Challenges and Resolutions in China's Labor Market

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Abstract: Ever since the rapid development of Chinese economy and society in the past decades, China’s labor market has been facing some serious issues and major challenges. Based on previous studies and empirical research, this paper analyzes the challenges in the Chinese labor market from three angles, including Recruitment Difficulties, Imbalance between Labor Demand and Supply, and Rising of Labor Cost vs. Widening Income Inequality, the worsen of industrial relations, and the global challenges for enterprises and employees. In the past decade, China’s labor market experienced two waves of recruitment difficulties, one in 2003-2008 and the other since 2009, there are some differences in jobs, area and sectors in the two waves. Authors explain Recruitment Difficulties from population aging, skill shortage, irrational industry structure and low wages and harsh working environment with data prediction and findings from surveys conducted in several Industrial Parks in Chinese cities such as Beijing, Suzhou, etc.. The second part of the paper analyses the imbalance of employment which is reflected in two aspects: regional structure and competence structure. This paper uses the CIER index to reflect the imbalance of labor market in quantity and quality based on the data from Zhilian Recruitment, the largest recruitment company in China. The third major challenge is Rising of Labor Cost and Widening Income Inequality. The fourth and the fifth major challenge is the worsen of industrial and the global challenges for Chinese enterprises and employees. This paper introduces and explains the changing of labor cost and income inequality in past decades in China based on previous researches. With these challenges in mind, this paper will then analyze the present situation and access the degree of possible threats these major challenges may present to China’s labor market. The paper will end by proposing corresponding solutions and policy suggestions for the government.
from four aspects, including expansion of labor supply, promotion of labor demand,
adjustment of employment structure and reform of income distribution mechanisms.

Key words: Challenges; Resolutions; China; Labor Market
I. Introduction

China’s labor market has undergone significant changes in the past 30 years. A more and more unified labor market has emerged, when employment obtained more attention from the government and labor force migrated from rural to urban areas. Long before 2003, China was in a typical dual economy development stage where the labor market is characterized by the unlimited supply of labor. The recruitment difficulty in 2003 caused a lot of discussion about the coming of Lewis turning point in China (Cai, 2007; Wu, 2007), and some other new issues.

Chinese economy has been growing very fast in the past 30 decades since the Reform and Opening up (see Figure 1), with an average growth rate of GDP at 9.8%. China has the second largest GDP in the world since 2010. According to World Bank standard, China has become a middle-income country. However, this does not mean that China can enter the category of high-income countries easily without facing the risk of Middle Income Trap.

![GDP and GDP Growth Rate in China 1979-2013](image)

**Figure 1 GDP and Its Growth in China: 1979-2013**
The growth of Chinese economy has been slowing down since 2012, the growth rate being 7.7%, 7.7%, 7.4% in 2012, 2013 and the first half year of 2014 respectively, and even below 7% in August 2014 (see Figure 2). President Xi Jinping said that this would be a *New Normal Status (NNS)* for Chinese economy in the future. NNS means that the Chinese economy was starting to change, and that economic growth would bid farewell to high speed and the traditional unbalanced, uncoordinated, and unsustainable growth pattern over the past 30 years. Chinese economy will keep growing in the future, but will enter a new stage of transition from high speed to middle-high speed growth and of industrial restructuring.

![The growth rate of GDP in China (%)](image)

**Figure 2 Growth rate of GDP since 2013**

This change of Chinese economy and labor force bring a series of challenge to Chinese labor market, such as recruitment difficulties, imbalance of competence structure and rise of labor cost vs. widening income inequality, worsening of industrial relations and the challenge of globalization for Chinese enterprises and employees. This paper analyses new challenges and their causes, and puts forward some corresponding policy suggestions.

II. Challenges in China’s Labor Market
Recruitment Difficulties

Since the second half of 2009, China witnessed the reappearance of labor shortage in coastal areas, resulting from China’s strong economic recovery. Shortage of rural migrant workers intensified in the Pearl River Delta area and the Yangtze River. Export-oriented manufacturing enterprises became concerned with labor shortage, in lieu of order shortage around the Spring Festival of 2011.

This wave of shortage of rural migrant workers is different from the other one in 2003 in four aspects: timing, area, industry and posts. (1) The timing of labor shortage was earlier than previous years. (2) The labor shortage area is wider. (3) Labor shortage mainly hit processing and manufacturing industries as well as service industries, compared with only the manufacturing industries in 2004. (4) Labor shortage occurred in production line operative jobs, which was different from the labor shortage of technical workers in 2003-2008.

