Investigating the job mobility of migrant workers in China

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Abstract
This research investigated the job mobility of migrant workers based on a survey of migrant workers in six cities in eastern China. The high degree of job mobility noted among migrant workers was found to be associated with the use of ''trial and error'' method in their search for better jobs. Differences in the duration of migrants' stay in the urban labor market and social integration in the destinations resulted in their varying capacity to obtain and analyze labor market information, which in turn, accounted for job changes. In view of the employers' interest in maintaining low wages, the legitimate rights and interests of migrant workers cannot be guaranteed under the current industrial, institutional, and social contexts. Under these circumstances, the job mobility of migrant workers reflects their aspirations to find better incomes and working conditions.

Keywords
migrant workers, job mobility, mobility decision-making, enterprise employment system

Introduction

Migrant workers comprise a large and special group of workers in China. They and their accompanying dependents are often referred to as the

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''floating population,'' which accounts for 2.53 million or about 18.5 percent of China's population in 2014 (National Bureau of Statistics of China, 2015). Migrant workers typically move from their homes and work and live in urban areas without having their household registration (*hukou*) status changed to that of a local permanent resident (Chan, 1999; Chang, 1996; Ding and Stockman, 1999; Liang and Ma, 2004). Because of their economic and social disadvantages, migrant workers strive to seek better employment opportunities in the cities. Their high degree of job mobility is an issue of wide concern.

There is a large body of empirical and theoretical literature on labor mobility in developed countries. However, most of the literature has focused on either job creation or job loss at an aggregate level (Ashenfelter and Layard, 1987; Ehrenberg and Smith, 2011). From the perspective of economics (including labor economics and industrial economics), those studies linked worker and job movements with economic cycles and industrial heterogeneity to understand the dynamics of the labor market and to examine the gross growth and loss in jobs (Campbell and Fisher, 1997; Zhang and Yang, 2003). Typically, worker and job mobility are measured by movements in three labor force statuses: *employment*, *unemployment*, and *not in the labor force*. However, a large majority of the studies focused on the *change* in labor force status (i.e., movement between employment and unemployment and movement between employment and out of labor force) and overlooked the importance of the movement of workers from one employer to another without a significant period of unemployment (Boon et al., 2008; Frazis and Ilg, 2009). Although a few scholars (Fallick and Fleishman, 2004; Moscarini and Thomsson, 2007) have explored direct employment-to-employment movement in the US labor market, such job-to-job mobility was measured at the aggregate level without analysis of the interactions between workers and employers and examination of the personal characteristics of the workers (e.g., age, gender, educational attainment, and previous work experience).

With globalization and rapid economic growth in China, the issue of the job mobility of migrant workers has received research attention. Job mobility has been explained in terms of job-matching models, the information asymmetry theory, and/or the theory of market segmentation (Bai and Li, 2008; Knight and Yueh, 2004; Li, 2006; Liang et al., 2007). These studies reveal not only the effects of personal factors, such as the workers' human capital and social capital, on job mobility, but also the effects of environmental factors, such as market information and system segmentation. However, the existing research on the job mobility of China's migrant workers has several limitations. First, existing studies have analyzed the

issue only from the perspective of migrant workers as a group while over-looking the study of enterprise behavior. As we know, labor relations involve both enterprise and labor, of which labor mobility results from the dynamic interactions between these two actors. The lack of analysis of the behavior of enterprises may lead to misinterpretation and misunder-standing because of the neglect of the underlying institutional and social roots. Second, previous studies have overlooked the relationship between job changes and the amount of time spent in urban areas of different groups. As such, they have failed to provide a thorough institutional inter-pretation of the mobility of migrant workers. Third, job mobility issues cannot be fully explained by a single set of factors. Human capital, social capital, market information and market segmentation are among the gen-eral factors that have direct effects on job mobility. In addition, economic development and institutional and social problems are part of the larger picture that should be considered. We have endeavored to design an approach by including the perspectives of migrant workers and enter-prises in the context of the broader economic, social and institutional environment. In so doing, we hope to provide a better understanding of the issue and to identify effective solutions.

Based on a survey of migrant workers, this study sought to examine the rate of job mobility by looking into the number of jobs experienced per unit of time and the average duration of each job, to measure and compare the job mobility of migrant workers vs. other groups of workers, and to find the reasons for the high job-to-job mobility of migrant workers. First, we investigated the decision-making process involved in the movement of migrant workers from one job to another, how they manage the job-to-job transition, and why they have a high level of mobility.

