

# THE IMPACTS OF MINIMUM WAGE POLICY IN CHINA

*Mixed results for women, youth and migrants*

**Li Shi and Carl Lin**

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# CHINA



4.6

Unemployment Rate



37.0

GINI



15250

GDP per person  
employed  
(constant 1990 PPP \$)



# THE IMPACTS OF MINIMUM WAGE POLICY IN CHINA

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## Introduction

Since China enacted its first minimum wage law in 1994, the magnitude and frequency of changes in the minimum wage have been substantial, both over time and across jurisdictions. The impact of the minimum wage and its controversial nature has sparked heated debate in China, highlighting the importance of rigorous research to inform evidence-based policymaking.

This chapter summarizes the impacts of the minimum wage policy in China on various aspects of the labor market: overall wages, employment, gender and income inequalities, and regional disparities. The authors pay special attention to

the 1.68 million rural-urban migrant workers in China, focusing on the wage and employment impacts they experience as a result of minimum wage policies.

***Minimum wage policy should focus on its initial intended purpose – ensuring that workers receive remuneration at a particular threshold to provide for their basic needs. Beyond that, the minimum wage should not be used as the primary tool to accomplish other political and economic goals.***

The chapter's findings show that since 2004, nominal minimum wages in China have increased substantially, at an average of 11 percent per year, leading to positive effects on wages and decreases in gender wage differentials and income inequality. On the other hand, the rising minimum wage has resulted in job

losses for young adults, women, and low-skilled workers.

For migrant workers, the minimum wage has only small negative impacts on migrants' employment in the east and central regions of the country and no effect in the west. In addition, this research finds that employers have increased the monthly working hours of migrant workers. Offsetting the costs of a higher minimum wage by increasing the number of working hours means that employers do not have to layoff migrant workers.

Taken together, this research shows that the minimum wage policy in China has resulted

in both positive and negative effects. As such, policymakers are confronted with a tradeoff. The authors propose, however, that in its application by policymakers, minimum wage policy should focus on its initial intended purpose – ensuring that workers receive remuneration at a particular threshold to provide for their basic needs. Beyond that, the minimum wage should not be used as the primary tool to accomplish other political and economic goals, such as increasing average wages or promoting social development.<sup>i</sup>

## The politics of minimum wage setting in China

China is in the midst of a transition from a planned economy to a market economy. As a result, the country faces economic and social problems that impede its long-term sustainable development. Moreover, the social instability resulting from widening income inequality, corruption, and social exclusion has become a major concern for the Chinese government. To respond to these challenges, both central and local governments are placing new emphasis on inclusive growth, introducing a number of new policies and regulations. Especially in recent

years, the government has actively intervened in the labor market – increasing job-training opportunities for unskilled workers and migrant workers, more strictly implementing new labor contracts, ensuring job stability, and expanding coverage of social insurance programs.

Raising the minimum wage has been one of the Chinese governments' most important labor market interventions. Since adopting the "New Minimum Wage Regulation" in 2004, the nominal minimum wage has increased significantly,

*i In China, there already are, for example, macroeconomic policy and social security/assistance measures such as unemployment insurance, medical care, and urban minimal living assurance systems that seek to improve the functioning of the labor market and reduce poverty.*

with average growth of 11 percent per year nationally. The process is largely driven by political competition between local governments at the city and provincial levels in response to the central government's appeal to raise the wage share of national income, as outlined in the 12th Five-Year Plan.<sup>ii</sup> The plan specifies the mean minimum-to-average wage ratio should reach 0.4 by 2015. As of 2009, the ratio was 0.29.<sup>iii</sup>

Since China's political system is highly centralized and hierarchical, the way in which the minimum wage is determined can be quite different from developed and other

developing countries. Local governments are eager to win the central government's support in the form of infrastructure development, fiscal transfers, bank loans, and land use. Moreover, promotions of local officials at provincial and city levels are determined by the central government.<sup>iv</sup> By raising the minimum wage, local governments signal their determination to address issues such as income inequality that could otherwise threaten political stability.

