality professional team.

With the development of Chinese employment service market system, the public employment service agencies is playing a more and more fundamental role in alleviating employment pressure and adjusting structural unemployment in China. But neither the quality nor the quantity of public employment service staff is in accordance with this progress. In 2001, only 40.5% of the staff in employment service agencies had three-year college education level or above, and 50.9% of the staff only had senior-middle school level. The survey of 40 member companies of Shanghai Talent Intermediary Association conducted in 2003 shows that, only 8% of the staff in agencies surveyed have the professional qualification of senior job consultants and only 3% of the surveyed are job

consultants. The statistics shows that, on average, there are 3 staffs in each employment service agency, each of whom provides service for about 12,000 people, 2 to 40 times of that in developed countries. And even these employees are not full-time staff, for they have other responsibilities besides employment service. This brings negative impact on employment promotion. The statistics show that, in 2005, the success rate of job-to-person matching by public employment service agencies is only 51%, and that in Shanghai is only 30%. Therefore, it is suggested that the Ministry of Labor and Social Security should enhance the status of the public employment service. For this purpose, a comparatively independent national public employment service agency or center should be established, and its branches should be set up in large and middle-sized cities. In the meanwhile, drawing upon the existing research and international practice, studies should be conducted on the competency model of professionals in Chinese public employment service agencies. Early research shows that three orientations should be followed when developing Chinese public employment service agencies and enhancing their staff competency: the institutional functioning orientation, customer orientation and service standardization orientation. According to the two dimensions of significance and imperativeness, the core competency of the professional staff can be classified into two levels: low level competency and high level competency. Low level competency includes moral virtue and professional spirit, communication skills, understanding of the differentials of the diversified customers, capacity of proactive learning and putting knowledge into practice, and analyzing skills. High level competency includes the ability to appraise the market development and expansion, to focus on details and to do research. What should be specially pointed out is that, relevant working experience in labor or human resource management should always be emphasized when recruiting staff for public employment service organizations. (See more details in the sub-report "Building Specialized and Professional Teams in Chinese Public-funded Employment Service Agencies: Study on the Core Competence of Professionals in China's Public Employment Service Agencies").

5.3 The system and methods of performance management should be introduced into the public employment service management.

The introduction of performance appraisal in public employment service can be done in two ways. First, to set up specific objectives to make the outcome of public employment

service better comply with its original goals; second, to make use of the performance appraisal to monitor the input and output of public employment service, and effectively reduce cost and improve efficiency. Studies of the developed countries show that, the foundation of performance appraisal for public employment service in various countries is the goal of their public employment service, that is, to implement management by objectives (MBO) in the public employment service. For example, the main goal of public employment service in France is to collect as many job vacancies as possible from the labor market, and the judgment of service quality depends, to a large extent, on the quantity and variety of the job vacancies provided by the public employment service agencies (INFORMISEP, 1994). Therefore, in the performance appraisal in France, the lasting time of a job vacancy and the time needed to fill the job vacancy are important performance indicators. The most imperative task in Chinese public employment service management is to introduce the goal-oriented performance management system, to emphasize the function of employment service for the disadvantaged, to value the statistics and the publishing of job vacancies, and to establish specific, measurable and comprehensive performance appraisal system. (See more details in "the Experience of Performance Appraisal of Employment Service in Developed Countries and Regions and its Implications for China" by Shaoying Hu).

5.4 Enhancing the publicity of public employment service organizations.

Results from interviews and surveys show that, most of the respondents got the job information in rather passive ways, including "recommended by others", "accidentally caught sight of when passing by", "got to know when handing in personal archives or paying for the insurance". Therefore, it is imperative to promote the publicity of public employment service organizations. Currently, the overrunning of black-market employment agencies, to a large extent, has to do with the poor publicity of the public employment service agencies. Thus, advertising and other appropriate methods should be used to strengthen the publicity of public employment service organizations.

