

The Impact of Minimum Wage Standard on Migrant Worker Shortage Stimulated by Urbanization

Zhu Yining
(Fudan University, China)

Abstract: Migrant workers shortage has become one of the problems impeding the process of urbanization in China. In this context, enterprises have to give a pay raise to be market friendly while the Chinese government has established minimum wage standard to ensure employment. Scholars' views are poles apart towards whether this standard can meet the requirements of eliminating "shortage" and accelerating urbanization. This essay will apply data analysis, personal interview and modeling. Data analysis based on Chinese Family Panel Studies (CFPS) indicates that the standard have the prerequisite to be a solution to migrant workers shortage. But taking real-life situation into consideration, the interview with two families in a small-scale county in Anhui Province and the proposed model reveal the actual impact in reality and in theory respectively. From this point, a full consideration of the whole aspects, which include both salary increase and reforms in household registration and education system in rural areas, is highly needed to solve the problem of migrant workers employment as well as walk out of the dilemma of urbanization.

Key words: minimum wage standard; migrant worker shortage; urbanization; employment

JEL code: J

1. Introduction

At the background of vigorously advocating urbanization and generally enhancing life quality around the beginning of the 21th century, a massive exodus of labor force from rural areas triggered an over-supply of migrant workers in such metropolis as Shenzhen. However, the situation reversed in 2004, when the manufacturing industry in Pearl River Delta suffered from shortage of manpower, demanding for 200 million more migrant workers. Although the global financial crisis later in 2008 bettered the supply-demand relationship to some extent, rate between demand and supply still bounced from 1:1.14 to 1.51, namely one job hunter had more than one job vacancy. Figure 1 demonstrates such trend by focusing on migrant workers' income growth per year.

Migrant worker shortage is one of the existing problems in the process of urbanization. Since Urban and Rural Integration, which is part of urbanization, should be pushed by migration, this problem may impede the progress bar. In this context, enterprises have to get a pay raise to be market friendly while the Chinese government has established minimum wage standard to ensure employment. According to the latest data, both the

Yining Zhu, Bachelor, School of Economics, Fudan University; research areas/interests: economics, finance. E-mail: 14300680172@fudan.edu.cn.

range and frequency of minimum wage adjustment have been increasing.¹

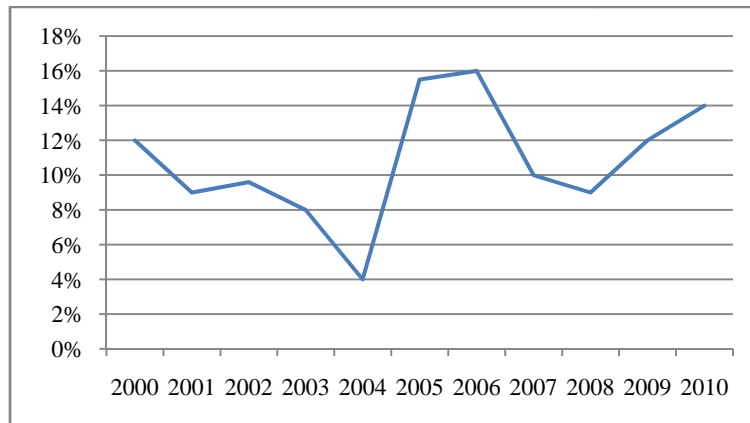


Figure 1 Migrant Workers' Income Growth in China (2000-2010)

Scholars' views towards this standard are poles apart.

According to the classical macroeconomic theory, the specified minimum wage has to exceed the market equilibrium wage for the purpose of ensuring both benefits and equity. Therefore, as is shown in the labor supply-demand curve below, unemployment follows. Zhang Wuchang, a famed Chinese scholar, upholds this theory (2000) and insists that the policy is meaningless to migrant workers with low quality of education or low labor capacity. Those suffering most are those the policy aims to protect. The standard may worsen migrant worker shortage in return.

