ISSN 1923-841X [Print] ISSN 1923-8428 [Online] www.cscanada.net www.cscanada.org

### Study on the Minimum Wages Increases in Beijing

### LIN Yuan[a],\*

<sup>[a]</sup>School of Labor Science and Law, Beijing Wuzi University, Beijing, China.

Supported by Beijing Social Science Foundation (Grant No. 16YJC051).

Received 25 May 2016; accepted 27 July 2016 Published online 31 August 2016

#### **Abstract**

This paper studies minimum wage increases in Beijing since the implement of minimum wage guarantee system. This paper compares minimum wage with per person GDP and average wage. It also studied the effect of minimum wage increases, and points out that increasing minimum wages will raise labor cost, improving labor productivity and promote the upgrading of industrial structure.

**Key words:** Minimum wage; Labor cost; Labor productivity; Industrial structure

Lin, Y. (2016). Study on the Minimum Wages Increases in Beijing. *International Business and Management, 13*(1), 16-21. Available from: http://www.cscanada.net/index.php/ibm/article/view/8566 DOI: http://dx.doi.org/10.3968/8566

### INTRODUCTION

Since 1994, China has begun to implement minimum wage guarantee system according to the international practice. Now, minimum wage has become a necessary means of government to intervene in the labor market and plays an important role in protecting the low-skilled laborers to get a reasonable payment in China. This paper studies minimum wage increases in Beijing from 1994 to 2015, and compares minimum wages with average wage, GDP per person, per capita consumption expenditure of urban households and unemployment insurance.

#### 1. MINIMUM WAGE CHANGES OF BEIJING

Table 1 shows minimum wage changes in Beijing from 1994 to 2015 since 'Enterprise Minimum Wage Provisions' was implemented. Minimum wages in Beijing include monthly and hourly minimum wages.

Table 1
Data of Minimum Wage in Beijing (1994-2015) Units:
Yuan

Year	Monthly minimum wage	Hourly minimum wage
1994	210	1.1
1995	240	1.4
1996	270	1.6
1997	290	1.7
1998	310	1.8
1999	400	2.3
2000	412	2.46
2001	435	2.6
2002	465	2.78
2003	495	2.96
2004	495	3.26
2005	580	3.47
2006	640	3.82
2007	730	4.36
2008	800	4.6
2009	800	4.6
2010	960	5.5
2011	1160	6.7
2012	1260	7.2
2013	1400	8.05
2014	1560	16.9
2015	1720	18.7

 $\it Note. \, A dapted from \, Human \, Resources \, and \, Social \, Security \, Bureau in Beijing.$ 

From Table 1, we can see minimum wages continue to show an upward tendency since 'Enterprise Minimum Wage Provisions' was implemented. Except for 2004 and 2009, minimum wages in Beijing increased every year.

<sup>\*</sup>Corresponding author.

The average annual growth rate of monthly minimum wage is 10.53% and hourly minimum wage is 14.44%.

# 2. COMPARATIVE ANALYSIS OF MINIMUM WAGES WITH PER PERSON GDP IN BEIJING

### 2.1 The Increase of Minimum Wages and Per Person GDP in Beijing

The annual growth of minimum wages is compared with that of per person GDP in Beijing to judge if labors getting their salary in accordance with minimum wage can share the development of socio economy.

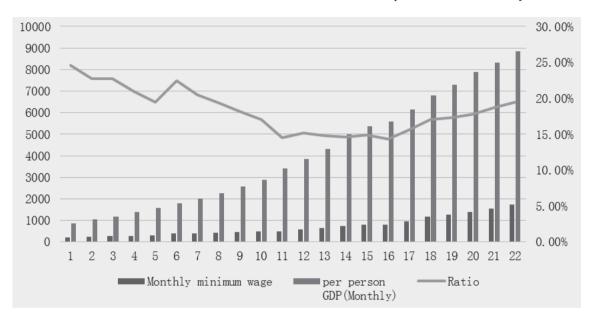


Figure 1
Minimum Wage and Per Person GDP in Beijing (1994-2015) Units: Yuan
Note. Adapted from National Bureau of Statistics of China.