In past decades, local governments had kept minimum wages low because they worried that high wages would

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*ii In the last ten years, the Chinese central government has gradually changed its development goals from emphasis on economic growth to social development. The government is also less concerned with production incentives and more focused on equitable distribution. This implies that wage growth and wage equality could become new indicators for the central government to evaluate and monitor the performance of local economic and social developments and efforts of local officials.*

*iii Urban Household Surveys (2004-2009).*

*iv Given the political system in China, the local governments have strong incentives to meet the desires of the central government since the promotion of local officials is decided by the central government. (See: Y Chen, H Li and L-A Zhou. 2005. Relative performance evaluation and the turnover of provincial leaders in China. Economics Letters 88, 421-425). The relevant studies indicate that the political status of a province is positively correlated with the provincial economic ranking in China, when the central government sets up economic growth as a priority. (See: E Maskin, Y Qian, C-G Xu. 2000. Incentives, scale economies and organizational form. Review of Economic Studies 67, 359-378). Li and Zhou present evidence on the link between political turnover of top provincial leaders and provincial economic performance, which is interpreted as the central government's method for controlling local officials. (See: H Li, L-A Zhou. 2005. Political turnover and economic performance: The incentive role of personnel control in china. J Public Econ 89, 1743-1762.)*

cause jobs to shift to districts with cheaper labor costs, exacerbating already high levels of unemployment in particular regions. Once China's labor market began to thrive, concerns over unemployment diminished and local governments began raising wages substantially and consistently. They calculated that any disemployment resulting from wage increases would likely affect migrant workers. As migrant workers are not eligible for unemployment benefits, any increase in migrant worker unemployment would not drive up fiscal spending. Given this dynamic, local governments in coastal cities, which host the most migrant workers, enacted the most significant wage increases.

The Chinese minimum wage policy has been regarded as the solution not only to protect workers with a wage floor, but to increase the income of the poor and reduce inequality.<sup>v</sup> But very limited empirical research has studied the consequences of the minimum wage policy in China. This chapter seeks to answer the following questions:

1. What are the wage and employment effects of China's minimum wage?
2. How are minimum wages set at city and provincial levels in China?
3. What are the impacts of minimum wages on wage distribution, the gender wage gap, and income inequality?

## A brief history of minimum wage legislation in China

Prior to 1994, China had no minimum wage law. China issued the first national minimum wage regulations in 1993, and in July 1994, these regulations were written into China's new labor law.

The 1994 legislation required that all employers pay wages no less than the local minimum wage. Further, all provincial, autonomous regions, and municipal governments were required to set the minimum wage according to six principles:

*v The political competition among local governments would speed up the rise of the minimum wage. As a matter of fact, this would presumably hasten labor migration to coastal areas, leading to greater imbalances. Moreover, this competition process is hypothesized to be harmful to the economic growth in the western region and lead to widening regional economic disparity in China.*

- the cost of basic living expenses of workers;
- the average number of dependents workers support;
- local average wages;
- the level of labor productivity;
- the level of local employment; and
- the level of economic development.

These conditions provided considerable flexibility for provinces in setting minimum wages; the economic development principle gave them the flexibility to limit the minimum wage to attract foreign investment.<sup>1</sup> High minimum wages would mean higher operational costs, which could reduce China's attractiveness to foreign investors looking to invest in Chinese businesses.

In the early 2000s, sluggish growth in minimum wages, along with growing concerns for uninsured workers, led the government to introduce new minimum wage regulations. The

new law, announced in January 2004, extended coverage to all employees in state-owned and private enterprises, own-account workers, and private, non-enterprise (non-profit) units.<sup>vi</sup> In particular, the new law established two types of minimum wages: a monthly minimum wage applied to full-time workers and an hourly minimum wage applied to part-time employees.

Moreover, the minimum wage standards are set and adjusted jointly by the local government, trade union confederation, and enterprise confederation of each province. The draft is then submitted to the Ministry of Labor and Social Security for review, and the Ministry asks for opinions from the All China Federation of Trade Unions (ACFTU) and the China Enterprise Confederation. The ACFTU, however, is a government body, which means that the authority to set minimum wages ultimately rests within the Ministry.

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***According to the new regulation, local governments must renew their minimum wage standards at least once every two years, and compared to the previous legislation, penalties for violations quintupled – from a maximum of 100 percent to a maximum of 500 percent of the owed wages.***

*vi Private non-enterprise units are equivalent to NGOs as defined by the Chinese government.*



Figure 1  
Provinces and Regions in China



standards at least once every two years, and compared to the previous legislation, penalties for violations quintupled – from a maximum of 100 percent to a maximum of 500 percent of

the owed wages. Moreover, employers could no longer include extra allowances such as overtime pay or food and travel subsidies as part of an employee's wage to meet the minimum standard.