This study was performed to elucidate and validate the following points. First, from the perspective of migrant workers who are motivated by a desire for better income, working conditions, and job skills, the high degree of job mobility reflects their resort to the ''trial and error'' approach in the hope of finding jobs. On the one hand, the non-standard, imperfect labor market would likely lead to more reliance on ''trial and error'' and frequent job changes. It is expected that job mobility would decrease with improvements in income, access to reliable information, familiarity with the local environment and social integration. Second, from the per-spective of enterprises, given the low-tech status of China's labor-intensive industries, cheap labor is the main competitive advantage for export enter-prises. The informal and non-standard employment system of enterprises, the multidimensional segmentation of the domestic labor market, and the marginal position of migrant workers in local communities does not foster inspection and monitoring of workers' conditions. Thus, the legitimate

rights and interests of the workers cannot be guaranteed. Young migrant workers have no choice but to ''vote with their feet'' (Cebula, 1978; Somin, 2008; Tian, 2013; Tiebout, 1956; Zhang and Tan, 2005), resulting in a high level of job mobility. In the case of older migrant workers, they may be vulnerable to losing their jobs, which could lead to a high degree of job mobility.

Sample description

The survey was carried out between late 2010 and early 2012 by the School of Social Development and Public Policy (SSDPP) of Beijing Normal University. It was administered in six selected cities in eastern China: Beijing, Dongguan, Wuxi, Wenzhou, Qingdao, and Shenyang.[1] Of the 1,339 questionnaires completed by migrant workers, 1,233 were valid, representing 92.08 percent of the total sample size. The survey defined migrant workers as non-local residents who have rural household registration and have migrated to urban areas for work. Those who had lived outside of their hometowns for more than half a year were targeted. Due to the high degree of mobility, the workplaces and residences of migrant workers were not fixed, thus it was challenging to select and recruit research participants (Bhagat, 2008). To make the sample more representative, we included both city communities and specialized industrial zones (i.e., Industrial Parks as well as Economic and Technological Development Zones) at a 2:1 ratio.[2] In addition, the sample structure was controlled according to the industry distribution of each city (Table 1). The profile of migrant workers in the sample is almost identical with the information

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[1]Beijing, China's capital city, is an international metropolis and the second largest city in China. Dongguan is located in the Pearl River Delta, one of the world's manufacturing bases where many foreign companies are concentrated. Located in the Yangtze River Delta, Wuxi is a large city in which township enterprises and collective economy are the basis for development, and Wenzhou is a medium-sized city whose economy mainly depends on individual and private enterprise. Qingdao is a large city on the Shandong Peninsula with many large state-owned enterprises as well as Japanese and Korean companies. Shenyang is the capital of Liaoning Province and China's famous old industrial base. In terms of regional distribution, the six selected cities generally cover all types of cities in eastern China. All of them are receiving destinations of substantial numbers of migrant workers.

[2]According to National Bureau of Statistics of China (2014), 35.5 percent of migrant workers in urban China worked and lived in the specialized industrial zones, and the rest worked and lived in the other part of an urban area, which is referred to as ''city communities.'' To be consistent with this general pattern, we sampled migrant workers from city communities and specialized industrial zones at a ratio of 2:1. In city communities, survey conductors randomly selected and visited residential addresses. If migrant workers were present at the selected addresses, they were asked to fill out the survey questionnaire. In specialized industrial zones, enterprises were randomly selected. Survey conductors then visited the selected enterprises and recruited survey participants.

Table 1. General characteristics of the sample.

n = 1,233		n	%
Distribution of respondents in the sampled cities	Beijing	179	14.53
	Wenzhou	218	17.69
	Dongguan	226	18.59
	Qingdao	265	21.51
	Wuxi	186	15.10
	Shenyang	155	12.58
Gender	Male	745	60.42
	Female	488	39.58
Age (years)*	≤20,	220	17.84
	(20, 25]	410	33.25
	(25, 30]	195	15.82
	(30, 40]	229	18.57
	(40, 50]	142	11.52
	>50	37	3.00
Marital status	Single	617	50.04
	Married	599	48.58
	Divorced or widowed	17	1.38
Number of years in the urban labor market since out-migration*	≤2 years	280	22.71
	(2, 4]	271	21.98
	(4, 6]	194	15.73
	(6, 8]	126	10.22
	(8, 10]	100	8.11
	(10, 13]	103	8.35
	>13	159	12.90
Educational attainment	Elementary school or below	148	12.00
	Middle school	591	47.93
	High school diploma or equivalent	351	28.47
	Associate's degree or above	143	11.60
	≤1000	102	8.27
Monthly income in Chinese yuan (at the time of the survey)	(1000, 1500]	277	22.47
	(1500, 2000]	383	31.06
	(2000, 2500]	131	10.62
	(2500, 3000]	147	11.92