Figure 1 shows the increases of minimum wages and per person GDP in Beijing from 1994 to 2015. We can see minimum wages increased with per person GDP, but the growth rate of minimum wages is below that of per person GDP. The average annual growth rate of monthly minimum wage is 10.53%, and that of per person GDP is 11.77%. The figures represent a general decline in the ratio of minimum wages to per person GDP. In 1994, the ratio of minimum wages to per person GDP was 24.61%, but in 2015, it dropped to 19.47%. Labors getting their salary in accordance with minimum wage can't share the development of socio economy in Beijing.

## 2.2 Within-country Comparisons of the Ratio of Minimum Wages to Per Person GDP

Table 2 shows data of minimum wages and Per Person GDP in various provinces and cities across the country in 1994 and 2015. We can see, except for Shanghai, the average annual growth rate of minimum wage is lower than that of per person GDP, and the average gap is 4.52 percent. The gap between average annual growth rate of minimum wage and average annual growth rate of minimum wage of per person GDP is 1.79 percent, and it just higher than Shanghai, but lower than other areas. Average annual growth rate of minimum wage in Beijing is higher than that in most areas. Because per person GDP in Beijing is high, the ratio of minimum wages to per person GDP is low.

Table 2 Minimum Wages and Per Person GDP in Various Provinces and Cities in 1994 and 2015 Units: Yuan/month

	1994		2015		Average annual	Average annual	
Area	Minimum wage (Monthly)	Per person GDP (Monthly)	Minimum wage (Monthly)	Per person GDP (Monthly)	growth rate of minimum wage(A)	growth rate of per person GDP(B)	B-A
Beijing	210	853	1560	8896	10.02%	11.81%	1.79%
Tianjin	210	680	1680	9086	10.41%	13.14%	2.73%
Hebei	180	287	1210	3364	9.50%	12.44%	2.94%
Shanxi	200	235	1150	2925	8.69%	12.76%	4.07%
Neimenggu	170	251	1200	5999	9.75%	16.31%	6.56%

To be continued

#### Continued

	1994		20	015	Average annual	Average annual	
Area	Minimum wage (Monthly)	Per person GDP (Monthly)	Minimum wage (Monthly)	Per person GDP (Monthly)	growth rate of minimum wage(A)	growth rate of per person GDP(B)	B-A
Liaoning	210	509	900	5454	7.18%	11.96%	4.78%
Jilin	190	309	950	4321	7.97%	13.39%	5.42%
Heilongjiang	200	369	850	3279	7.13%	10.96%	3.83%
Shanghai	220	1267	1820	8577	10.59%	9.53%	-1.06%
Jiangsu	210	482	1270	7340	8.95%	13.85%	4.90%
Zhejiang	210	512	1220	6489	8.74%	12.85%	4.11%
Anhui	180	210	860	3015	7.73%	13.52%	5.79%
Fujian	280	446	950	5688	5.99%	12.89%	6.90%
Jiangxi	190	198	1060	3068	8.53%	13.94%	5.41%
Shandong	170	373	1350	5363	10.37%	13.54%	3.17%
Henan	204	206	1100	3269	8.35%	14.06%	5.71%
Hubei	180	278	900	4234	7.97%	13.84%	5.87%
Hunan	205	225	1030	3593	7.99%	14.10%	6.11%
Guangdong	320	566	1550	5658	7.80%	11.58%	3.78%
Guangxi	280	223	1070	2945	6.59%	13.08%	6.49%
Hainan	180	402	970	3415	8.35%	10.73%	2.38%
Sichuan	180	207	1070	3082	8.86%	13.73%	4.87%
Guizhou	190	129	1000	2495	8.23%	15.13%	6.90%
Yunnan	185	208	1070	2425	8.72%	12.42%	3.70%
Shanxi	200	195	970	4011	7.81%	15.48%	7.67%
Gansu	180	160	1200	2184	9.45%	13.24%	3.79%
Qinghai	200	243	1250	3452	9.12%	13.48%	4.36%
Ningxia	200	224	1150	3668	8.69%	14.25%	5.56%
Xinjiang	180	329	1160	3381	9.28%	11.73%	2.45%

Note. Adapted from China Labor Statistical Yearbook.