## How does the minimum wage affect earnings and employment?

Fang and Lin found that minimum wage changes in China led to significant negative effects on employment in the eastern and central regions

(see **Figure 1**), and caused disemployment for young adults and low-skilled workers, particularly workers who at the time of a minimum wage



increase were receiving a wage between the old and new minimum wage.<sup>2</sup> They also show that minimum wages in the provinces with vigorous enforcement did increase average wages, but

this simultaneously had an adverse effect on employment. This trade-off between an increase in the minimum wage and job protection has been extensively discussed in the literature.

## Gender and minimum wages in urban China

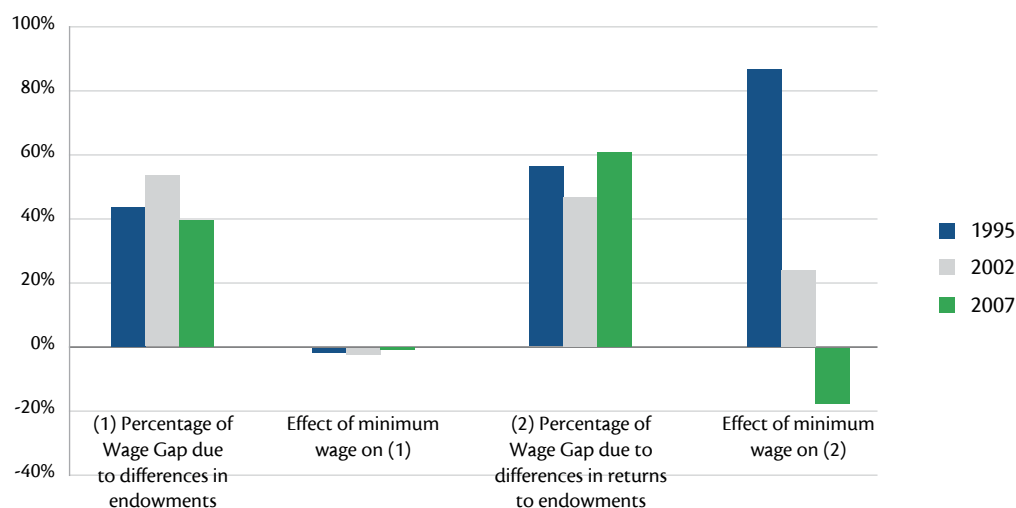
In urban China, the gender wage gap was small when there was a planned economy. But as the country began to transition to a market economy, especially after the 1990s, when state-owned enterprises (SOEs) were reformed further, the gender wage gap gradually expanded. The implementation of a minimum wage system generally contributes to an increase in wages for all low-income groups. Therefore, if a higher proportion of female workers are paid below the minimum wage level, then the implementation of a minimum wage system should narrow the gender wage gap. Ma and Li provide evidence that minimum wages do have an impact on the gender wage differentials in urban China, based on data from the China Household Income Project Surveys of 1995, 2002 and 2007.<sup>3</sup>

The authors of the study provide three major findings. First, they do not find a spike in the percentage of workers at the minimum wage as the statutory wage floors are increased, a phenomenon seen in some countries such as the United States. Second, in 1995, 2002 and 2007, the proportion of female workers earning wages below the minimum wage was higher than that of men. Third, minimum wage levels have different impacts on male and female workers' wages.<sup>vii</sup> For example, in 1995 a minimum wage increase of 100 yuan (US\$ 15.6) raised males' average wages by 3.2 yuan (US\$ 0.50) and females' average wages by 2.7 yuan (US\$ 0.42).<sup>viii</sup> But at the low end of the wage distribution (the 1<sup>st</sup> and 3<sup>rd</sup> percentiles), the rise in the minimum wage level has a slightly larger impact on females' average wages.

*vii Ma and Li show that in 1995, the gender gap between the average wage and the minimum wage level (between males and females) is -8.0 yuan (US\$ 1.25). In 2002 and 2007, however, the gaps are 8.9 yuan (US\$ 1.4) and 22.1 yuan (US\$ 3.5), respectively. In other words, the difference between females' wages and the minimum wage standard was larger compared to those of males in 1995; in 2002 and 2007, the difference was smaller for females than for males. (See: X Ma, S Li. 2014. Impact of minimum wage on gender wage differentials in urban china, China Institute for Income Distribution Working Paper No.16.)*

*viii The numbers for male and female are 3.5 yuan (US\$ 0.55) and 2.8 yuan (US\$ 0.44) in 2002 and 3.4 yuan (US\$ 0.53) and 2.4 yuan (US\$ 0.38) in 2007.*

Figure 2  
**Contribution of the Minimum Wage on Reducing Gender Wage Gaps in China**



Ma and Li show that the gender wage gap is the largest in regions with high minimum wage levels, and smallest in regions with “middle” minimum wage levels.<sup>ix</sup> According to their research, increasing minimum wage levels reduces the wage gap between men and women for incomes above the sixth percentile in the wage distribution. This illustrates the “sticky floor phenomenon” – a wage gap between female

workers and their male counterparts even for jobs that require relatively few skills and little education.