Table 1. Continued

n = 1,233		n	%
	(3000, 4000]	79	6.41
	>4000	114	9.25
	East region	554	45.67
Place of origin	Central region	449	37.02
	West region	210	17.31
	City	30	2.43
Type of origin	Small town	387	31.39
	Rural area	816	66.18

Note: Where an asterisk (*) is used, ''('' means exclusive and '']'' means inclusive. For example, a monthly income of CNY1,000 falls in the first category, while CNY1,000.01 falls in the second category. As such, the categories are not overlapping.

on migrant populations in the 2010 national population census (National Bureau of Statistics of China, 2011).

We measured the job-to-job mobility of migrant workers on the basis of the retrospective micro data from the survey. The questionnaire included detailed questions regarding the respondents' work experience, including the type, location and duration of each job they had held since they first left a rural area and started to work in cities.

A common mistake in the study of job mobility is that job characteristics usually pertain to the ''current'' job status at the time of the survey, thereby disregarding the job-to-job transition that occurred before the survey. Because of their high degree of mobility, migrant workers may have experienced frequent changes in the types of jobs, wages, employers, industries, and regions, so it is not reasonable to use the ''current'' job characteristics at the time of the survey to depict and analyze the entire job mobility process. In contrast, personal characteristics tend to be more stable. Thus, for relatively stable personal factors, such as gender, educational attainment, and age, we retrospectively examined the entire job mobility experience of migrant workers. For factors such as income, relationship with the local community, and the number and status of dependents, we examined the employment experience only in the ''current'' city.

Table 1 summarizes the basic characteristics of the sampled migrant workers. Overall, the sex ratio was 6:4 (M:F). Their ages ranged from 16 to 69 years, with an average age of 28.53 years. The average age at which they first migrated from their homes was 21.73 years. The average time that they had lived away from their hometowns from the time of out-migration was 6.81 years, and the average time spent in their ''current''

city was 3.49 years. A slight majority (53.37 percent) of the survey participants had worked in the urban labor market for less than five years. One individual had been in the urban labor market for 35 years.

With respect to educational attainment, the majority (76.4 percent) of the migrant workers had finished middle school (47.93 percent) or high school (29.74 percent), 11.6 percent of them had an associate's degree or above, and 12 percent had an elementary school education or less (Table 1). The overall educational attainment of the migrant workers was higher than that of China's rural population. In terms of marital status, single, married, and divorced or widowed migrant workers represented 50.04 percent, 48.58 percent, and 1.38 percent of the sample, respectively (Table 1). Of those who were married, 89.63 percent had children. More than half of the sample (55.62 percent) worked and lived alone, and 44.38 percent lived with family (29.13 percent with their spouse, 13.35 percent with their children, and 7.1 percent with their parents). Of those who were married, 62.6 percent lived with their spouses, indicating a clear pattern of family migration. However, only 33.4 percent of those who had children lived with those children, reflecting a great number of children left behind in rural areas.

With respect to place of origin, respondents from the East, Central and West regions[3] accounted for 45.67 percent, 37.02 percent, and 17.31 percent of the sample, respectively (Table 1). Most of the respondents came from rural areas (66.18 percent), about a third came from small towns (31.39 percent), and the remaining 2.42 percent originated from cities (but with rural household registration).

The average monthly income was 2,728 Chinese yuan (CNY). Most of the migrant workers (61.8 percent) had a monthly income of less than CNY2,000. Thirty-seven individuals in the sample had a monthly income of more than CNY10,000, whereas five had a monthly income of less than CNY500. The average number of days worked per month was 26.84 and the average number of hours worked per day was 9.97. The average wage was CNY10.19 per hour. The respondents were able to have average monthly savings of CNY1,447, which accounted for 53.04 percent of their monthly income. The monthly savings increased as the monthly income increased (correlation coefficient, 0.9592). However, the proportion of income that was saved was not highly correlated with the monthly income. This implies that the proportion

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[3]The overall pattern of China's regional economic development is that the level of economic development gradually decreased from the East coastal region to Central and West regions. The overall trend of population movement flow is in the opposite direction: from West and Central regions to East region. While Central and West regions are sending net outflows of migrants, East region is receiving a net inflow of migrants.

