

Four Topics on Wage Changes in the Chinese Economy

Cai Fang Wang Meiyuan

1. The Overall Trends of Wages in China

Foxconn, the world biggest manufacturer of electronic products, took the lead in wage rising, with one-off increase in compensation by over 30% after being blamed for twelve cases of chain suicide of its employees. It seems to indicate that 2010 is a year of significant wage rise in China. If one, however, closely follows the dynamics of migrant workers' wages, he or she should know that the event is just the continuation of the trend of wages increase since 2003, the year that first witnessed the labor shortage and thus the year of significance in the Chinese economic development. This essay discusses issues related to wages increase of ordinary workers, its root causes and implications for decision-makings in terms of public policy and private business.

Wages Increases as General Trend and by Sector

Wages growth in China has been long trend, especially since the late 1990s, in which mass redundant were laid off and as a result, the productivity enhanced. As shown in Fig. 1, the 3-years smooth growth rates for average and selected sectors' wages have been above 8% since this century, the fastest comparing with rest of the world by whatever grouping. However, while the Chinese statistics are very complicated, the data on wages are the most difficult to understand. That is, it is not proper to understand the dynamics of China's wages by just looking at figures in Figure 1, because they mainly reflect the wages rates for formal employees. Given that the migrant workers, who mainly take informal jobs in non-agricultural sectors, make up one-third of urban employment, the increase in migrant workers' wages deserves specially examining.

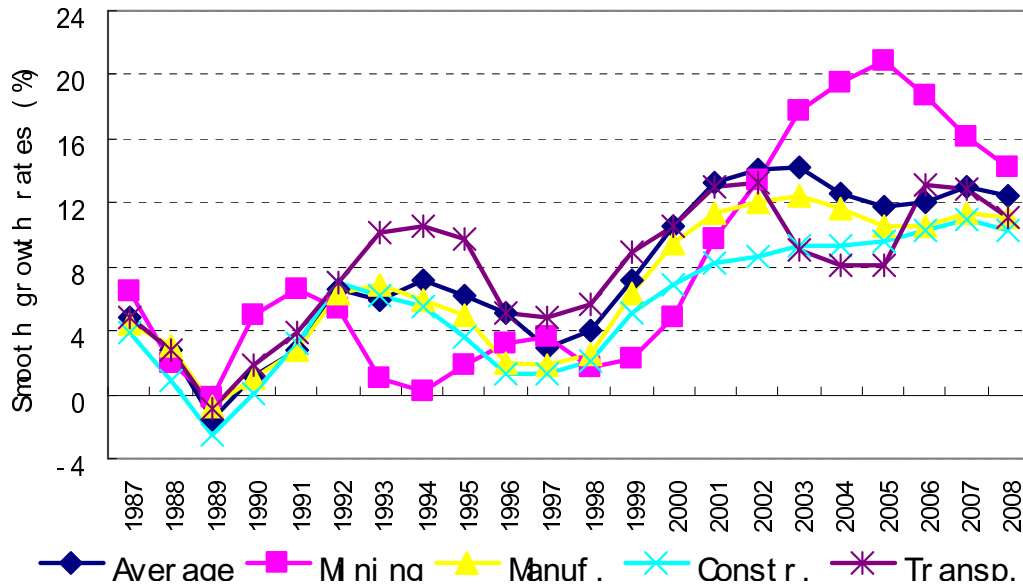


Figure 1 3-Years Smooth Growth Rates of Wages in Selected Sectors

In fact, before 2004, when urban local workers' wages began to zoom, the wages of their migrant counterparts had still suffered long stagnation. Only began in 2004, when migrant labor shortage appeared for the first time, have their wages grown rapidly. In the period 2003 to 2008, the annual growth rate of migrant workers' wages was 10.3%, a significant surge in comparison with the previous stagnation.

In his eminent works, Arthur Lewis characterized the economy in developing countries as a dual economy, in which there is a large pool of surplus laborers in agriculture. The modern sector grows therefore with absorbing surplus labor force an unchanged wage rate. When the growth rate of labor demand in modern sector exceeds the growth rate of labor supply drawn from agriculture, such an economy reaches its turning point – the Lewis turning point. The arrival of the turning point doesn't mean absolute exhaustion of labor force, but it only means that enterprises can only find suitable workers at a raised wage rate.

The Supporting Forces of the Wages Inflation

The rise of wages in China is not a regional and temporary phenomenon but overall and persistent phenomenon. The factors explained as follows will sustain the increase in wages of ordinary workers, particularly of migrant workers, in the long run.