### 2.3 International Comparisons of the Ratio of Minimum Wages to Per Person GDP

According to ILO, the world average ratio of minimum wages to per person GDP is 58%. The ratio of minimum wages to per person GDP in Beijing was 19.47% in 2015, and it is considerably lower than the world average. Table 3 shows the ratio of minimum wages to per person GDP

in some other countries. We can see it is not only lower than developed countries, such as USA, Germany, Britain, Japan, but also lower than developing countries, such as Indian, Cuba, Mongolia. It shows that the minimum wage is not suitable for the economic development level, and it will harm the interests of low-income workers because they can't share the development of socio economy.

Table 3
Ratio of Minimum Wages to Per Person GDP in Various Countries

Country	USA	Japan	Britain	Switzerland	Canada	Germany
Ratio	32%	32%	28%	36%	41%	45%
Country	Australia	France	Italy	Sweden	Denmark	New Zealand
Ratio	51%	51%	40%	61%	61%	62%
Country	South Korea	Sweden	Denmark	Greek	Norway	Portugal
Ratio	37%	61%	61%	44%	43%	42%
Country	India	Pakistan	Cuba	Mongolia	Morocco	Pakistan
Ratio	106%	110%	60%	56%	64%	110%

 $\it Note. Adapted from ILO, Global Wage Report 2014/15$  'Wages and Income Inequality'.

# 3. COMPARATIVE ANALYSIS OF MINIMUM WAGE WITH AVERAGE WAGE IN BEIJING

One of the most important factors which should be considered is average wage of workers when drafting the minimum wage (Giuliano, 2013; Papps, 2012; Addison & Demet Ozturk, 2012). Therefore, the ratio of minimum wage to average wage is an important index for determining the level of minimum rate.

### 3.1 The Increase of Minimum Wages and Average Wage in Beijing

This paper studies the data of minimum wage and average wage of workers in Beijing from 1994 to 2015, as shown in Figure 2. Because average wage is figured on yearly basis, this paper will convert it to monthly average wage in order to facilitate comparison with minimum wage. From 1994 to 2015, the average annual growth rate of monthly minimum wage is 10.53%, and that of average wage is 12.99%. In Figure 2, we can see the ratio of minimum wages to average wage was38.53%, but in 2015, it dropped to 24.27%. It should be noted that minimum wage in Beijing is in the forefront in China—in top five. Nevertheless, due to the high level of average wage, the ratio of minimum wage to average wage is relatively low.

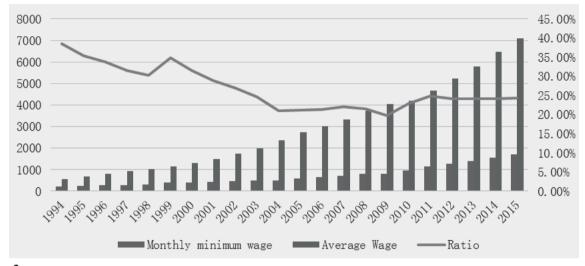


Figure 2
Minimum Wage and Average Wage from 1994 to 2015 Unit: Yuan/month
Note. Adapted from Human Resources and Social Security Bureau in Beijing.

The ratio of minimum wages to average wage reflects the income gap between the rich and the poor. Although the minimum wage has been improving in the past 20 years in Beijing, we can feel the life pressure of low income groups is still great because the low ratio of minimum wages to average wage. Many companies will pay salary for low skilled and unskilled workers according to minimum wages. The low level of minimum wages

will cause a potential slowdown in income of low income groups, which will widen gap between the rich and poor and endanger social stability and harmony.

## 3.2 Within-country Comparisons of the Ratio of Minimum Wages to Average Wage

Table 4 shows data of minimum wages and average wage in some provinces and cities across the country in 1994 and 2015.

