

# ***The Impact of Job Referral from Different Social Connections on Initial Wages: Evidence from Chinese Labor Market***

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**Abstract:** Job referrals are a popular approach to finding a job through social ties. In the Chinese labor market, it is popular to locate jobs through social contacts, which is thought to be a means to earn a higher starting salary. The purpose of this paper was to investigate the disparities in starting salaries across employment found through various social relationships. Based on social network theory, this research added variables to the Mincer-type equation for regression analysis to measure the strength of social relations. The findings of this study, which used data from the China Household Income Project (CHIP 2018), showed that, unlike previous studies that focused on strong ties in the Chinese labor market, jobs found through weak ties have significantly higher starting salaries than jobs found through strong ties, and the difference in starting salaries for jobs found by migrant workers through various social ties is more pronounced. As a result, under the bleak backdrop of the labor market and decreasing economic growth, it was recommended that job seekers, particularly migrant workers, broaden their social circle in order to seek better initial pay.

**Keywords:** Job Referral, Initial Wage, Weak Ties, Migrant Worker, Chinese Labor Market

## **1. Introduction**

China experienced a three-year stretch of GDP growth rates below 7%, which began in 2016, resulting in stable and reduced economic growth [1]. With mounting global trade tensions and a growing threat of geopolitical threats, uncertainty about economic development has grown dramatically. The damage spread to China's stock market, where the Shanghai Securities Composite Index fell by about 25% throughout the year [2]. Simultaneously, a large supply of working-age labor and a significant structural conflict in employment contributed to the coexistence of the two fundamental difficulties of employment and recruitment.

According to CHIP 2018 data, more than 38% of participants gained jobs through acquaintances [3]. Galbis et al. discovered that the network matching rate is counter-cyclical by studying French immigrants' job data from 2003 to 2012 [4]. During an economic expansion, the network matching rate declines, meaning that fewer job seekers find jobs through social contacts. In contrast, during economic downturns, more people get work through social relationships [4]. Given the economic slump in 2018 and the accompanying impact of the epidemic, the importance of job hunting through social contacts becomes clear. Palleis and Sands' field experiment on oDesk (an online labor market)

found that recommended workers were more likely to be employed than their non-recommended counterparts, which was frequently accompanied by higher initial compensation [5]. Referred employees also showed improved performance and lower attrition rates [5]. The higher starting salary is attributed to references providing employers with a better awareness of the referees' talents, which supports the findings in Shi's study [6]. According to case studies from the communications and textile industries, employers are also willing to hire suggested candidates. Job referrals can assist companies in matching some job searchers with exceptional quality who are difficult to directly observe at a cheaper cost, ensuring that these employees can perform better at work while avoiding the monitoring problem of moral hazards [7, 8].

While existing research on job hunting through social connections predominantly focuses on the quality and salary levels of recommended employees, insights from Galbis et al., indicating higher job-seeking success rates for immigrants through social connections, provide valuable context [4]. With over 130 million migrant workers in China, who often have limited access to job information compared to local workers, understanding how they utilize social connections for job hunting is an area with limited research in China. To comprehensively understand the well-being of migrant workers, this paper aims to explore whether, like local workers, they can secure higher initial wages through job hunting via social connections. Additionally, it will assess whether the impact of higher starting salaries resulting from job referrals is more pronounced among local or migrant workers. Analyzing this problem will help to understand the employment situation of migrant workers and provide suggestions for the government and relevant agencies to implement employment policies to help workers, especially migrant workers.

Subsequently, this paper will review social network theories to elucidate the importance of job referral in job hunting and explore factors influencing employee salaries. Moreover, the paper will investigate whether the initial salary levels for job referrals by acquaintances of varying degrees of intimacy (family, relatives, and friends) differ based on CHIP 2018 data. Through regression analysis, the disparities in initial wages between migrant workers and locals leveraging social connections for job searches will be examined.

## 2. Literature Review

### 2.1. Job Referral and Social Network

Job referral, a fundamental aspect of networking and hiring, has been integral to career development from its early stages. Social connections, a crucial component of personal social capital, enable individuals to directly or indirectly secure jobs or acquire job-related information [9].

In situations where job vacancies are scarce, job seekers, particularly young individuals with limited knowledge of the labor market, tend to rely on social connections to find employment [10]. Montgomery's adverse selection model reveals that individuals with strong relationships with high-paying jobholders enjoy higher incomes [11]. Empirical studies, such as Heath's analysis of the textile industry in Bangladesh, introduce innovative mechanisms like joint contracts to address moral hazard issues [8]. Fernandez et al. list several benefits for employers that come from employee referrals. These include a larger pool of applicants through employee networks, recommendations based on similarity, protection of reputation, information benefits, and faster integration of recommended employees into the work environment [12].