5.5 Perfect the legislations and regulations on employment intermediary organizations.

There are several ways to perfect the legislations and regulations on employment intermediary organizations: taking the opportunity of issuing of the employment promotion law, unifying the regulations on employment service issued by the labor department and personnel department; expanding the coverage of the regulation from only regulating the behaviors of employment intermediaries to regulating the behaviors of all the employment service organizations; enhancing the level of relevant regulations, changing the administrative regulations into formal legislations. Correspondingly, the punishment should be changed from administrative penalty and licenses suspense into the legal chastisement, in which job seekers are motivated to play a role in assisting correcting the illegal conducts; free service should be provided by the public employment service organization, and service charge should be prohibited for the private organizations; as the issue of youth employment becomes more and more serious, the new entrants in the labor market should be treated as "a special group". (See more details, in the sub-report "Conflicts between Ideal and Reality: Regulations on Employment Service of ILO and its Implication for China" by Lilin Li).

References

1. Alvarez, F., & Veracierto, M. 1998. "Search, self-insurance and job-security provisions", *Federal Reserve Bank of Chicago Working Paper*, 98-2.

2. Amuedo-Dorantes, C., Malo, M.A., & Muñoz-Bullón, F. 2006. "The Role of Temporary Help Agencies in Facilitating Temp-to-Perm Transitions." *IZA Discussion Papers*, 2177.

3. Autor, D.H. 2004. "Labor Market Intermediation: What it is, Why it is Growing, and Where it is Going?" *NBER Reporter Fall 2004*.

4. Barbieri, G., Gennari, P., & Sestito, P. 2001. "Do Public Employment Services help people in finding a job? An evaluation of the Italian case." Italian National Institute of Statistics, No.3, Rome.

5. Benner, C., Bernhardt, A., Brownstein, B., & Zimmerman, S. 2003. "Economic Opportunity in a Volatile Economy: Understanding the Role of Labor Market Intermediaries In Two Regions." Final Research Report, Prepared with Funding from the Ford, Rockefeller and Russell Sage Foundations, Ford Foundation Grants: 1000-0399 and 1000-0399-1, Rockefeller Foundation Grant: RF 99015 #38, Russell Sage Foundation

Grant: 85-99-11.

6. Böheim, R., & Taylor, M.P. 2002. "Job Search Methods, Intensity and Success in Britain in the 1990s." *Working Paper*, Department of Economics, Johannes Kepler University, No. 0206, Linz.

7. Booth, A.L., Franscesconi, M., & Frank, J., 2002, "Temporary Jobs: Stepping Stones of Dead Ends?" *The Economic Journal*, 112(480), 189-213.

8. Bu, C. 2004. "Social network, the main channel and support for labor force migration in China," *Journal of Changchun Polytechnic University (Social Science Edition)*. 6: 66 – 68.

9. Burda, M.C. 1992. "A note on firing costs and severance benefits in equilibrium unemployment", *Scandinavian Journal of Economics*, 94(3), 479-489.

10. Campens, E., & Tanguy, S. 2005. "The market for job placement: a model of headhunters." *Centred' Economie de la Sorbonne UMR*, 8174.

11. Chang, K., Li, K. 2006. "Strict labor dispatch regulation is necessary." *China Labor*. 3: 9 – 12.

12. Clark, W. 1998. "Production Costs and Output Qualities in Public and Private Employment Agencies". *Journal of Law end Economics*, 31(2), 379-393.

13. Cohen, Y., & Haberfeld, Y. 1993. "Temporary help service workers employment characteristics and wage determination" *Industrial Relations*, 32(2), 272-287.

14. Eberts, R.W., & Holzer, H.J. 2005. "Overview of Labor Exchange Policies and Services". The Role and Function of Labor Exchange in a Market Economy, W.E. Up-. john Institute for Employment Research, 457-503.

15. Fougere, D., Pradel, J., & Roger, M. 2005. "Does Job-Search Assistance Affect Search Effort and Outcomes? A Microeconometric Analysis of Public versus Private Search Methods", *Institute for the Study of Labor (IZA) Papers*, No.1825.