Table 4
Minimum Wage and Average Wage in 1994 and 2015 Unit: Yuan/month

	1994			2015			Average annual	Average annual
Area	Minimum Wage	Average Wage	Ratio	Minimum Wage	Average Wage	Ratio	growth rate of minimum wage	growth rate of average wage
Beijing	210	534.58	39.28%	1560	8522	18.30%	10.02%	8.42%
Tianjin	210	447.00	46.98%	1680	6064	27.70%	10.41%	6.30%
Hebei	180	348.75	51.61%	1210	3760	32.19%	9.50%	5.55%
Shanxi	200	333.08	60.05%	1150	4081	28.18%	8.69%	6.22%
Neimenggu	170	306.25	55.51%	1200	4479	26.79%	9.75%	6.47%
Liaoning	210	355.75	59.03%	900	4016	22.41%	7.18%	7.38%

To be continued

#### Continued

Area	1994				2015		Average annual	Average annual
	Minimum Wage	Average Wage	Ratio	Minimum Wage	Average Wage	Ratio	growth rate of minimum wage	growth rate of average wage
Jilin	190	305.50	62.19%	950	3876	24.51%	7.97%	6.93%
Heilongjiang	200	281.25	71.11%	850	3670	23.16%	7.13%	7.21%
Shanghai	220	617.08	35.65%	1820	8354	21.79%	10.59%	7.53%
Jiangsu	210	414.5	50.66%	1270	5072	25.04%	8.95%	6.82%
Zhejiang	210	466.42	45.02%	1220	5131	23.78%	8.74%	7.08%
Anhui	180	316.08	56.95%	860	4241	20.28%	7.73%	7.89%
Fujian	280	407.42	68.73%	950	4452	21.34%	5.99%	7.63%
Jiangxi	190	287.5	66.09%	1060	3852	27.52%	8.53%	6.34%
Shandong	170	361.5	47.03%	1350	4319	31.26%	10.37%	5.69%
Henan	204	295.5	69.04%	1100	3515	31.30%	8.35%	5.69%
Hubei	180	337.58	53.32%	900	4153	21.67%	7.97%	7.55%
Hunan	205	342.00	59.94%	1030	3926	26.23%	7.99%	6.58%
Guangdong	320	593.08	53.96%	1550	4957	31.27%	7.80%	5.69%
Guangxi	200	372.33	53.72%	1070	3785	28.27%	6.59%	6.20%
Hainan	280	374.00	74.87%	970	4157	23.34%	8.35%	7.18%
Sichuan	180	322.50	53.62	1070	4380	24.43%	8.86%	6.94%
Guizhou	190	322.50	58.91%	1000	4398	22.74%	8.23%	7.31%
Yunnan	185	367.17	50.39%	1070	3842	27.85%	8.72%	6.28%
Shanxi	200	316.92	63.11%	970	4081	23.77%	7.81%	7.08%
Gansu	180	399.67	45.04%	1200	3913	30.66%	9.45%	5.79%
Qinghai	200	414.67	48.23%	1250	4757	26.28%	9.12%	6.57%
Ningxia	200	355.83	56.21%	1150	4572	25.16%	8.69%	6.79%
Xinjiang	180	354.42	50.79%	1160	4456	26.03%	9.28%	6.62%

Note. Adapted from China Labor Statistical Yearbook.

### 3.3 International Comparisons of the Ratio of Minimum Wages to Average Wage

Generally, minimum wage accounts for 40%-60% of average wage in most countries in the world, and there are fewer countries are less than 40%. The world's average wage data is not full, and we can see average

wage data of OECD countries in Table 5. In these 24 countries, the ratio of average wage to per person GDP is 81%, and the ratio of minimum wages to average wage is 50%. It is obviously that the ratio of minimum wage to average wage is well below international norms in Beijing.

Table 5
Ratio of Minimum wages to Average Wage in OECD countries

Country	Switzerland	Sweden	Finland	Norway	Ireland	Denmark
Ratio	83%	76%	73%	71%	60%	58%
Country	Germany	Italy	Poland	Portugal	Greece	France
Ratio	58%	54%	52%	51%	50%	49%
Country	Belgium	Austria	Netherlands	Spain	Luxembourg	South Korea
Ratio	46%	45%	45%	45%	41%	37%
Country	Australia	Czech	Japan	Britain	USA	Hungary
Ratio	36%	36%	35%	30%	30%	29%

Note. Adapted from ILO, Global Wage Report 2014/15 'Wages and Income Inequality'.