The study also shows that endowments – for example, land, skills, and time – lead to a gender wage gap directly, because men receive a higher set of endowments than women. There is also a gap in terms of return on endowments; in other

<sup>ix</sup> According to Table 1 in Ma and Li, middle and high minimum wage levels are 165-175 yuan (US\$ 25.8- US\$ 27.4) and over 175 yuan (US\$ 27.4) in 1995, 285-330 yuan (US\$ 44.6-51.6) and over 330 yuan (US\$ 51.6) in 2002 and 510-615 yuan (US\$ 79.8 – 96.2) and over 615 yuan (US\$ 96.2) in 2007, respectively. (See: X Ma, S Li. 2014. Impact of minimum wage on gender wage differentials in urban china, China Institute for Income Distribution Working Paper No.16).

words, even if men and women had the same set of endowments, men would earn more. The study finds that the gender pay gap is due even more to the latter than the former.

Both the effect of endowments and the effect of the returns to endowments are affected by changes to the minimum wage. Changing the minimum

wage impacts returns to endowments more than it affects the distribution of endowments themselves. The fourth column in **Figure 2** shows the effect of the minimum wage on the gender wage gap via the returns to endowments. The implication is that raising the minimum wage is a more effective tool for narrowing the gender pay gap than directly providing women endowments.

Table 1  
**Decomposition of Earnings Inequality and Contributions of the Minimum Wage, 2004-2009**

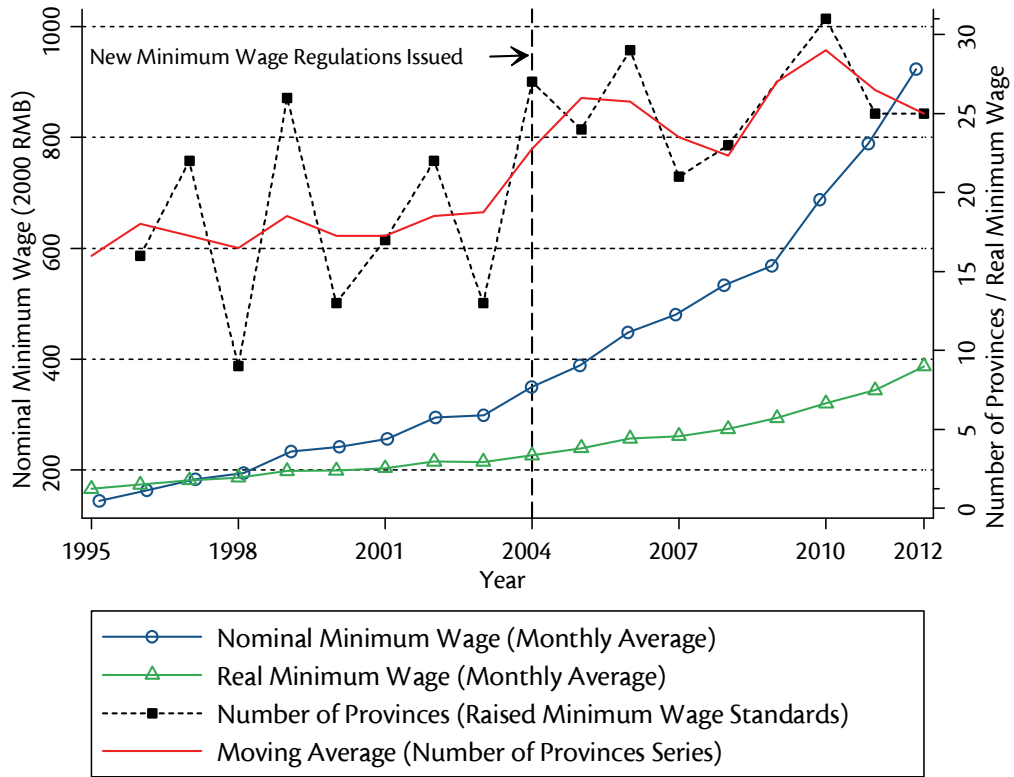
For wage earners at the lower end of the distribution, changes to the minimum wage have the effect of reducing inequality. Labor market characteristics, meanwhile, have caused inequality to increase.