First, as a result of demographic transition, the change in population age structure has been reducing the increment of labor force. Before China reaches its population peak of 1.44 billion in around 2030, the increment of working age population is predicted to decrease with annual rate of 13.6 percent in the period 2004 to 2011 and to become zero in around 2015 and negative afterwards (see Figure 2). After a momentary break during the 2009 financial crisis, the labor shortage, which first appeared in 2003, resurged in September 2009 and became widespread after Lunar New Year of 2010. Given that the labor shortage has its demographic root cause, wages increase will continue and is more likely to speed up.

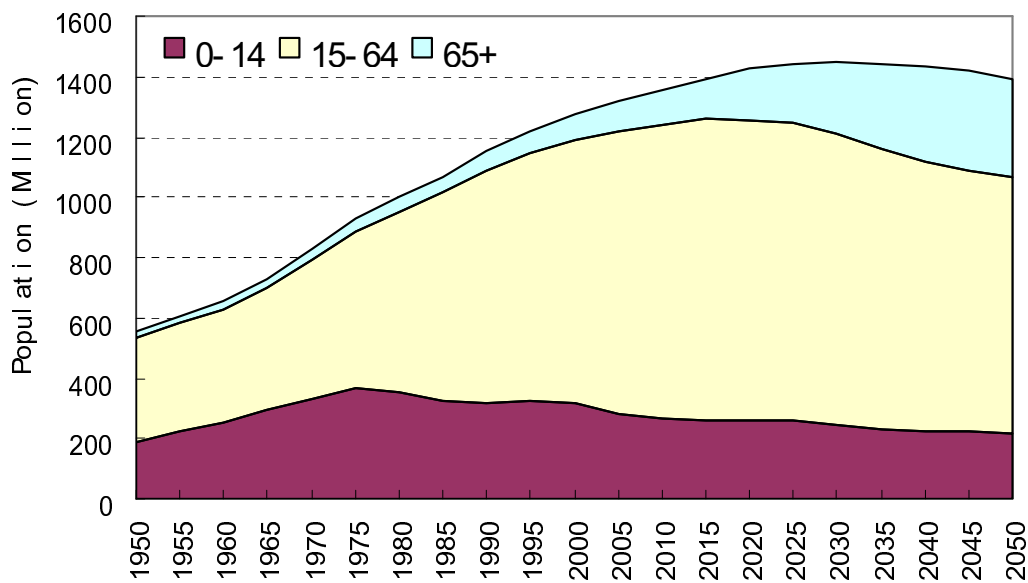


Figure 2 China Population Prediction

Second, labor market institutions building is accelerating, which provides legitimate and institutional supports to a reasonable increase in wages. One example is the changes in levels and the frequency of adjustment of minimum wages standard. As required by the central government - namely, the level of minimum wages has to be adjusted every other year and to apply the program to migrant workers, and also pressured by the labor shortage, municipal authorities have increased the adjustment frequency and local level of the minimum wages since 2004. The numbers of cities that adjust their local standard of minimum wages have enlarged, and the magnitude of each adjustment has also increased. During the period of 2009 financial crisis, all Chinese cities did not raise the minimum wages since the policy priority at the time was to stabilize employment. Since 2010 when the Chinese economy became clearly

recovered from the recession, a wide range of cities began to raise the minimum wages again.

Moreover, the government began to strengthen the role of trade union in protecting workers' rights and to introduce collective bargaining on compensation and working terms. In response to workers' growing demand for higher pay and better protection in labor market, those practices in labor market institutions building will create an institutional climate for well-balanced growth of wages. As the Lewis turning point arrives, more job opportunities imply that ordinary workers have gained their rights to vote with their feet. If borrowing Albert Hirschman's explanation on how and under what conditions people use the approaches of "exit" and "voice" to express their dissatisfaction in modern society, the case of China's labor conflict is like this: assured by obtaining rights to exit, they increasingly tend to voice their dissatisfaction about pay, working conditions, and other benefits in work place.

Will the Wage Inflation Cumber with the Economic Growth?

Fear for wage increase by investors is that the inflated wage rate may weaken the comparative advantage of China's labor-intensive industries and thus harm their commodities' competitiveness. Three reasons can release the fear. That is, in the near future, the wage inflation will not damage the sustainability of China's economic growth, and the further source driving the growth is expectable.