In order to measure the relationship between supply and demand in the labor market of China, we develop the CIER Index to reflect the competitive intensity of labor market. The CIER Index is calculated by “Number of job seekers/Number of job vacancies” based on the data from Zhilian Recruitment, the largest recruitment company in China. The larger the CIER index is, the more competitors there are for job vacancies and the more intensive the labor market is. From the CIER Index of 2010-2014 in Figure 3, we can find that the CIER Index is declining because of the rising demand and the sluggish supply, which means that recruitment is becoming more and more difficult (CIER, 2014).
The main cause of labor shortage in this wave is the aging population in China. Over the past three decades, the largest contribution to economic growth is capital accumulation, accounting for about 71% (Cai, 2009). There is a direct correlation between capital investment and demographic dividend. First of all, the demographic dividend shows that the decline of dependency ratio brings the high savings, high accumulation capital to invest. Secondly, the population bonus shows that labor supply is unlimited, which breaks the law of diminishing returns to capital in the neo-classical growth theory. Research found that every 1% decline of dependency ratio brought 0.115% growth of economy (Cai, 2009). Since the 1970s, the birth rate has been declining in China. Along with the growing proportion of population aged 15-64, the gross dependency ratio decreased until 2011 (see Figure 4). Low dependency ratio and the rise of labor force bring population bonus to China’s economy through the channel of labor supply and technical promotion (Hu, 2009).
China’s birth rate has undergone an extreme decline because of the family planning policy (or the one-child policy), which resulted in a quickly changed population structure, the problem of aging population and the loss of population bonus in a short period (see Figure 5). The gross dependency ratio stopped decreasing in 2011, and increased for 0.2%, 0.5% in 2011 and 2012. Since 2000, the proportion of age above 65 in population has exceeded 7% (see Figure 4). According to the international standard, this means that China has become a society of aging population. In 2012, the proportion of 65+ was 9.4%. UN’s World Population Prospects predict that the proportion of 65+ will be 16% in 2030, and 24% in 2050, 28% in 2100 (Figure 6). The proportion of age 15-64, the labor age population, decreased for the first time in 2012, from 74.4% in 2011 to 74.1% in 2012 (Figure 4), showing that the relationship between labor supply and labor demand has undergone a fundamental change (Zeng & Lu, 2008).

This rapidly aging population leads to the fact that labor demand cannot be met, and that the rapid growth of Chinese economy like the last thirty years cannot be sustained. This brought serious challenges to China's labor market and economic development.
In 2003, recruitment difficulty appeared for the first time in China, which got increasingly serious with time. More and more scholars think that China has arrived at the Lewis turning point (Cai, 2007), and the time of infinite labor supply is over. Such as Wang (2011) said China young migrant workers under the age of 35 have dried up now, and the shortage of migrant workers come 10 years earlier in advance. China is from the stage of an unlimited supply of labor to the new stage of the labor shortage.

![Figure 5 China population by age groups and sex (medium fertility)](source: World Bank: World Population Prospects: The 2012 Revision; Available at: http://esa.un.org/unpd/wpp/)

ii. Imbalance of Competence Structure

Along with the disappearance of the demographic dividend, the resource reallocation effect acquired through the transfer of labor force in each department, and the stable return to capital effect from unlimited supply of labor will gradually disappear. Chinese economy has stepped into the stage of economic development, from the dual economy to a stage of new classical growth. China’s economy must rely on the improvement of labor productivity as a source of sustainable economic growth.

The improvement of capital to labor ratio is one of the ways to promote labor productivity. The contribution ratio of capital to labor productivity has grown from 45.3% in 1978-1994 to 64% in 1995-2009 and 65.9% in 2010-2015. However, the limited higher capital labor ratio may encounter the phenomenon of the troubled

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decreasing returns to capital. The World Bank predicts that the contribution ratio of capital will decrease in 2016-2020 (Figure 7). Therefore, boosting the total factor productivity is the fundamental way to improve labor productivity. The growth of TFP could offset the adverse effects of diminishing returns to capital, which is the enduring engine for sustainable economic growth, though contribution of TFP to labor productivity has been decreasing from 46.9% in 1978-1995 to 31.4% in 1995-2009, and 28% in 2010-2015.

The growth of TFP comes from the efficiency of both resource reconfiguration and micro production. Resource reconfiguration efficiency is obtained by the adjustment and upgrade of industrial structure. In the 12th-five year plan, the Chinese government called for developing modern industrial system and improving core competitiveness by upgrading manufacture, developing strategic emerging industry and speeding up the development of service industry.