Multiple studies have demonstrated a direct association between networking and greater starting earnings. Shi's analysis, employing the Mincer-type equation, demonstrates that individuals who obtain employment through social ties receive almost 7% higher salaries compared to those who do not. However, this initial pay advantage gradually decreases during extended periods of employment [6].

## 2.2. Important Results

Several variables influence income levels, including educational attainment, gender, industry, professional competence, and individual distinctions. This study specifically examines the subsequent factors:

The higher the education, the higher the starting wage. Beaton selected to examine the impacts of schooling on salaries and job satisfaction using male data aged 45 to 50, an age category that avoids the tendency to enter the job market after the age of 30 in particular professions (e.g., medicine) [13]. He also stated that, while people with more education earn more, they also have better endowments and come from families with higher socioeconomic standing, which has a negative impact on their post-work earnings [13].

Men are more likely to get better starting salaries. Sterling and Fernandez used data from an elite management program to assess the beginning wage gap between men and women from 2009 to 2010 [14]. Their study discovered that, while the salary disparity between men and women was diminishing with higher education levels, it remained, particularly in the early salary [14]. The cause could be the preconception that women are less productive than men and that companies must decide how much to provide when they don't know the person, which leads to lower pay for women [14].

Older workers will receive a higher starting salary than younger workers. Lee and Wilbur investigated the association between age and job satisfaction by surveying 1,707 public employees in the United States and categorizing them into three age groups (under 30 years old; 30-49 years old; 50 years old and older). Their study discovered that older workers have higher job satisfaction, although salaries are highest in the 30-49 age range and lowest in the under-30 age group [15].

The more experience a person has, the easier it is to negotiate a higher starting salary. Bhattacharjee et al. used employment data for 2000 MBA graduates from a "leading" business school in India to calculate the influence of job experience and academic achievement on earnings [16]. Their research discovered that academic performance has a considerable impact on salary in India, but in the international context, the impact of academic performance on salary is minimal, while the impact of job experience on salary is more significant [16].

Initial pay will differ depending on whether they are local or non-local. Previous research has revealed that local workers tend to earn higher starting salaries than non-local ones. A 2010 study of public sector workers in the Netherlands discovered that immigrants received lower earnings than non-immigrants due to social capital disadvantages such as difficulty integrating into relevant networks and policy constraints [17]. Using 2005 Chinese census data, Zhang and Wu discovered that occupational segregation resulting from the household registration system caused rural immigrants to have an income disadvantage in all occupations except low-wage occupations [18].

The existing literature on the influence of proximity in personal relationships on employees' starting salaries is scarce, and there is a lack of agreement among prominent scholars. Lester et al. utilized the Survey of Consumer Expectations and the Job Search Survey, which were completed between 2013 and 2018, for their study [19]. Lester et al. conducted a thorough analysis of 5,000 satisfied individuals between the ages of 18 and 64 who were not self-employed. They found that employment recommendations from professional contacts resulted in greater pay compared to recommendations from relatives and friends [19]. Nevertheless, it is crucial to emphasize that persons with limited competence and excellence frequently lack alternative external connections, resulting in their selection of employment opportunities advised by their family or friends [19]. The cause-and-effect relationship between this decision and its influence on salary remains ambiguous.

### 2.3. Summary

Prior research has demonstrated that employment referrals can lead to an initial salary benefit. This study asserts that there is a positive correlation between education level, age, and work experience and the initial salary advantage. Additionally, it highlights that men tend to possess a bigger starting wage advantage compared to women. This research primarily investigates the genesis of the region and the extent of the close association and posits the following two hypotheses:

*H1: Local workers have a greater initial wage advantage than migrant workers.*

*H2: The initial wage advantage is greater for distant relationships than for close relationships.*

## 3. Method

### 3.1. Research Design

The empirical analysis will be conducted using quantitative methods. The independent variable association and dependent variable in this study passed the correlation test, indicating a significant correlation that may be employed in regression analysis. This study uses qualitative analysis to acquire insights into the impact of relationship strength on starting wages.