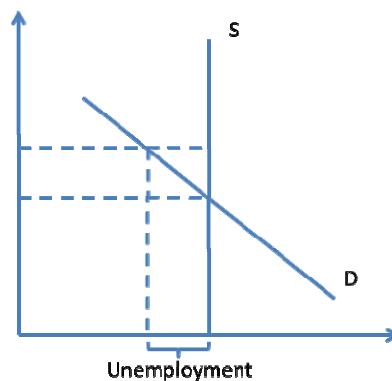


Figure 2 The Impact of Minimum Wage Standard in Classical Macroeconomic Theory

On the other hand, Li Xiaochun and He Ping (2010) agreed that “The establishment of minimum wage standard can promote the employment of migrant workers. Market becomes uncertain when faced with economic crises, which requires the government to take countermeasures in the labor market so as to bring the economy back to full employment.”

Meanwhile, scholars like Luo Xiaolan (2007) take a careful middle way. “A threshold value does exist. If the value is not reached, the minimum wage has a positive effect; otherwise, the employment of migrant workers will decrease as the minimum wage increases.”

¹ Resource: Range: The average growth rate of monthly wage in 2014 was up to 14%. Frequency: Provinces adjust the minimum wage 1.79 times per year from 1995-2004, 1.75 from 2005 to 2010 and 1.20 from 2010 to 2014.

The impact of such policy is under discussion. Generally, scholars focus on modeling to explain whether it can meet up with the goal of eliminating “shortage” and accelerating urbanization. Since urbanization and employment, especially that of migrant workers who function as a bridge between rural and urban areas, are undivided, this essay will also center on this topic but with an integrated research method, aimed to find a better suggestion for policy-makers to accelerate urbanization.

2. Materials and Methods

2.1 Existing Data

The data below are sorted out from a survey carried out in 2010 by Chinese Family Panel Studies (CFPS) Database. CFPS designed a questionnaire including the two questions based on subjective estimation: (1) How many migrant workers in your village have leave for city? (2) What do you think of the per capita income in your village?

These two questions have certain connection for the reason that when it comes to the per capita income, the respondents inevitably take that from both migrant workers and left-behind farmers into consideration. Therefore, interviewees may have different answer combination for the two questions. Trend estimation and simple regression model will be applied successively. The original data is sorted as Table 1 below.

Table 1 (Original Information) Numbers of People in Each Answer Combination²

Expectation of the number of migrant workers	Total number of people	Expectation of per capita income					
		[0, 1000)	[1000, 2000)	[2000, 3000)	[3000, 4000)	[4000, 5000)	[5000, 6000)
0	22	4	2	4	0	1	1
10	44	7	8	7	2	4	3
20	36	10	5	7	5	3	2
30	58	12	10	11	9	8	4
40	39	9	9	7	3	4	2
50	47	5	11	7	4	8	9
60	34	6	4	7	9	3	1
70	22	3	3	1	4	3	1
80	7	0	3	2	1	0	0
90	3	1	0	0	1	0	0
100	1	0	1	0	0	0	0
	313	57	56	53	38	34	23

2.2 Personal Interview

Data above is far less than what is needed in this research. Thus, a personal interview was conducted in Yingshang, which is a small-scale county in Anhui Province, during my volunteer teaching period.

Aimed for case study, I randomly chose two of my students — a girl surnamed Zhao and a boy surnamed Shen — and went their home for a visit to their parents. The questions asked, which are also concerned more on subjective issues, are listed as below:

² You may find that total number each line is not equal to the sum number of the expectation of per capita income. In fact, a few expect per capita income to exceed 6000. Since this part of data does not affect the analysis procedure in this essay, it is omitted deliberately for briefness.

- Are any of your relatives hunting for a job in a metropolis?
- Why are you willing to stay here instead of hunting for a job in a metropolis?
- If minimum wage keeps increasing in urban area, will you change your mind to leave for cities? What do you think of the minimum wage standard?