First, the more rapid growth of labor productivity guarantees that the wage inflation will do no harm to comparative advantage of manufacturing. Based on nationwide data of manufacturing firms, we found that in the period 2000 to 2007, while workers' compensation in real term increased by 91.8%, marginal product of labor increased by 178.7% (Figure 3). It is clear that not wage alone but the ratio of wage to labor productivity determine a firm's, sector's or country's competitiveness. In our study, no matter based on marginal productivity of labor or average productivity of labor, the calculated unit labor costs – the ratio of work compensation to labor productivity – declined by more than 30% totally or over 5% annually in the period concerned.

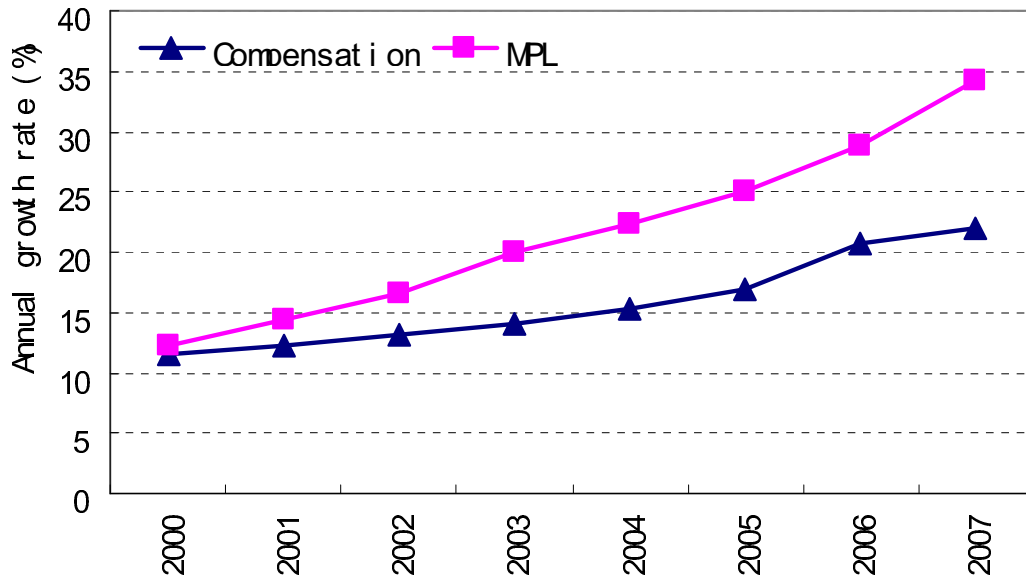


Figure 3 Compensation and Labor Productivity of China's Manufacture

Secondly, China's spatial vastity and regional diversity create opportunity for the central and western provinces to carry on labor-intensive industries which become outdated in the coastal regions. In the conventional flying geese paradigm, when one country encounters labor cost increase, the labor-intensive industries are usually transmitted to its less-advanced counterpart countries, because the latter hold comparative advantage in those industries. That is what has happened among East Asian economies since 1960s when Japan became the first country in the region entered its Lewis turning point. Such a paradigm, however, can be revised into a domestic version in China's case. Namely, the labor-intensive industries can continue growing in the less-developed regions.

In the first years of this century, the capacity of industrial development in the central and western regions has substantially improved, as the result of the central government's implementation of going-to-the-west strategy aimed to invest in infrastructure in favor of the those regions. That has created conditions for those regions to catch up with the coastal regions and carry on the transferred industries. The fact is, right after raising wage rate by 30%, Foxconn has moved its main factories to Zhengzhou, the capital city of Henan, the most populous province in central China, and it has planned to recruit 200 thousand local workers.

Thirdly, the wage increase and its continuance will create a new group of consumers in China, which in tern generate a rebalance in the Chinese economy (as well as in the world

economy) and sustain its growth. In 2009, the Chinese migrant workers amounted to 145 million, accounting for more than one-third of urban employment. By adding those rural non-agricultural workers that work within their home townships, the number of rural-origin non-agricultural workers is as large as that of US's working age population (15 years old and above).

About this population size, three things should be borne in mind. First, although the level of migrant workers' wage rate is below the average of urban labor market, the huge size of migrant workers makes their total earnings a significant income and potential consumption expenditure. Second, being at the bottom of income distribution, migrants' income increase implies the shrinkage of inequality. Third, as is generally expected, the low income group has bigger consumption elasticity of income – namely, stronger marginal propensity to consume, migrants are more likely to become next giant consumers in China. That will support China's transformation from export-led to domestic demand-driving growth.