Table 2. Distribution of migrant workers based on number of jobs held.

Number of jobs held since leaving home			Number of jobs held in the "current" city		
Number of jobs	n (persons)	%	Number of jobs	n (persons)	%
1	289	23.48	1	721	58.86
2	392	31.84	2	257	20.98
3	291	23.64	3	149	12.16
4	148	12.02	4	62	5.73
5	50	4.06	5	12	0.98
6 or more	61	4.95	6 or more	24	1.96

of income used for spending increased as the income rose and that the consumption of the migrant workers was not limited to the most basic needs of living. Thus, the improvement in their income could effectively expand their consumption.

Findings

In this study, job mobility is defined as the intensity of the job-to-job transition of workers in different enterprises. A variety of indicators are used to describe the job mobility of migrant workers, including the number of job changes and the proportion of second or multiple job changes (Bai and Li, 2008; Li, 1999, 2006; Tian and Yang, 2006; Xie, 1998; Xu, 2010). It is important to note that job-to-job mobility differs between individuals who have lived in urban areas for different amounts of time since out-migration from their home. Moreover, the job mobility among different groups of migrant workers was not comparable without controlling for the duration of their stay in the urban labor market. Therefore, we used the number of job experiences per unit of time or the average duration of each job to measure job mobility and to compare the job mobility of the migrant workers with other workers.

Comparing job mobility

In the sample, 76.52 percent of the respondents had changed jobs at least once during their stay in the urban labor market. Those who had changed jobs once and twice, respectively, accounted for 31.84 percent and 23.64 percent of migrant workers (Table 2). Each worker had held an average of

2.59 jobs, and the average duration of each job was 3.05 years. More than two-fifths of the workers (41.14 percent) had switched jobs in their ''current'' city; 20.98 percent of them had one job change and 12.16 percent had two job changes. The average number of jobs held in the ''current'' city was 1.85, with an average duration of 2.27 years.

To gain a more concrete idea of the intensity of job-to-job mobility or the frequency of job changes, the level of job-to-job mobility of workers in developed countries can be instructive. Based on the 1994–2003 monthly data of the Current Population Survey published by the US Bureau of Labor Statistics, Fallick and Fleishman (2004) found that an average of 2.6 percent of employed Americans changed employers each month. This implies an average duration of 8.1 years per job and that an average American worker would hold four to six jobs during his or her lifetime. Moreover, consistent with the general decline in the pace of worker flow during the recession in recent years, job-to-job flow in the United States slowed substantially since 2001 (Fallick and Fleishman, 2004), indicating that employed persons tended to stay longer at each job. Furthermore, Auer and Cazes (2003) investigated the job mobility of employed individuals in 16 developed countries including the United States, Japan and western European countries. They found an average duration of 10.5 years per job in 1998; the shortest duration of 6.6 years was found in the United States. Compared with these trends and patterns, Table 2 shows that the level of job mobility of China's migrant workers is significantly higher.

For purposes of comparison, we can also examine the level of job mobility among China's urban resident workers. In 2000, urban resident workers in Jiangsu province had an average job mobility frequency of 0.83, or an average number of 1.83 jobs over the course of an entire career (Chen, 2008). According to Ren (1997), the average frequency of job mobility was 1.11 among urban residents in Shanghai in the 1990s, yielding an average number of 2.11 jobs per worker. In 2002, an average urban resident worker was expected to hold 3.12 jobs and 2.6 occupations in his or her lifetime (Liu, 2011). In contrast, at an average age of 27.9 years, the migrant workers in our study were nowhere near the end of their careers, but the average number of jobs they had held was about the same level as that experienced by urban resident workers over their entire lifetime. Thus, the job mobility of migrant workers was substantially higher than that of their urban resident counterparts.

The migrant workers in our study were mainly young adults who generally had not worked in the cities for very long. In fact, their out-migration from home and entrance into the urban labor market occurred mainly after the 1990s. Therefore, to make the comparison

more convincing, we need to compare their job mobility with that of urban resident workers of about the same age who entered the labor market at around the same period. Tang's study in Qingdao City (2007) of 374 college graduates who were 35 years of age or younger in 2000 found that of those who were employed as white-collar workers, 57.2 percent had changed jobs. The average duration of each job was 3.75 years, or 45 months, and the average number of jobs held was 2.06 for each person. In our investigation of migrant workers in Qingdao City, the average worker held each job for 2.36 years and had held 2.27 jobs. Thus, in the same city, migrant workers showed a higher level of job mobility than young white-collar workers. Furthermore, the high degree of mobility of migrant workers was reflected not only in terms of job flow, but also in terms of spatial mobility; many of them changed their workplace while changing jobs.