### CONCLUSION

### Effects of minimum wage increases:

### (1) Raising labor cost

To some extent, the level of employees' salary reflects the relative value of their job in the firm. We use U to represent the relative value of a job, and p to represent function pay. From the principle of internal equity of salary system, we can get formula (1)

$$\frac{U_1}{p_1} = \frac{U_2}{p_2} = \frac{U_3}{p_3} = \dots = \frac{U_m}{p_m}$$
 (1)

 $U_m$  refers to the relative value of the job of low-skilled employees who get salary in accordance with minimum wage, and  $p_m$  refers to the function pay of these low-skilled persons. When minimum wage increases, low-skilled workers can get more salary. At the same time, salary of other employees rises too according to formula (1). Therefore, labor cost increases. An abundant of cheap labor is a comparative advantage in China, which is an important motive force to China's economic growth. The comparative advantage will be lost by raising the minimum wage. Labor-intensive enterprises in Beijing have to face the rising level of labor cost and loss of profits, and some of them will feel difficult to survive. Considering of the higher labor costs, some labor-intensive enterprises will leave Beijing.

#### (2) Improving labor productivity

In social economical activities, improving labor productivity depends on the human resource management and maximizing its efficiency. According to the efficiency wage theory, minimum wage increases will raise the overall wage level of enterprises, which helps the enterprise to improve labor productivity Paying high wages has advantages in four aspects. The first one is workers' health, which means higher wage can provide nutrient-rich food to make workers healthier. When workers become healthier, their productivity will rise. The second one is workers' mobility, which will decline when wage rises. The third one is the effort of workers. When workers find they will lose the higher wage if they are fired as a punishment of being lazy, they will do their best to preserve their job. The last one is the quality of workers. High-quality workers will be attracted by higher wage, so higher wage is an effective method to recruit high-quality workers. Minimum wage increases will raise the overall salary level of Chinese enterprises, which will contribute to a better staff motivation, and

change the present situation of low labor productivity in Chinese enterprises.

### (3) Promoting the upgrading of industrial structure

Labor is the most important production factor, and the wage of laborers has a significant impact on the industrial structure. In the case of the low cost of labor, enterprises always take the advantage of it to develop labor-intensive industries, and lack of technological innovation. Many Chinese enterprises have depended on the cheap labor resources for a long time. The aim pursued by these enterprises is the low cost rather than technological innovations. Many enterprises are unwilling to spend money on updating technology or improving the overall quality of the workers. Instead, they prefer to hire more cheap labor force and less advanced technology, which causes the weak desire for technological progress and the low capability of independent innovation. The result is that Chinese industry structure has been in a lower level for a long time, and in the bottom of the international industry division. Minimum wages increases will force Chinese enterprises to get out of the "low-technology trap" and update industrial structure.

### **REFERENCES**

Addison, J. T., & Demet Ozturk, Orgul. (2012). Minimum wages, labor market institutions, and female employment: A Cross-country analysis. *Industrial & Labor Relations Review*, (65), 779-809.

Akerl, G., & Yellen, T. (1986). *Efficiency wage models of the labour markets*. Cambridge, UK: Cambridge University Press.

Card, D. (1992). Using regional variation in wages to measure the effects of the federal minimum wage. *Industrial and Labor Relations Review*, (46), 22-37.

Giuliano, L. (2013). Minimum wage effects on employment, substitution, and the teenage labor supply: Evidence from personnel data. *Journal of Labor Economics*, (31), 155-194.

Manning, A. (1995). How do we know that real wages are too high? *Quarterly Journal of Economics*, (4), 1111-1125.

Papps, K. L. (2012). The effects of social security taxes and minimum wages on employment: Evidence from Turkey. *Industrial & Labor Relations Review*, (65), 686-707.

Smith, R. E., & Vavrichek, B. (1992). The mobility of minimum wage workers. *Industrial and Labor Relations Review*, (46), 82-88.

Wang, J., & Gunderson, M. (2012). Minimum wage effects on employment and wages: Dif-in-dif estimates from eastern China. *International Journal of Manpower*, (33), 860-876.