2. The Increase in Migrant Workers' Wages and their Difference among Regions

Since 2003 the migrant workers' wages have significantly increased as a result of labor shortage, a phenomenon never seen before in PRC history. Though there is handful of studies debating that it is doubtful to conclude a meaningful increase in migrants' wages, the figures cited by this essay from NBS are more authoritative and consistent with economics logic. Most importantly, distrusting the actual increase in ordinary workers' wages can hardly justify itself while there is obvious reaction by both domestic and international investors.

This essay tries to find the answers to questions such as (1) is the wage increase transitory phenomenon or long-term trend, (2) what are the driving forces for the wage growth, (3) are the trends the same among regions, and (4) what would be the near future trends for the wages increase.

The Shortage of Migrant Laborers

Many Chinese scholars and policy-makers have difficulty to accept the fact that there is

widespread labor shortage in China, because the long-standing existence of surplus labor force in agriculture has made itself not only a legacy but also a conventional wisdom. In previous essay (*The Overall Trends of Wages in China*), we presented the demographic cause for the labor shortage in general. Here, we depict some more superficial phenomena of migrant labor shortage in particular throughout China, coastal and inland.

While many of the major newspapers in China and abroad have reported the shortage of migrant workers, the survey conducted by the Chinese Manufacturers' Association of Hong Kong (CMA) is most recent source available and authoritative. According to this survey, which involved 222 enterprises in Pearl River Delta region, Southern China, 90% enterprises claimed that they have had difficulty to recruit adequate workers, and that on average 21% posts are in vacancy. Taking a look at how enterprises, governments and workers respond to the labor shortage is not only convincing but also entertaining.

China is known for its developmental state mode – namely, the local governments' duties are closely tied to the chariot of enterprises' performance. When local firms have operational problems, they go and complain to the governments. As a response to the wide complaints of labor shortage, the local governments actively respond in various forms, such as establishing job agencies or signing contracts of labor dispatch with agencies in labor sending regions. On the other hand, migrant workers, especial their new generation, tend to frequently change jobs. In some enterprises, the employees' turnover rates are over 80% annually. In an interview, a journalist was told by the interviewee that the young migrant worker had changed jobs for 40 times within the previous 4 years. If labor market works – that is, if the supply-demand law is true, the logical result of the labor shortage would be wages increase.

Significant Increase in Migrant Workers' Wages

When discussing about the turning point of economic development characterized by wages hike, Sir Lewis emphasized that only unskilled workers' wages increase matters, since there is always scarcity in skilled workers at whatever stages of economic development. Since the wages data of urban formal employees in China's statistics are so aggregate and average that they are unable of reflecting the status of unskilled workers, it's best to take migrant

workers' wages as proxy for unskilled workers'.

There was no any statistics distinguishing migrant workers' wages from the urban workers' before 2001. When announcing a survey on migrant workers conducted in 2004, the then-Commissioner of National Bureau of Statistics (NBS) asserted that the migrant workers in Pearl River Delta regions earned essentially the same wages as their older generation had earned 20 years previously. In fact, at the time he made this impressive comment to media, the data showed that migrants' wages started to increase already and migrant labor shortage appeared in China for the first time. Figure 4 shows that not only have the wages in manufacturing and construction increased constantly, which mainly reflects the general trend of wages since they do not specifically represent migrant workers' wages, migrant workers' wages have been catching up.