For the first question, all of the four patents responded in the affirmative. When it comes to the second question, Zhao’s father committed that the salary in urban areas is higher but the life there is harder. “Once I was delighted to hear that the minimum wage standard is established, because more salary means better life for my daughter. But the fact is that I cannot benefit from it because the company I served for asked me for an urban household registration. It is really depressing.” They said they have no alternative but to stay since the household registration system is rigorous. “That’s why we felt hopeless and returned here. Even if the minimum wage increases, we cannot benefit from it.”

3. Results

3.1 Based on Existing Data

Original data is processed and another table (Table 2) is made for reference for two reasons: (1) Various total numbers may make analysis confusing, percentage form provides a more intuitive and convenient approach. (2) Subjectivity of the answer combination may make extremes on the endpoints inevitable, data between the first and the third quartiles (cumulative number are 78.25/313 and 234.75/313 respectively) are more typical.

Table 2 (Processed Information) Percentage of People in Each Answer Combination³

Expectation of the number of migrant workers	Total number of people	Expectation of per capita income					
		[0, 1000)	[1000, 2000)	[2000, 3000)	[3000, 4000)	[4000, 5000)	[5000, 6000)
20	36	28%	14%	19%	14%	8%	6%
30	58	21%	17%	19%	16%	14%	7%
40	39	23%	23%	18%	8%	10%	5%
50	47	11%	23%	15%	9%	17%	19%
60	34	18%	12%	21%	26%	9%	3%
70	22	14%	14%	5%	18%	14%	5%

The processed data in Table 2 illustrates that the larger estimated number of migrant workers, the more anticipated income. To take the modes of each number group (namely each line) into consideration, it seems that the two expectations have positive correlation. Figure 3 demonstrates such trend in a simple econometrics model⁴:

$$inc = \beta_0 + \beta_1 num + \beta_2 num^2 + u$$

using the processed data in Figure 2, the regression line combining num, num² and inc together is

$$\hat{inc} = 457.14 - 26.429num + 1.0714num^2$$

($R^2 = 0.9118$)

It can be concluded that minimum wage can improve expectation and inspire the general public’s confidence in the future needs, so theoretically the standard has the prerequisite to be a solution to migrant workers shortage.

³ The bold and italic number above represents the highest percentage per line.

⁴ In this regression model, “inc” stands for expectation of per capita income and “num” stands for expectation of the number of migrant workers.

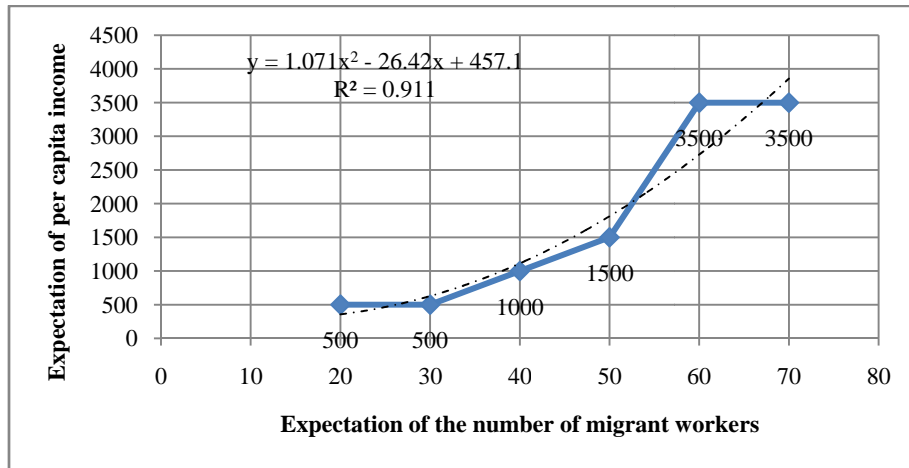


Figure 3 Regression Model on Answer Combination

3.2 Based on Personal Interview

But the personal interview provides a realistic angle for the impact of minimum wage standard. It indicates an “invisible bulwark”, namely, the segmented labor market prevents free labor flow in reality. As the interviewees said, the household registration system makes it more difficult to blend into urban life. Thus, the absence of thorough education, which is caused by the “bulwark”, leads to the prejudice that migrant workers are born for such bottom-end jobs like masons or dustmen. Although migrant workers do have proficient in some aspects, the companies are not willing to pay minimum wage out of prejudice.