From the above analysis, it is evident that migrant workers have higher job mobility when compared with different groups of workers: employed individuals in developed countries, China's urban resident workers, or young white-collar urban workers.

Demographic characteristics

Our data show that men were less mobile than women and varying patterns by age group. Those 20 years of age or younger had about four times as much job mobility as those over 30 years of age (Table 3). Older workers below 50 years of age tended to have less, but those above 50 years of age showed patterns of increased job mobility with advancing age. Job mobility was also found to increase with level of education: migrant workers with an associate's degree (or higher) were about three times more mobile than those with an elementary school education (or less). With respect to marital status, the job mobility of single workers was about 2.7 times that of married workers.

Number of years in the urban labor market

The number of years spent in the urban labor market since out-migration had a rather significant effect on the job mobility of migrant workers. The longer they had worked in the cities, the lower their job mobility, suggesting more stability in their jobs. This pattern holds true for all age groups. In general, those who had worked in the urban labor market for two years or less were seven times more mobile compared with those who had worked for more than 10 years and eight times more mobile than those

Table 3. Job mobility of migrant workers by personal characteristic.

n = 1,233		n	Average number of years per job	T-test p value
Gender	Male	743	3.31	0.0008
	Female	488	2.64	
Age	≤20	219	1.30	0.000
	(20, 25]	410	1.95	
	(25, 30]	195	2.90	
	(30, 40]	229	4.82	
	(40, 50]	141	5.81	
	>50	37	4.80	
Educational attainment	Elementary	148	4.74	0.000
	Middle school	591	3.23	
	High school or equivalent	349	2.47	
	Associate's degree or above	143	1.94	
Marital status	Single	616	1.66	0.000
	Married	598	4.46	
	Divorced/widowed	17	3.67	
Number of years in urban labor market since out-migration	≤2	279	0.97	0.000
	(2, 4]	271	1.74	
	(4, 6]	194	2.56	
	(6, 8]	126	3.34	
	(8, 10]	100	4.62	
	(10, 13]	103	4.79	
	>13	158	7.18	

who had worked for more than 13 years since their out-migration from their hometowns (Table 3).

Family, economic and social characteristics

We investigated the living conditions of migrant workers by examining their family, economic and social characteristics in the city where they worked and lived. As shown in Table 4, job mobility varies with respect to the presence of family, participation in the local pension insurance program, relationship

Table 4. Job mobility of migrant workers by family status, economic status and social status.

n = 1,233		n	Average number of years per job	T-test p-value
Presence of family	No family present	679	1.56	0.000
	Family present	539	3.17	
	(1) Spouse	373	3.84	
	(2) Children	176	3.88	
	(3) Parents	91	2.2	
	(4) Siblings	125	1.69	
	(5) Spouse and children	163	4.00	
Monthly income (CNY)	≤1000	102	1.51	0.000
	(1000, 1500]	277	1.54	
	(1500, 2000]	378	2.17	
	(2000, 2500]	130	2.08	
	(2500, 3000]	147	2.86	
	(3000, 4000]	79	3.61	
	>4000	109	3.62	
Participation in local pension insurance?	No	869	2.12	0.000
	Yes	350	2.64	
Adaptation to local life?	Yes	879	2.53	0.000
	No	343	1.59	
Language ability	Don't understand the local dialect	330	1.75	0.0011
	Can understand the local dialect but cannot speak it fluently	537	2.29	
	Have mastered the local dialect; can use it to communicate with others	355	2.72	
Number of local friends with frequent contacts	0	405	1.82	0.0006
	1–2	232	2.19	
	3–5	279	2.28	
	≥6	306	2.91	
Interactions with locals in daily life	Frequent interaction	164	3.09	0.0001
	Moderate interaction	577	2.34	
	Little interaction	481	1.90	

(continued)

Table 4. Continued

n = 1,233		n	Average number of years per job	T-test p-value
Interactions with locals at work	Frequent interaction	239	3.09	0.0001
	Moderate interaction	586	2.18	
	Little interaction	396	1.91	
Relationship with local residents	Good	445	2.73	0.0001
	Satisfactory	500	2.09	
	Poor	39	2.05	
	Not applicable	236	1.81	

with the local residents and monthly income (Table 4). Those who were not accompanied by their families had significantly higher job mobility than those who lived with family members. Those who were accompanied by parents or siblings were much more mobile than those who lived with their spouses or children. Migrant workers who lived with both their spouse and their children had the lowest level of job mobility.