Garc á-P érez, J.I., & Mu ñoz-Bullón, F. 2005. "Are Temporary Help Agencies changing mobility patterns In the Spanish labor market?" *Spanish Economic Review*, 7 (1): 43-65.

17. Garc á-P érez, J.I., & Muñoz-Bullón, F. 2005. "Temporary Help Agencies and Occupational Mobility." Oxford Bulletin of Economics and Statistics 67 (2), 163-180.

18. Grubb, W. N. 1995. "Evaluating Job Training Programs in the United States:

Evidence and Explanations (Technical Assistance Report, MDS-1047)". National Center for Research in Vocational Education, University of California at Berkeley, CA, http://vocserve.berkeley.edu/AllInOne/MDS-1047.html.

19. Márquez, G., & Ruiz-Tagle V., C. 2004. "Search Methods and Outcomes in Developing Countries: The Case of Venezuela". *Working Paper*, Inter-American Development Bank Research Dept., No. 519.

20. Hopenhayn, H., & Rogerson, R. 1993. "Job turnover and policy evaluation: A general equilibrium analysis", *Journal of Political Economy*, 101(5), 915-938.

21. Houseman, S.N., & Polivka, A.E. 1999. "The Implications of Flexible Staffing Arrangements for Job Stability". W.E. Upjohn Institute for Employment Research, *Staff Working Papers*, 99-56.

22. Houseman, S.N. 1997. "Temporary, Part-Time and Contract Employment in the United States: New Evidence from an Employer Survey". W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan.

23. Ichino, A., Mealli, F., & Nannicini, T. 2005. "Temporary Work Agencies in Italy: A Springboard Toward Permanent Employment?". Giornale degli Economisti e Annali di Economia, 64(1), 1-27.

24. Katz, L.F., & Krueger, A.B. 1999. "The high-pressure U.S. labor market in the 1990's", Brookings Papers on Economic Activity, 1, 1-87.

25. Lee, W. 2007. "Public Employment Offices and the Labor Market in the United States between 1890 and 1940", NBER "Labor Market Intermediation Conference" working paper.

26. Li, Y. & Zhang, H. 2003. "The Current Situation and Development of the Non-profit Employment Service in Guangdong Province". Journal of South China Normal University (Social Science Edition), 2, 3 - 9.

27. Melchionno, R. 1999. "The changing temporary work force: Managerial, professional, and technical workers in the personnel supply services industry". *Occupational Outlook Quarterly*, 43(1), 24.

28. Mortensen, Dale T., Pissarides, & Christopher A. 1999. "New Developments in Models of Search in the Labour Market". *CEPR Discussion Papers*, 2053.

29. Mosley, H., & Speckesser, S. 1997. "Market Share and Market Segment of Public

Employment Services". *Discussion Paper* FSI 97-208, Wissenschaftszentrum Berlin für Sozialforschung (WZB) Berlin.

30. Neugart, M., & Storrie, D.M. 2002. "Temporary work agencies and equilibrium unemployment". *Working Paper* No. 02.6, Minda de Gunzburg Center for European Studies, Harvard University, Cambridge, MA.

31. Nollen, & Stanley D. 1996. "Negative Aspects of Temporary Employment". *Journal of Labour Research*17, 567-582.

32. Osterman, P. 1999. "Securing Prosperity: The American Labor Market: How it has changed and what to do about it. Princeton". NJ: Princeton University Press.

33. Otoo, M.W. 1999. "Temporary Employment and the Natural Rate of Unemployment, Finance and Economics Discussion Series, Paper 1999-66". Federal Reserve Board of Governors, December 1999.

34. Pastor, M., Leete, L., & Dresser, L. 2001. "Economic Opportunity In a Volatile Economy: Understanding the Role of Labor Market Intermediaries In Two Regions". Ford Foundation Grants: 1000-0399 and 1000-0399-1, University of California, Institute for Labor and Employment, 39-106.