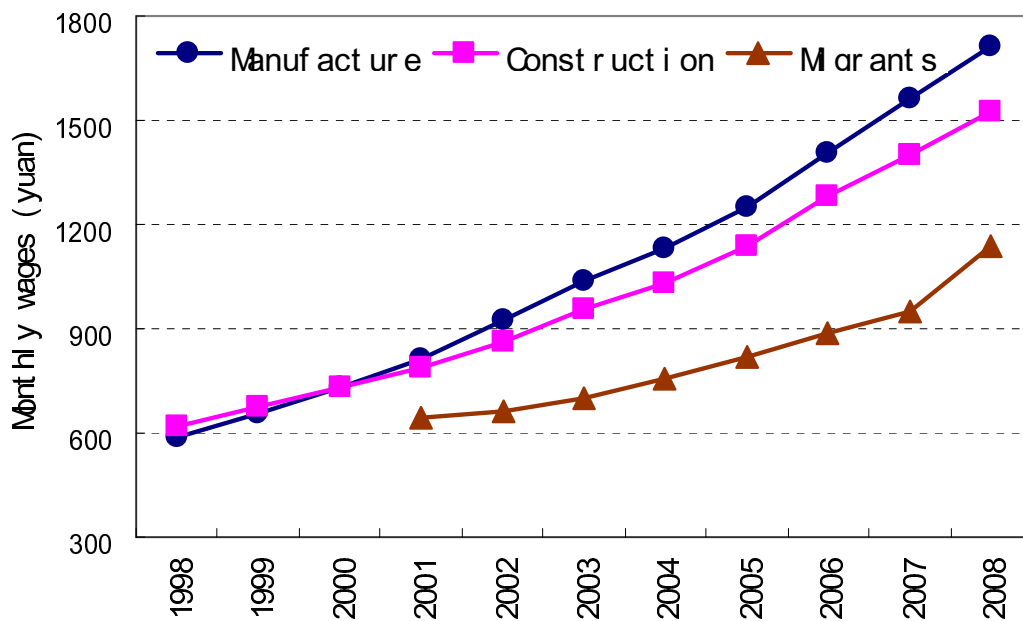


Figure 4 Migrant Workers' Wages Catch up

Apart from the NBS source present in Fig.1, there are other individual surveys and new reports, which assert even higher levels and faster growth of the migrants' wages. For example, a survey conducted by the People's Bank of China, the central bank, in early 2010, shows that average wage of migrant workers was 1783.2 yuan in 2009, 17.8% increase comparing to previous year. In fact, to compare local and migrant workers' wages requires combining wage rates with working hours, because they work in different ways. According to

a survey conducted in 2010 (called China Urban Labor Survey or CULS), migrant workers work 27% more hours a week than do urban local workers. That is, migrants have to work longer in order to get higher monthly wages. As a matter of fact, the same survey shows that while migrants' wages were only 88.2% local urban workers', the monthly wages of the former were slightly higher than that of the latter (5.6% higher) after adjusting the difference in weekly working hours between them.

As the migrants' demographic characteristics change, the new generation migrant workers tend to work fewer hours than did their older counterparts. The result of CULS shows that migrant workers worked nearly 12.4 hours less than did their predecessor in 2005. That is, the growth of migrants' wages and their convergence to urban locals' shown in Table 1 can imply a larger surge of actual wage rate (e.g. if measured by hourly wage rate).

Regional Differences of Migrant Workers' Wages

There are three factors that influence the regional pattern of migrant workers' wages. First, the differences in economic development levels, employment opportunities, and consumption prices levels determine that the eastern provinces are more advantageous in holding higher wage rate of migrant workers. Secondly, labor market integration – namely, labor mobility increases as institutional barriers are eliminated, tends to create conditions for wage convergence. Thirdly, the regional development policies impact regional disparities of migrants' wages. The centrally implemented strategy of going to the west has allocated huge investments in the western regions that stimulate infrastructure construction and capital-intensive industries, and the transferring of manufacture creates more jobs in the central regions. All those factors generate a convergence of wages.

With all factors described above, the regional pattern and dynamics can be perfectly expected, which is shown in Table 1. First, the wage rate in Eastern regions has been the highest, whereas the wage rates of the three regions have been converging. Second, by receiving the transferred investments from coastal regions, the Central regions have gained more employment opportunities and thus had faster growth of wages than in Eastern regions. Third, due to their faster and more capital-intensive growth, the migrants' wage rate in the

Western regions has increased faster, comparing with both the eastern and central regions.

Table 1 Migrant Workers' Wages by Region (yuan)

| | East | Central | West |
|------------------------|------|---------|-------|
| 2003 | 760 | 570 | 560 |
| 2005 | 912 | 760 | 788 |
| 2006 | 981 | 821 | 869 |
| 2008 | 1150 | 1085 | 1083 |
| 2009 | 1221 | 1159 | 1183 |
| Annual growth rate (%) | | | |
| (2003-2009) | 8.22 | 12.55 | 13.27 |

A Demographic Factor Impacting Trend of Migrants Wages

The rural labor exodus began in 1980s along with the Chinese reform has been evolved into a large tide of migration since the mid 1990s. Now a new generation of the migrant workers has emerged. According to a NBS survey, the migrant workers aged between 16 and 30 amounted to nearly 90 million, accounting for 61.6 percent of the total in 2009. The CULS results also show a dramatic alteration in migrant workers' demographic characteristics. That is, comparing with their older counterparts, the younger generation of migrants holds the following characteristics. One, they are better educated, with 42.3 percent graduated from senior high school and higher (college), comparing with 25.3% for those aged between 31 and 40 and 20.1% for those aged between 41 and 50. Two, 13.1 percent of them are only child of their family, product of nationally implemented family-planning program, whereas the percentage of those aged 31 to 40 is 3.3 percent and that of those aged 41 to 50 is only 2 percent. Three, 32.8 percent of the young migrants had actually lived in cities and towns before they reached the age of 16, whereas the percentage for the two older groups is 24.9% and 25.3%, respectively.