Bhattacharjee et al. used the Mincer-type equation to examine the impact of academic performance and work experience on the starting income of MBA graduates, concluding that education, age, gender, and work experience all have significant effects on the initial wage [16]. Shi's research reveals that job-seeking through acquaintances and years of schooling increases starting compensation [6]. According to Lester et al.'s research, job introductions through weak ties, such as business relationships, may have a higher beneficial influence on earnings [19]. Based on prior research, this work constructs the Mincer-type equation, introduces the key variable to distinguish the strength relationship, and investigates its impact on the beginning salary.

$$\lg(\text{initialwage}_i) = \alpha + \beta_1 \text{strongties}_i + \beta_2 \text{edu}_i + \beta_3 \text{age}_i + \beta_4 \text{gender}_i + \beta_5 \text{exp}_i + \varepsilon_i \quad (1)$$

### 3.2. Data Collection & Analysis

This study utilizes data from the 2018 China Institute of Income Distribution's publication, CHIP. CHIP2018 is a survey that collects data that is typical of the entire nation, similar to a census. CHIP2018 is a questionnaire survey that was carried out using systematic sampling of the China Statistical Yearbook. It includes data from 15 provinces in eastern, central, and western China. This dataset satisfies the criteria of this article in multiple ways. Initially, the poll inquired about the manner in which people obtained their present employment. Additionally, its inquiries about other job-related attributes from employees, such as their remuneration, field of work, profession, and job search activities. Furthermore, this survey is comprehensive and encompasses the specific attributes of employees in several sectors, along with intricate demographic data. The scope of the investigation is focused on urban workers between the ages of 18 and 65. A total of 5451 observations fulfilled the criterion of possessing a social connection for job acquisition. Refer to Table 1 in the descriptive analysis for specific information.

Table 1: Descriptive statistics of variables.

Variable	Obs	Mean	SD	Min	Max
initial wage	5451	2624.938	1871.614	100	12000
local	5451	0.928	0.258	0	1
strong ties	5451	0.311	0.463	0	1

Table 1: (continued).

edu	5451	10.348	3.241	0	21
gender	5451	0.58	0.494	0	1
age	5451	40.762	10.563	18	65
exp	5451	2.335	1.233	1	6

source from: CHIP2018

To determine the sources of job referrals, this study examines a question posed to respondents in CHIP 2018: "How did you obtain your current job?" There are multiple responses to this inquiry, and the author examines the outcomes of familial communication, referrals from relatives, and referrals from friends or acquaintances. This study performed an analysis of variance (ANOVA) to compare the means of three distinct groups, as presented in Table 2. The findings revealed substantial disparities among the groups. Employees referred by family members received the lowest starting wage on average, whereas employees referred by peers or acquaintances received the highest beginning salary. Both family referrals and relative referrals exhibited below-average rates, and both groups of individuals shared similar features in securing employment through familial connections. Hence, this study establishes a binary index by amalgamating individuals who secure employment through familial and relational connections, namely, relatives (strong ties) as well as friends or acquaintances (weak ties). Individuals who provided a referral from a family member or relative would be denoted as "1," while those who did not would be denoted as "0".

Table 2: ANOVA.

Referral from	Initial wage		
	Mean	SD	Min
Family	2325.3466	2141.9422	100
Relatives	2569.9158	2521.616	100
Friend	2902.2332	3795.5296	100
F	9.41***		

note: \*\*\*p<0.01, \*\*p<0.05, \*p<0.10

Second, the variables that define whether an employee is a local or a non-local are taken from the question "current place of residence registration" and differentiated by province level. Those who answered "out of province" or "other" would be defined as non-local or otherwise local. Other demographic information, including years of education, age, gender, and work experience (expressed as the number of jobs attended), can be obtained directly from CHIP 2018. In this paper, the extreme value of the starting wage is 1% lower. In order to eliminate the influence of market factors, other control variables are added, such as industry, occupation, company size, unit ownership, and labor contract type.

Next, this paper will utilize Stata 16.0 statistical software to do regression analysis by applying a Mincer-like equation to estimate the impact of proximity on initial wages.

#### 4. Results

In this research, using the CHIP2018 data estimation equation (1), a heteroscedasticity test was performed on the original regression results, and it was discovered that there was heteroscedasticity. Table 3 displays the estimation results obtained by combining heteroscedasticity with a resilient standard error.

Column (1) demonstrates that, at the overall sample level and a significance level of 1%, the first wage of a job obtained through a relative recommendation is 16.7% lower than that found through a friend link. This finding lends credence to Hypothesis 2, which holds that weaker ties result in greater beginning earnings.

Columns (2) and (3) depict the impact on the starting pay of local and migrant workers seeking jobs through family relationships, respectively. Compared to 15.6% for locals, the result for non-locals was -27.1%, demonstrating that non-locals were more negatively impacted by beginning earnings while seeking jobs through family links. This finding strongly confirms Hypothesis 1, demonstrating that local workers experience less negative economic impact than migrant workers under the identical strong-ties job referral. Years of schooling, males, and work experience have a substantial positive link with initial pay at all levels; although age has a considerable negative correlation, the economic impact is minor. Variable controls contain a variety of control factors, such as industry, occupation, firm size, work unit ownership, and labor contract type, which have little impact on the dependent variable's initial salary.