This upgrade of industrial structure needs higher qualification of the labor force, which is also the fundamental factor for improving micro production efficiency.
However, in the survey of Suzhou Industrial Park in 2013, we found that there were some occupations with long-term skill shortage or high mobility (see Table 1), which means that there is an imbalance between competency structure of labor force and the need of economic development.

Table 1 The lists of long-term skill shortage & occupation with high Mobility in Suzhou Industrial Park in 2013

<table>
<thead>
<tr>
<th>long-term skill shortage</th>
<th>Occupation with high Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 skilled operatives</td>
<td>skilled operatives</td>
</tr>
<tr>
<td>2 Process Engineer</td>
<td>unskilled operatives</td>
</tr>
<tr>
<td>3 Electrical Technician</td>
<td>welder</td>
</tr>
<tr>
<td>4 R&amp;D Lead engineer</td>
<td>Sr. Maintenance Engineer</td>
</tr>
<tr>
<td>5 Product Engineer</td>
<td>R&amp;D engineer</td>
</tr>
</tbody>
</table>

The imbalance competency structure is mainly reflected in the two groups of graduates and migrant workers. Rural Migrant Workers Office of the State Council found that 40% of new-generation migrant workers are only junior middle school graduates and 57% of them don’t have any technical skills; more than ¼ of them never joined any skills training program (Figure 8) (Rural Migrant Workers Office, 2014).

Figure 8 Competence Structure

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Although the number of Chinese college graduates has grown fast since 1998, their employment rates are not optimistic because of their low employability (Zeng & Niu, 2009; Zeng, 2004). We conducted a survey on the graduate employees in Zhongguancun Science and Technology Park in 2009, and found that the reasons for employment difficulties of university graduates are related to their ability. From Figure 9, we can find that “The gap between the employability of university graduates and the actual needs of employers” is the most important reason for the employment difficulty of university graduates.
The shortage of skilled labor force has become another challenge in the Chinese labor market both now and in future which results from some reasons. Firstly, the expansion of university enrollment resulted in the oversupply of labor market, and the absence of career guidance resulted in the fact that students have no experienced career guidance (Wang et al., 2011). The second cause is the inadequacy of employment information caused the non-transparency of labor supply and demand information (Zeng, 2009). And the one-sided perception of employment was also the reason for the employment difficulties.

iii. Rising of Labor Cost vs. Widening Income Inequality

Lower labor cost is one of the most important factors for China’s rapid economic growth since the Reform and Opening up. Along with the change of population structure and the arrival of Lewis turning point, the average wage has increased rapidly since 1998 and the average wage growth rate for state-owned enterprises is higher than that for other enterprises (see Figure 10) (NBS, 2013). The rise of wage leads to higher labor cost, which has undermined the competitiveness of China’s foreign trade and further influenced the development of Chinese economy.
Despite the continuous rise in the past 15 years, the average labor cost of China remains lower than other countries in the world (see Figure 11).

Although the wages is rising, the rapid economic growth has created prominent income inequality in China. China's Gini coefficient has remained higher than the

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UN warning level of 0.4 since 2000 (see Figure 12).\(^5\) Meanwhile, considering the unequal social security system bringing the different welfare which worsen the income inequality, that China’s level of inequality is among the highest in the world (Li and Luo, 2011).

![Gini coefficient in China, 2003-2012](image)

Figure 12 Gini coefficient in China, 2003-2012

Wage gaps between rural and urban residents (see Figure 13), between private and non-private sectors remain wide (see Figure 14). Income of rural residents is the same as 30% of that of urban residents; worker wages in urban private enterprise in 2010-2012 was 56.3%, 58.7% and 61.5% compared to workers in urban non-private enterprises. In non-private sectors, the highest income occupations were finance and information technology with the annual amount of RMB 89,743 and RMB 80,510; the lowest income occupation were agricultural and forestry with the annual amount of RMB 22,687, and RMB 31,267 (Wu, 2013). This unequal distribution and concentration of income to top earners and the owners of capital has generated public dissatisfaction, and increased the risk of social unrest.