Such a demographic factor of migrants may have an influence on regional pattern of

their wages. As previous studies indicate, rural laborers with more advantageous demographic characteristics – namely, better education and younger age, are more likely to migrate and tend to migrate farther and longer from home. In the near future, with the trends that witness labor-intensive industries transferring to inland provinces and industrial upgrading taking place in the coastal provinces, the younger generation of migrants will work and reside in the eastern regions, while older generation would be more likely to work near their home towns in the central and western regions. That is, the spatial difference in migrant workers' wages will remain, but it is more a reflection of differentials of human capital in stead of regional segmentation of labor market.

3. The Rise of Labor Costs and Fall of Labor Inputs in Agriculture

There are two concerns about the increase in ordinary workers' wages in China. A first is whether the rise of wages is long-term trend. If it is caused by the changed labor demand and supply relationship, which is typically manifested by the Lewis turning point arrival, rather than by institutional barriers deterring labor mobility or tensed labor disputes, it will have long lasted until the wages gap between modern and traditional sectors vanishes. A second is whether such wages rise can cause inflation. This is partially related to the first concern. Namely, if the labor shortage is a result of the Lewis turning point, and if the labor productivity in agriculture can be enhanced in accordance with the increase in labor costs, inflation would not happen. Otherwise, if the labor productivity of agriculture could not offset the effect of the reduction of labor input in the sector, there would be a food shortage. This essay examines those issues.

Rise of Labor Cost in Agriculture

Although one cannot ignore the fact that there has been widespread labor shortage in China since 2003, there are arguments on the major cause of the labor shortage. That is, it is hypothesized by some observers that instead of the fundamental reason – namely, the Lewis turning point arrival accompanied by demographic change, one, two or all of the following

factors may cause the perceived labor shortage: (1) the mismatch between skills demanded by enterprises and skills supplied by laborers, (2) the existing institutional obstacles, such as *hukou* system and spatial segmentation of labor market, and (3) the government-implemented favorable policies towards agriculture that raise rural laborers' reservation wage – namely, reluctance to work in non-agricultural sectors at the current wage rate. While it deserves detailed empirical studies to respond to those arguments, they can be ruled out from decisive factors giving rise to the labor shortage if it is convinced that labor costs are increasing and labor inputs are reducing in agriculture, which the surplus laborers originate from.

First of all, let's see how fast the wages rates of hired workers have grown in agriculture since 2003. Before the late 1990s, when labor force was typically surplus, hired labor was rarely seen in agricultural sectors. While mass rural laborers migrated to urban jobs, it became common to hire paid workers in agriculture. Therefore, wages of hired agricultural workers can be the indicator of the degree of labor surplus. As is shown in Fig.5, the wage levels and dynamics of wages are clear-cut before and after 2003, the year of Lewis turning point. Whereas there had been stagnation of wages rates in all farming sectors in the period 1998 to 2003, in the period 2003 to 2008, their annual growth rates have substantially gone up – 15.1% in grain production, 11.3% in oilseed production, 21.4% in pig farm with 50 pigs or more, 9.4% in vegetable production, and 11.7% in cotton production (Fig. 1), which have in essence kept pace with the increase in migrant workers' wages, if not faster.