35. Qu, X.. 2003. "Social mobility and relationship trust -- Relationship intensity and peasant workers' job seeking strategy." *Sociological Research.* 1, 1-11.

36. Rosenfeld, M., 1997. "The Economic Theory of Institutional Change (ETIC) and the Emergence of Public Activities: The Case of Public Employment Services in Germany". *Zeitschrift fur Wirtschafts- and Sozialwissenschaften*, 117(2), 291-312.

37. Roshchin, S., & Markova, K. 2004. "Choice among Different Job Search Channels: The Evidence from Russian Labor Market", *EERC Working Paper* Series 04-05e, EERC Research Network, Russia and CIS.

38. Rudolph, H., & Schröder, E. 1997. "Arbeit nehmerüber lassung: Trends und Einsatzlogik". Mitteilungen aus Arbeitsmarkt und Berufsforschung, 1/97, 102-126.

39. Segal, L.M., & Sullivan, D.G. 1997. "Temporary Services Employment Durations: Evidence from Administrative Data", Federal Reserve Bank of Chicago Working Paper WP-97-23 (December).

40. Segal, L.M., & Sullivan, D.G. 1997. "The Growth of Temporary Services Work", *Journal of Economic Perspectives*, 11(2),117-136.

41. WAPES, 1994. "The development of comparable performance indicators in public employment services". World Association of Public Employment Services (WAPES) Workshop, Aske, Sweden.

42. OECD, 1992. "The public employment service in Japan, Norway, Spain and the United Kingdom", OECD Employment Outlook (Paris), 117-151.

43. Thomas, J.M. 1997. "Public Employment Agencies and Unemployment Spells: Reconciling the Experimental and non-experimental Evidence". *Industrial and Labor Relations Review* 50(4), 667-683.

44. Training and Employment Department, the Ministry of Labor and Social Security.2003."TheChineseEmploymentAgenciesDevelopmentReport, "http://www.lm.gov.cn/old/gb/content/2003-09/22/content_13853.htm

45. Walwei, U. 1996. "Improving Job-matching through Placement Services", in G. Schmid, J. O'Reilly, and K.Schömann (ed.): International Handbook of Labour Market Policy and Evaluation. Cheltenham: Edward Elgar, 402-430.

46. Walwei, U. 1996. "Performance Evaluation of Public Employment Services (PES)". ILO, Document No.47.

47. Wang, Q. 2005. "A rational approach towards labor dispatch". *China Labor*, 12, 13-14.

48. Wang, J., & Guo, Z. 2001. "Logistic Regression Model – Method and Application". Higher Education Press.

49. Wang, Q. & Hou, L. 2004. "Thoughts on dual labor relations operation from legal perspectives – Example on China's labor dispatch practice". *China's Labor*, 4, 18-21.

50. Wolf-Powers, A.L. 2003. "The Role of Labor Market Intermediaries in Promoting Employment Access and Mobility: A Supply-and Demand-side Approach". Doctoral Dissertation, Rutgers University.

51. Xia, B., Qiu, J. 2005. Labor Dispatch, Calling for Regulation. *China Labor.* 6, 6–9.

52. Zeng, X. & Yu Y. 2006. "The natural rate of unemployment Measurement and Analysis." *Social Sciences in China*, 4, 65 – 76.

53. Zhang L. 2003. "Issues on China's Labor Dispatch". A Collection of *China's Labor Research Reports 2002*. China Labor and Social Security Press.

54. Zhang W. 2002. Advanced Textbook on Statistics and Analysis for SPSS 11. Beijing Xiwang Electronic Press.

55. Zhao C. 2007. "Seven Issues in Campus Recruitment." *College graduates employment in China*, 2, 26 – 27.

56. Zhao Y. 2002. "Social Capital of Re-employment: Utility and Limitations." *Sociological Research.* 4, 43 – 54.

57. Zimmermann, K. F. 2004. Frontiers in Economics. Beijing: China Development Publishing House.

58. Zweifel, P., & Zaborowski, C. 1996. "Employment service: Public or private?" *Public Choice* 89, 131-162.