Since the premise of classical macroeconomic theory supported by Zhang is a unified and free market, under the actual circumstance mentioned above, however, a personally brand-new model has to be built to describe how the minimum wage standard influences the urban labor market.

The new model is based on classical macroeconomic theory and two more facts: First, the minimum wage policy guarantees basic welfare and lowers the barrier, thus increasing supply in the urban labor market ($S \rightarrow S'$). Second, the minimum wage began to increase more widely and more frequently since 2004.

When the enterprises' demand for labor remains unchanged, the unemployment rate in the urban labor market will increase more (compared with Figure 1). Thus, with the existence of labor market segmentation, a new labor supply-demand curve is built (the right part of Figure 3).

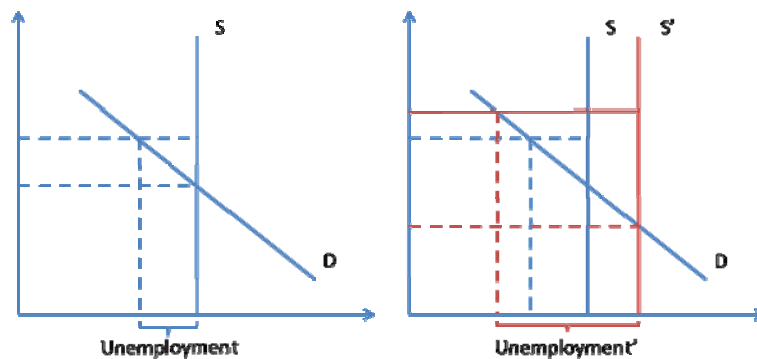


Figure 4 Comparison between the Classical Model and the Personally-Proposed Model

In conclusion, nominally, the minimum wage standard was established to guarantee popular welfare and stimulating urbanization; but actually, it may lead to more unemployment under current background and cannot improve urbanization both in reality and in theory.

4. Discussion and Recommendations

Policy makers should be aware that there is no right or wrong decision. To analyze further, the conclusion above has a premise that unemployment caused by the segmented labor market (N1) is less than new migrant labor force caused by the minimum wage policy (N2). In this case, the minimum wage will not alleviate labor shortage, but will increase pressure on urban development. Urbanization will slow down with negatively-affected development. Once $N1 > N2$, the minimum wage is meaningful to solve the “labor shortage” to some extent. So how to control the scale is a huge challenge.

To take one more step forward, the real reason for the negative influence on urbanization is the household registration system. Increasing salary only cannot solve the problem of migrant workers shortage as well as the dilemma of urbanization, which requires the authority to take the whole aspects into consideration. Reforms in household registration system and education system in rural areas are of more significance in terms of urbanization and employment.

References

- Su Yongzhao (2013). “Study on the employment effects of Chinese minimum wage under the dual economic structure — From the angle of labor market”, *Economy and Management*.
- Li Xiaochun and He Ping (2010). “Effects of the minimum wage on the employment of rural migrant workers — A case study of the Yangtze River Delta”, *Jiangsu Social Sciences*.
- Luo Xiaolan (2007). “An analysis on the minimum wage’s employment effect over the rural-workers in China”, *Journal of Finance and Economics*.
- Wu Zhihong (2015). “The impact of minimum wage increase on migrant labor supply and technological progress: Evidence from Guangzhou, 2000-2011”, *Human Resource Development of China*.
- Yuan Zhigang (2015). “Three questions on turning point”, available online at: <http://yuanzhigang.blog.caixin.com/archives/9272>.