\(^5\)Source: NBS statistical data.
Along with the rising of labor cost and widening of income gap, which may result in the decline of cost competitiveness, inability to compete with advanced economies in high-skill innovations, and challenge of the next stage of development as leaders seek to transform the nation into a high income country. Therefore, the middle income trap is another challenge in China labor market.

iv. **Worsen of Industrial Relations**

For a long time, China was proud of the fortunes being made by its labor-intensive industries, but currently, the past glory of low labor costs has placed a heavy burden on the industrial peace of this “world factory”. From 2000 to 2010, there were
150,000 collective labor disputes in arbitration, covering approximately 3.96 million workers. The number of workers involved in the collective labor disputes peaked in 2003 and 2008. Although recently the number of collective labor disputes in arbitration experienced a slight decrease, the increasingly severe labor unrest and labor protests attracted more and more public attention (Pak Nang Leung, 2007: 3).

Two typical incidents of labor unrest and protests are Foxconn’s suicides and Honda’s strikes in 2010. The suicides at Foxconn suggested that the Dormitory Labor Regime (Pan Ngai, 2007) that is widely used in labor-intensive manufactories can render serious labor problems. The suicides also brought public and academic attention to the assembly line workers’ work-life balance and psychological health. The 2010 Honda strike was viewed as unprecedented because it suggested the possibility of reaching a collective labor contract through negotiation (Estlund and Gurgel, 2012). Several years of increasing labor protests followed, suggesting that labor-management relationships should be a crucial part of HRM practices in China labor market.

Most of the recent labor protests occurred in private and foreign-owned enterprises in coastal China (Taylor et al., 2003; Chan and Pun, 2009). From 2000 to 2009, the labor disputes primarily took place in Guangdong, Jiangsu, Beijing, Shanghai, Shandong and Zhejiang. In addition, collective labor protests have some correlation with the regional industrial distribution. In coastal China, most strikes or slowdowns were started by assembly line workers in manufacturing industries such as the digital industry or the car manufacturing industry. In other provinces, such as Henan, Shaanxi, and Xinjiang, most collective labor actions are started by taxi drivers and bus drivers. During the labor protests, the workers posted various appeals, most of
them concerning increasing the wage rate, reducing working hours, seeking more employee benefits, requiring equal treatment, and asking for the right of participation in management processes.

Reviewing the cases of labor protests in China currently, it is notable that the employees are making basic demands of employers, for security, mutual communication and equality. Security demands mean that employees can receive their wages and salary on time and in full and that employees can work in safe environments. This type of security is a basic demand from workers to maintain a continuous and harmonious employment relationship, and most of the labor protests have been triggered by a failure to meet this demand (Zeng et al., 2012a, 2012b). A communication demand means that the employees’ voice can be heard, and employees can communicate with management on issues concerning their interests (Budd, 2004). It was found that most enterprises had only one-way communication channels: messages were passed along from employers to employees through billboards and bulletins. Employees, being the passive recipients of information, seldom had the chance to convey their feelings, ideas and expressions to the management. Gradually, the employees’ feelings of dissatisfaction accumulated. Equality demands refer to providing employees with equal access to payments, employee benefits, and opportunities for promotion. Currently, increasing numbers of employees care about equal treatment at the workplace level. If in everyday management, any of the three types of employees’ demands are not met, grievances and dissatisfaction will accumulate and eventually break out, leading to disastrous outcomes. The employers cannot focus solely on improving work efficiency; more attention should be paid to managing industrial relations.
v. Global competition of talent

In November 2001, China became a WTO member, indicating a new era of comprehensive involvement in economic globalization. Compared to China’s debut on the world stage in the late 19th century, it is playing a more active and mature role. Frequent economic and cultural interactions with other countries have brought about changes in industrial structures as well as in the labor market. In 2001, approximately 200 Fortune 500 multinational companies were conducting business in China, and this number increased to over 400 by 2005. Currently, almost all multinational companies regard China as the most important emerging market. (Zeng and Su, 2009). In 2014, President Xi Jinping put forward “One Belt (the Silk Road Economic Belt) and One Road (the 21st Century Maritime Silk Road)” project in APEC, which means more and more China enterprises go abroad in the future.

During the globalization of economy, Chinese employers and employees also faced global challenges. Enterprises should improve their HRM ideology, techniques and skills to meet the international standards to attract and retain high-level talent. Along with the Chinese enterprises go to the world, Chinese labors are facing more competition. Especially, the challenges from cultural, political, economic, and social differences are the urgent problem need to consider and resolve (Warner, 1993; Child, 1994; Su and Wright, 2012).