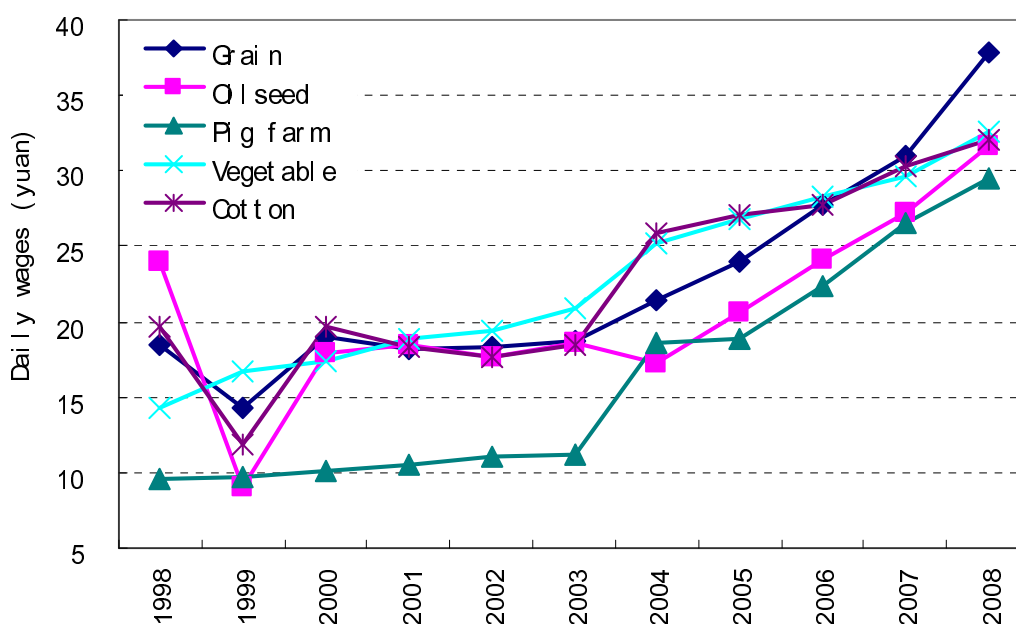


Figure 5 Hired Workers' Wages Rates in Agricultural Sectors

Secondly, we move to look into daily wage of farm household laborer. This is kind of shadow wage rate for household laborer by considering costs of living, labor market wage rates, and the opportunity costs of household laborers engaged in farming. The growth of such a wage indicator has closely followed the path of that for hired workers' wages. Namely, after stagnation in the period 1998 to 2003, it increased dramatically, with an annual growth rate of 9.5%.

The basic idea of the Lewis turning point is that labor surplus becomes less and less as the result of mass labor migration from rural to urban sectors, and the wages of ordinary workers increase constantly. As rational and calculative producers, farmers would respond to the changes by altering inputs strategy.

Reduction of Labor Input in Agriculture

As the labor cost increases, farmers respond in two ways, either of which would reduce labor inputs in agriculture. First, in agricultural production, labor and physical capital (machineries and equipments) can be substituted for each other, to some extent. That is, if the labor cost increases faster than capital costs do, farmers tend to reduce the inputs of workforce by using more labor-saving technologies – namely, powers, tractors and towing machineries. Second, if the increase of labor cost causes disincentive of farmers planting agricultural crops, they reduce labor inputs either by reducing the sown area planted or by planting extensively. Before we find out what ways in which farmers actually react in the face of the labor cost increase, we look into the real reduction of labor input.

Rice, corn and wheat are major crops in China, accounting for 77% of grain production and for 53% of total agricultural crops in 2008. We take those crops as an example to see how much and how fast labor inputs have reduced after the Lewis turning point. As is shown in Fig. 6, while the labor inputs in grain production have always been shrinking in the period examined, the year of 2003 does indicate a turning point, after which the labor inputs of the three crops further declined more rapidly and simultaneously. In the period 2003 to 2008, the

work days per *mu* (equivalent to 0.165 acre) in the productions of rice, corn and wheat reduced by 30.8%, 30.1%, and 32.2%, respectively.