Migrant workers who participated in the local pension insurance program were considerably less mobile than those who did not participate in such a scheme. Several indicators of adaptation in the community and interactions with local residents are associated with job mobility. Migrant workers with the following characteristics were less likely to change jobs: frequent and close contact with locals, frequent interactions with local residents in their work and daily lives, those who got along with local residents, adaptation to local life, and mastery of the local dialect or language (Table 4). With respect to economic status, migrant workers whose monthly income was CNY1,000 or lower were more than twice as likely to change jobs as those with a monthly income of more than CNY3,000.

Overall, significant group differences in job mobility were found among migrant workers with different demographic and socio-economic characteristics. The most notable difference in job mobility was associated with the following variables: the time spent in the urban labor market, age, marital status, educational attainment, and gender. In terms of living conditions in their "current" city, the most significant differences in job mobility were associated with the presence of family, income, and factors regarding social relationships and social integration in the local area.

Table 5. Most important reasons for changing jobs.

Reason for leaving former job (n = 945)	%	Reason for intended job change (n = 342)	%
Low wage	38.2	Low wage	45.32
Better working conditions	22.43	Better working conditions	16.37
To gain knowledge and skills	5.71	To gain knowledge and skills	10.82
Heavy work load	6.35	Heavy work load	9.65
Job insecurity	2.86	Job insecurity	5.26
Children's education and family reasons	6.56	Children's education and family reasons	4.39
End of project, layoff, or termination of the contract	10.37	Project approaching its end, potential layoff, or near termination of the contract	4.39
Other	7.51	Other	3.80
Total	100.00		100.00

Note: Based on single-choice option.

Why do migrant workers change jobs?

The survey included two questions designed to explore the major factors that migrant workers might have considered in their decisions to change jobs. First, for those who already had experienced changing jobs, what was the most important reason for leaving their previous job? Second, for those who intended to change jobs at the time of the survey, what was the most important reason for the intended job switch? Eight possible reasons were given for each question (Table 5).

According to Table 5, the low level of income was the most frequently cited reason for both groups to look for another job. The search for higher income came up in the earlier discussion, which indicated that the higher the income level, the lower the job mobility. The other important reasons were related to satisfaction with working conditions and the pursuit of useful knowledge and skills. Furthermore, the aspiration to gain knowledge and skills had the most importance in the decision-making of the younger migrant workers.

Switching jobs: Costs and opportunities

The costs of changing jobs include the cost of looking for a job (i.e., direct costs) and the opportunity cost of switching jobs. The fact that migrant workers were able to change jobs frequently indicates the low cost of their job transitions. First, the cost of job hunting is low. Migrant workers are mostly concentrated in the low-end manufacturing and service industries. Many such labor-intensive enterprises are in need of workers to perform unskilled jobs. At the same time, the vast majority of migrant workers have limited or low technical skills. Under these supply and demand conditions, it is not difficult for migrant workers to find new jobs, often with the help of their social networks. These informal channels incur minimal costs to migrant workers.

Second, the opportunity cost of changing jobs is not high because workers have nothing to lose—their previous performance and/or income could not be accumulated over time (Li, 1999). When asked ''What was the major loss of your job change?'' and ''Was your loss, if any, serious?'' most of the migrant workers (72 percent) indicated that they had suffered no loss at all. Of those who did indicate a loss, only 15 percent claimed to have a ''serious loss.''

Job search by ''trial and error''

The job transitions of migrant workers can be a continuous process of ''trial and error'' in which workers constantly look for a job to which they are better suited. The more transparent and complete the labor market information, the shorter the process of ''trial and error'' and the more easily migrant workers can find satisfying jobs. However, in an environment of inadequate market information, those who have better ability to access and identify market information can greatly shorten the ''trial and error'' process and find more suitable jobs rather quickly and easily. Moreover, a strong relationship exists between the ability to access information and the degree of social integration into the local area: those with greater social integration had better access to market information.