Earnings inequality measure	Total change between 2004 and 2009	Due to	
		(1) Changes in minimum wage	(2) Changes in labor market characteristics
Gap between 50th percentile and 10th percentile of wage earners	.058*** (.007)	-.092*** (.012)	.150*** (.013)
Gap between 50th percentile and 25th percentile of wage earners	.031*** (.006)	-.044*** (.010)	.076*** (.010)
Gap between 75th percentile and 50th percentile of wage earners	.046*** (.005)	.043 (.032)	.003 (.012)
Gap between 90th percentile and 50th percentile of wage earners	.019*** (.006)	-.003 (.026)	.022 (.025)
Gap between 90th percentile and 10th percentile of wage earners	.077*** (.008)	-.095*** (.033)	.171*** (.032)
Gini coefficient	.004*** (.002)	-.050*** (.013)	.055*** (.012)
Variance of log earnings	.022*** (.002)	-.069*** (.013)	.091*** (.013)

\*\*\* denotes a high degree of statistical significance (p-value of 0.99)

**Note:** The table is drawn from Lin and Yun (2015). All numbers are in log points. Bootstrapped standard errors with 100 repetitions are given in parentheses. Earnings gaps, Gini coefficients and variances are calculated at individual level.

Figure 3  
**Minimum Wages in China, 1995–2012**



**Note:** Nominal wages have been adjusted for inflation and are expressed in 2000 yuan (RMB).

# Minimum wages and inequality in urban china

Lin and Yun used a large set of city-level data, containing relevant information on the minimum wage combined with a longitudinal household survey of 16 representative provinces, to estimate the effect of minimum wage changes in China over the period 2004-2009 across different income groups.<sup>4</sup> Compared to previous studies using provincial-level data and reporting mixed results, their study shows that minimum wage changes significantly help reduce the earnings gap at the bottom end of the earnings distribution – between the 10<sup>th</sup> percentile and the median wage. As one would expect, minimum wage changes did not have an effect on other parts of the wage distribution – for instance, the gap between the median wage and the 90<sup>th</sup> percentile. Their analysis also suggests that minimum wage reduces earnings inequality measured, for example, by the Gini index.

Lin and Yun's findings are consistent with recent studies for other countries, reporting that the minimum wage plays an essential role in lowering wage inequality. Both the U.S. and Mexico, for example, have seen a declining real minimum

wage and rising inequality, and empirical evidence shows that the declining minimum wage accounts for a substantial part of the growth in inequality in both countries over the past three decades.<sup>5</sup> In contrast, China has experienced both a rapid increase in the minimum wage *and* rapidly increasing income and earnings inequalities in the past 10 years.

Lin and Yun's findings that minimum wage increases have beneficial effects on the earnings distribution – by reducing the earnings gap particularly at the bottom end of the wage distribution – have both regional relevance and general implications in the context of the minimum wage literature. They break down the rise in inequality to show that minimum wage mitigated that increase.

For example, from 2004 to 2009 the earnings inequality between the 10<sup>th</sup> percentile and the median wage grew, but by far less than it would have without minimum wage.<sup>x</sup> In other words, the increase in income inequality that China has witnessed would have been more severe if not for the growth in minimum wages.

***By offsetting the costs of a higher minimum wage by increasing the number of working hours, employers do not see the need to layoff workers.***

<sup>x</sup> The earnings inequality between the median and 10th percentile workers (p50-p10) grows by 0.058 log point from 2004 to 2009. By decomposing this gap, they find that labor market characteristics increase the gap by 0.150 log point, whereas the minimum wage significantly decreases the gap (-0.092 log point) during this period.

## Minimum wages and migrant workers

The minimum wage in China has received increased attention because of growing income inequality and the vulnerable position of low-wage migrant workers who are flooding into cities. The national minimum wage in China has more than doubled over a brief period: from 474 yuan (US\$ 74) in 2004 to 1072 yuan (US\$ 167.37) in 2011. In advanced economies, most low-wage workers are paid by the hour and regulations prevail on legal working hours. In China, by contrast, most low-wage migrant workers are paid by the month, and minimum wage legislation does not specify the number of working hours. As such, employers may extend employees' working hours to compensate for increased costs. This unintended consequence of the minimum wage legislation is of particular importance for migrant workers who may receive less legal protection and may be more affected by minimum wage legislation than other workers.