In general, China’s labor market faces the challenge of aging population structure, lower labor force quality, rising labor costs, income inequality, and worsening of labor relations, which the Chinese government needs to address with reasonable measures to ensure continued development of the Chinese economy and avoid the Middle Income Trap.
III. Conclusions and Policy Orientation of the Government

There are some challenges in the Chinese labor market, including recruitment difficulties, imbalance between labor demand and supply, and rising of labor cost vs. widening income inequality, which come from population aging, skill shortage, the imbalance of labor market in quantity and quality, etc. In order to deal with these challenges, the government should adopt corresponding solutions and policies, including the expansion of labor supply, promotion of labor demand, adjustment of employment structure and reform of income distribution mechanisms, and so on.

First of all, introduce policies to expand labor supply. On the one hand, a much easier population policy could be introduce, which means to loosen the country's family planning rules, and allow each resident couples to have two children. Unfortunately, population policy could not provide more labor force at once, so we can ease the difficulty in recruitment by progressively raising the retirement age to 65 by the year of 2050 for both men and women. On the other hand, employees could be allowed to continue working and getting paid for several years after the retirement age, which will increase their incomes and reduce the pension fund's outward payments.

Secondly, promote labor demand by keeping the sustainable growth of economy. On the one hand, the government should support small and medium-sized enterprises by cutting taxes for small business owners and stimulating their potential of creating jobs. On the other hand, China should accelerate the speed of upgrading the industrial structure and make independent innovations which can ensure that productivity growth continues and China stays away from the “middle income trap” to keep the stability of labor market.
Thirdly, adjust employment structure to solve the imbalance of labor supply and demand. Implement employability promotion strategy, including: (1) Carry out educational reform, for example, adjust the curriculum to improve the employability of graduates to meet the needs of employers, as well as the reform of National College Entrance Examination. China’s Education Ministry has revealed that China will soon unveil a reform plan for the College Entrance Examination, whereby technical capability and academic aptitude will be tested in two separate systems. (2) Develop vocational education with the focus on supporting rural secondary vocational training and to establish an education system featuring vocational education with general education. (3) Make a plan of regional specialization of industry clusters, to lead a rational labor allocation based on regional resources and advantages. (4) Promote intermediary service to reduce frictional unemployment.

Fourthly, reform the income distribution mechanism to reduce income inequality. (1) Implement targeted policy to groups in different income levels: increase the revenue of low-income people, scale up middle-income groups as well as limit high-income group’s earnings. (2) Adjust the structure of national income distribution by gradually increasing the proportion of the incomes of residents, and increasing the share of work remuneration in the primary distribution, which can boost consumer demand to realize continuous and stable economic growth.

The fifth, to avoid the middle income trap, transform the pattern of economic growth from export-led, investment-led and government-directed to consumer-led. An expanding middle class can use their increasing purchasing power to buy high-quality, innovative products and help drive growth. Moreover, building a high-quality education system to invest in human capital is critical to avoid the middle-income trap.
through launching immediately a war on poor education, health and nutrition as one step in helping China avoid the Middle Income Trap in the coming years. In addition, investment in early childhood development by policy makers is fiscally responsible to reduce costs and create economic growth. Heckman Equation suggests a nearly 10% annual rate of return to the state on money invested in early childhood education.

The sixth, Chinese enterprises should strive to balance short-term low-cost advantages and long-term technological innovation. Currently, most Chinese enterprises still focus on short-term benefits and are pursuing low profit margins at the cost of employees’ benefits. Now is the time for Chinese enterprises to break the bottleneck of low labor costs and develop new advantages. Technical upgrading and industrial restructuring would ultimately light the way for China’s industrial development. At the same time, it must be admitted that currently most small and medium enterprises in China lack the momentum to transform from low-cost oriented to high-tech oriented businesses, and the race to the bottom game will last long in China’s industrial field. As a result, there will be a continuous tug of war between the short-term low-cost advantage and long-term technological innovation in China enterprises.

In addition, the government should also pay more attention to the reform of pension insurance system and protection of employees’ rights. Such efforts include the advancement of government agencies, realization of trade union professionalization and promotion of collective bargaining system and improvement of their collective bargaining capacity.
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ii A string of suicides at a factory in China owned by Taiwanese firm Foxconn, a large contract manufacturer, took place between January and November 2010. A total of 18 employees attempted suicide; of these, 14 died and 4 were seriously injured. http://www.bbc.co.uk/news/10182824, 2013-03-31-13:14

iii On May 27, 2010, over 100 employees at a Honda auto parts factory (Guangdong) started walkouts over pay. As a result, four Honda auto assembly plants in China had to stop production, forcing the company’s management into negotiations. On June 4, 2010, a collective agreement was reached between Honda and the workers. http://www.china.org.cn/business/2010-06/10/content_20223069.htm, 2013-03-31-13:14