To verify the relationship between job mobility and access to information, we created two regression models for the multiple regression analysis. In Model I, we focused on the basic demographic characteristics for analysis using ''City'' as the control variable. We used the log of the average duration of each job since out-migration as the dependent variable and used the relatively stable personal characteristics such as gender, age, educational attainment, and number of years since out-migration as independent variables (see regression results in Table 6). The explanatory

Table 6. Job mobility and personal characteristics: Results from the multiple regression analysis (Model I).

Personal characteristics (independent variables) (n = 946)	Regression coefficient
Gender (male = 1, i.e., the reference group)	
Female	0.052*
Education (elementary or below = 1)	
Middle school	−0.020
High school or equivalent	−0.041
Associate's degree or above	0.027
Marital status (single = 1)	
Married	0.110**
Divorced or widowed	−0.176
Age (≤20 years = 1)	
(20, 25] years	0.055
(25, 30] years	0.048
(30, 40] years	0.256***
(40, 50] years	0.345***
>50 years	0.388***
Number of years in urban labor market since outmigration (≤2 years = 1)	
(2, 4] years	0.558***
(4, 6] years	0.894***
(6, 8] years	1.140***
(8, 10] years	1.372***
(10, 13] years	1.406***
>13 years	1.685***
City (Beijing = 1)	
Wenzhou	0.084
Dongguan	−0.035
Qingdao	0.124**
Wuxi	0.103*
Shenyang	0.021
Adjusted R^2	0.6357

Note: Dependent variable = log of average duration of each job since outmigration.
*$p < 0.1$, **$p < 0.05$, ***$p < 0.01$.

Table 7. Job mobility and family and social integration factors: Results from the multiple regression analysis (Model II).

Independent variables (n = 946)	Regression coefficient
Other personal characteristics in Model I (omitted)	
Presence of family (No family present = 1)	
With parents, siblings, or others	0.044
With spouse	1.199***
With children and spouse	0.885***
Monthly income status (in CNY) (≤1000 = 1)	
(1000, 1500]	0.082
(1500, 2000]	0.682***
(2000, 2500]	0.598*
(2500, 3000]	1.096***
(3000, 4000]	1.567***
>4000	1.151***
Participation in local pension insurance (Participation = 1)	
No participation	−0.442***
Adaptation to local work and life? (Adaptation = 1)	
Lack of adaptation	−0.441***
Language ability (Inability to understand the local dialect = 1)	
Can understand the local dialect, but cannot speak it fluently	0.587***
Have mastered the local dialect and can use it to communicate with others	1.025***
Place of origin (Eastern region = 1)	
Western region	−0.019
Central region	0.075
City (Beijing = 1)	
Wenzhou	0.656**
Dongguan	−0.062
Qingdao	0.108
Wuxi	−0.052
Shenyang	−0.960***
Adjusted R²	0.3247

Note: In this table we have omitted the independent variables of personal characteristics that were included in Model I, namely, number of years in the urban labor market, age and educational attainment.
Dependent variable = log of average length for each job in the "current" city.
*p < 0.1, **p < 0.05, ***p < 0.01.

power (i.e., goodness of fit) of this model was 63.57 percent. Model II focused on the analysis of social integration in the "current" city. We used the log of the average duration of each job in the "current" city as the dependent variable and incorporated additional independent variables used in Model I, such as the presence of family, monthly income and local social relations (including adaptation to the local work and lifestyle, number of local friends with frequent contact, interactions with local residents at work and daily life, relationships with local residents, ability to understand and communicate in the local language, and participation in the local pension insurance and social security programs). In terms of goodness of fit, Model II explained 40.1 percent of the variations in job mobility. The regression results from Model II are presented in Table 7.

From the results of Model I (Table 6), it can be seen that when other variables were controlled, age and the amount of time spent in the urban labor market had the most significant effects on job mobility. The pattern of decreasing job mobility with increasing number of years since out-migration was obvious. The time spent in the urban labor market not only suggests the acquisition of job skills, work experience, and social experience in the local area, but also enhances migrant workers' ability to access and obtain market information. When migrant workers stay longer in a city, they establish more social relationships in their workplaces, they become more familiar with the local environment, they develop more social networks, and they are more knowledgeable on where and how to access information—all of these factors contribute to their capacity to obtain a satisfactory and stable job.

The effects of age on job mobility were also significant. For workers younger than 30 years old, job mobility was rather high in general and did not vary considerably across age subgroups. Job mobility declined substantially once workers passed the age of 30. Educational attainment was not found to be statistically significant ($p > 0.1$; Table 6), possibly because the ability to obtain market information is through practical experience. Furthermore, formal education may not be properly rewarded in unskilled or low-skilled labor-intensive jobs. In China's migrant labor market, work experience or practical onsite training is probably more important and better rewarded than educational attainment.