***Most low-wage migrant workers are paid by the month, and minimum wage legislation does not specify the number of working hours. As such, employers may extend employees' working hours to compensate for increased costs.***

Yang and Gunderson used a large migrant household survey dataset and municipal data to investigate the impact of increases of minimum wages on migrant workers' wages, employment and working hours.<sup>6</sup> The results indicate that the minimum wage has only small negative impacts on migrants' employment, with the largest negative effects for rural female workers and for workers in east and central China. But because employers increase the hours worked by migrant workers in each month to offset some of the cost increases due to higher monthly minimum wages, the amount workers actually earn per hour does not increase. This adjustment in part explains the absence of adverse employment effects that are commonly found in the minimum wage literature on China. By offsetting the costs of a higher minimum wage by increasing the number of working hours, employers do not see the need to layoff workers.

# Conclusions

The minimum wage has been regarded as an important element of social protection policy in many countries around the world. Increasing the minimum wage is intended to raise wages for millions of low-income workers and enhance their well-being. Yet existing literature from mostly industrialized countries provides no consensus on whether the minimum wage is an effective policy tool. Studying the effects of the minimum wage is even more complicated in developing countries such as China than it is in industrialized countries because of large informal sectors in urban areas, large pools of surplus labor in rural areas, and difficulties in ensuring compliance with minimum wage legislation. Since China instituted its first minimum wage law in 1994, the magnitude and frequency of changes in the minimum wage have been substantial, both over time and across jurisdictions.

China is a large developing country that is transitioning to a market economy, with an abundance of workers in low-paid occupations that are affected by changes in the minimum wage. Although its experience with minimum wages is new, the findings of this chapter's authors offer general implications for other transition and developing economies. Most

importantly, this research on China shows that when the minimum wage increases rapidly – an 11 percent per year growth rate since 2004 – the effects are significant. China's experience illustrates that rapid increases in minimum wages have led to an increase in average wages and a reduction in the gender wage gap and income inequality. However, the fast rising minimum wage has resulted in job losses for young adults, women, and low-skilled workers.

This research highlights the importance of rigorous research to inform evidence-based policymaking. Despite the fact that the minimum wage policy is popular and welcome by most policymakers and workers around the world, the debate in academia has gone on for decades, and no consensus about its effects have emerged. Minimum wage policy should focus on its initial intended purpose – ensuring that workers receive remuneration at a particular threshold to provide for their basic needs. Beyond that, the minimum wage should not be used as the primary tool to accomplish other political and economic goals, such as increasing average wages or promoting social development; there are other more effective policy tools to achieve these broader goals.



## Endnotes

<sup>1</sup> S. Frost. 2002. Labour standards in China: The business and investment challenge. In *Association for Sustainable and Responsible Investment in Asia*; J Wang and M Gunderson. 2011. Minimum wage impacts in china: Estimates from a prespecified research design, 2000-2007. *Contemporary Economic Policy* 29, 392-406.)

<sup>2</sup> T Fang and C Lin. 2013. Minimum wages and employment in china. IZA Discussion Paper No. 7813.

<sup>3</sup> X Ma, S Li. 2014. Impact of minimum wage on gender wage differentials in urban china, China Institute for Income Distribution Working Paper No.16.

<sup>4</sup> C Lin, M-S Yun. 2015. The effects of the minimum wage on earnings inequality: Evidence from china. In: Cappellari L, Polachek S, Tatsiramos K (Eds). (Bonn: IZA Workshop on Inequality: Causes and Consequences).

<sup>5</sup> D S Lee. 1999. Wage inequality in the United States during the 1980s: Rising dispersion or falling minimum wage? *The Quarterly Journal of Economics* 114, 977-1023; M Bosch and M Manacorda. 2010. Minimum wages and earnings inequality in urban Mexico. *American Economic Journal: Applied Economics* 2, 128-149.; DH Autor, A Manning, CL Smith. 2014. The contribution of the minimum wage to U.S. Wage inequality over three decades: A reassessment. National Bureau of Economic Research Working Paper Series No. 16533.

<sup>6</sup> J Yang and M Gunderson. 2014. The impact of minimum wages on migrant workers's wages, employment and hours. China Institute for Income Distribution Working Paper No.15.