Table 3: Initial Wages and Referrals.

lg (initial wage)	(1) All	(2) Local	(3) Non-local
strong ties	-0.167*** (-7.320)	-0.156*** (-6.572)	-0.271*** (-3.198)
edu	0.013*** (3.539)	0.011*** (2.856)	0.034*** (3.051)
gender	0.233*** (11.622)	0.241*** (11.475)	0.139** (2.235)
age	-0.017*** (-14.926)	-0.017*** (-14.621)	-0.007* (-1.818)
exp	0.117*** (14.739)	0.115*** (13.844)	0.092*** (3.940)
controls	-0.007*** (-3.878)	-0.006*** (-3.068)	-0.016** (-2.515)
_cons	7.999*** (97.591)	7.977*** (93.154)	7.933*** (30.236)
N	5451	5060	391
R2	0.122	0.118	0.137
F	125.132	112.411	9.521

note: \*\*\*p<0.01, \*\*p<0.05, \*p<0.10

## 5. Discussion

Based on survey data from 15 urban employees in China, this research investigates the impact of job referrals with varying relationship strengths on individual employees' beginning earnings. The findings indicate that employment referrals from close family and relatives have a negative impact on starting salaries, which supports hypothesis 2. This paper compares the outcomes of the suggested method to those of traditional methods. According to Lester et al.'s study, employment recommendations through business ties earned 16% more in beginning salary than non-referrals, whereas referrals through family members paid 9% less [19]. The findings of this study contradict those of earlier Chinese scholars. In Bian's study, people hired through strong ties earned around 10% more than those hired through weak connections, but he also predicted that the income advantage of strong connections would progressively fade as the economy and labor market developed [20]. A

strong relationship may result in a lower starting wage level, whereas a weak relationship may result in a higher first income level. First, people who prefer to use strong connections to obtain work tend to have a limited social network and low skills, and they are unable to get work through strong connections due to a lack of external options [19]. On the other hand, as Granovetter's study demonstrated, the less close the relationship, the higher the status gap between the contacts, and the greater the amount of information given to each other, which may be more valuable [21].

This study also found that local workers have better economic benefits than non-local workers when they are recommended by acquaintances, which shows that local workers have significantly less negative initial wage effects than non-local workers when they are recommended by strong connections. This is consistent with Hypothesis 1 and previous studies of rural migrant workers in the Netherlands and China. According to the results of this study and previous literature, the average initial wage of migrant workers in this paper is much higher than that of local workers, but migrant workers are more negatively affected by strong relationship recommendations. From the data point of view, the average initial wage of migrant workers who received a job referral from a weak relationship is much higher than the average initial wage of migrant workers who received a job referral from a strong relationship. This may be related to China's unique national conditions. Migrant workers are often migrant workers from rural areas. Due to market competitiveness and limited information channels, this part of the population is more likely to choose low-income jobs recommended by relatives [19].

The findings of this study indicate that individuals seeking employment through social connections should not only consider their familial history but also broaden their social network and actively pursue additional opportunities. The government and associated agencies should prioritize their focus on migrant workers in cities who have poor levels of education and occupational abilities. These individuals are more prone to sharing information about low-paid employment among themselves, which can lead to a cycle of poverty. The government has the capacity to offer occupational skills training and enhance employment information channels for these specific demographics.

## 6. Conclusion

The employment structural contradiction in China's labor market is severe due to the economic slowdown and labor market oversupply. This paper examines the starting wage of Chinese workers who secure employment through social connections. It investigates the level of social connection intensity that leads to higher initial earnings in the current context and explores the presence of any local effects. This study employs regression analysis to examine the influence of job referrals from various social relationships on initial earnings while also differentiating between local and non-local labor groups. It accomplishes this by organizing and analyzing the theories of social networks and job referrals. It has been observed that non-local groups are disproportionately affected by the impact of occupations brought about by distant social connections, which tend to have higher initial earnings.

This paper analyzes past research on the effect of social networks on job searching and describes the differences in the starting salaries of positions found through social connections of varying intensities. Strong relationships are now more widely recognized in China's labor market, and this paper underlines the increased importance of weak links in determining initial compensation. This paper uses the Mincer-type equation to test the impact of social networking on local and non-local migrant workers, respectively, filling gaps in prior research on migrant workers that used social network theory. The opinions provided in this paper are based on the author's summary analysis, which has a subjective effect. Although this differs from previous views on identifying great relationships, there are some groups in China who discover higher starting salaries through strong partnerships. This research is primarily based on macro statistics provided by CHIP (2018), with no in-depth analysis of any specific categories besides local workers; therefore, it has several drawbacks.

In future research to investigate the social well-being of various groups, the method described in this work can be used to confirm that practitioners in different social groups and industries have higher comparative advantages in getting jobs through social contacts.

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