In terms of Model II (Table 7), after controlling for other variables, the significant factors were found to be the presence of family, monthly income, participation in local pension insurance, ability to understand and communicate in the local language, and adaptability to local life, all of which were indicators of the individual's degree of integration into the local area. Migrant workers with spouses or children had significantly lower job mobility than those who worked and lived alone. Income can

represent the economic dimension of integration. Table 7 shows a sig-
nificant decline in job mobility and increase in job stability with an
increase in monthly income. Job mobility also declined significantly
with participation in the local pension insurance plan and adaptation
to the local way of life. Another example that illustrates the effects of
labor market information on job mobility is the relationship between the
ability to understand and communicate in the local language and job
mobility. Migrant workers who understood the local language or dialect
had an advantage in accessing and obtaining market information over
those who did not understand the local language. Workers who mas-
tered the local language proficiently showed significantly lower job
mobility (Table 7). Indeed, there was a reciprocal causality or a
mutual causal relationship between a high level of social integration
and a low level of job mobility. Thus, when integration was used as
an independent variable, it showed a negative effect on job mobility.
This can be explained in two ways: social integration can effectively
reduce the adverse effects of market segmentation, and it can also
improve the worker's ability to obtain useful market information.

Therefore, we conclude that the reliance of migrant workers on the
"trial and error" method leads to a high degree of job mobility.
Over time, once workers have gained more human capital and are
better integrated in the destination, they are in a better position to
obtain and assess market information, eventually resulting in fewer job
changes.

Concluding discussion

Based on a survey of migrant workers in six cities in eastern China, this
research revealed a high degree of job mobility among migrant workers,
which was associated with the use of "trial and error" method in their
search for better jobs. Differences in the duration of migrants' stay in the
urban labor market and social integration in the destinations resulted in
their varying capacity to obtain and analyze labor market information,
which in turn, account for job changes. In view of the employers' interest
in maintaining low wages, the legitimate rights and interests of migrant
workers cannot be guaranteed under the current industrial, institutional,
and social contexts. Under these circumstances, the job mobility of migrant
workers reflects their aspirations to find better incomes and working
conditions.

This research contributes to the literature in three ways. First, in the
past, income change was believed to be the major decisive factor for job
mobility of workers, including China's migrant workers (Bartel and

Borjas, 1981; Cai et al., 2005; Mincer, 1958). Our study considered income as one of the main factors. It found that a large proportion of migrant workers change jobs due to poor working conditions and lack of oppor-tunities for human capital improvement. Furthermore, the younger the migrant workers, the more likely they are to change jobs for reasons other than income. Therefore, the factors for their job mobility were diversified.

Second, in terms of the relationships between individual characteristics and job mobility, our study showed that age, and especially number of years in the urban labor market, had a significant impact on job mobility. Past studies found that job mobility generally declined with worker's age and length of work experience based on two major explanations (Bai and Li, 2008). The first explanation is that with accumulation of firm-specific human capital (Parsons, 1972), the worker's wage is based on his or her marginal productivity. Thus an experienced worker would change jobs only if the new job offers a higher wage. This is in line with the idea of the job search theory (Burdett, 1978). The second explanation emphasized that workers do not know exactly about a firm's characteristics at the time of employment. Once they find out that the work is unacceptable after some period of time, they choose to leave. This is in line with the job matching theory (Jovanovic, 1979). Our findings supported the relevance of both explanations and theories. Our study further revealed that compared with firm-specific human capital, human capital (e.g., education) acquired prior to employment did not have a substantial impact on job mobility.

Third, we found that social integration could lower the level of job mobility for China's migrant workers. The job mobility in their current city of residence was associated with factors such as presence of family, participation in the local pension insurance program, mastery of the local dialect, and adaptation to local life (Li and Tian, 2012; Tian, 2013; Tian and Peng, 2014; Yang, 2010). Social integration could help solve the issue of asymmetric information, provide access to market information, and improve the chance of finding suitable jobs. The relationship between social integration and job mobility has not been examined systematically in the current literature (Bai and Li, 2008; Knight and Yueh, 2004; Zhang et al., 2012). This study's findings suggest that the job mobility of migrant workers is also shaped by social integration, in addition to the human capital viewpoint.

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