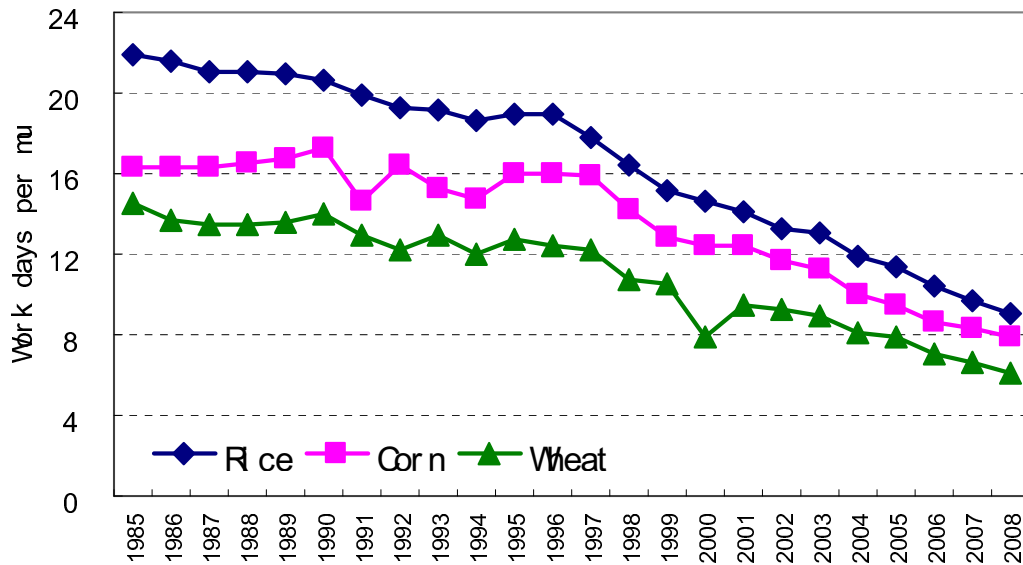


Figure 6 Changes in Labor Inputs of Grain Production

The Technological Change in Agriculture

The unlimited supply of labor is the essential characteristic of the Lewisian type dual economy. The Chinese economy had been full of redundant laborers in both rural and urban sectors before it reached the Lewis turning point in around 2003, and agriculture basically provided a pool for surplus laborers. Statistically, the employment in agricultural sector was not determined by how many workers it needed, but it was a residual of the country's total employment. That is, while employment share of agriculture declined over time as a long trend, the actual numbers of laborers engaged in agriculture rose and fell as the numbers of workforce needed by non-agricultural sectors periodically fell and rose. Once labor became a scarce factor of production, and the unlimited supply of labor can no longer characterize the economy as a whole, agricultural technology cannot but respond to the changed endowment of production factors.

The orientation of technological advancement in agriculture is in general directed by the relative prices of production factors. When labor became short factor of production relative to physical capital, agricultural producers tend to adopted labor-saving technologies. The

distinction of properties characterizing the agricultural technological changes before and after the Lewis turning point can be found in the process of China's agricultural mechanization. In the period 1978–98, when there was surplus labor in agriculture, the annual growth in the capacity of large and medium-sized tractors was 2%, while that of small-sized tractors was 11.3%. In the period 1998–2008, as the mass labor force shifted from agricultural to non-agricultural sectors and, as a result, there emerged stronger demand for labor-saving technological changes, the capacity of large and medium-sized tractors increased by 12.2% annually and that of small-sized tractors decreased by 5.2%. Changes in the growth rates of different sizes of tractor-towing machinery show a similar trend, with the annual growth rate of large and medium-sized tractor-towing machinery increasing from zero growth in the period 1978–98 to 13.7% in 1998–2008, whereas the annual growth rate of small tractor-towing machinery declined from 12.1% to 6.9% in the same period.

In the meantime, the inputs of physical capital in agriculture, as a substitution for the inputs of labor force, have increased dramatically. During the period 2003 to 2008, for example, the capital inputs per *mu* of rice, corn and wheat increased in real term by 51.1%, 32.0%, and 41.0%, respectively. One can clear notice that the increase in inputs of physical capital are even in a bigger pace than the decline in inputs of labor force for all those grain crops. As a result of falling labor inputs and faster rising physical inputs in production, Chinese agriculture's capital–labor ratio, which is denoted by the ratio of physical inputs to labor inputs, has risen rapidly since 2003. According to the theory of induced technological changes coined by Hayami and Ruttan, this labor-saving tendency during the rapid process of agricultural mechanization is the natural result of the ultimate abatement of the surplus labor force in agriculture. It is hardly surprising that the total factor productivity (TFP) of the agricultural sector has also witnessed a rapid rise during the same period—increasing by 38% between 1995 and 2008, with a sudden rise after 2003. The fact that a possible negative effect of decline in labor inputs on agricultural capacity has been offset by an actual positive effect generated by the enhancement of labor productivity of agriculture can prevent the economy from encountering food price inflation.

4. Wages Gap and Wages Convergence: Unskilled vs. Stilled Workers

It is commonly agreed among economists that wage differentials are caused by difference of human capital that workers possess – education, health, and skills, and by discrimination in labor market. Like in other developing countries and in the early stages of development of industrialized economies, the features of wage differentials in China have been marked by mass surplus labor force in rural areas. Due to the nature of unlimited supply of labor, there had been no scarcity of unskilled labor before the Lewis turning point, while skills are in shortage everywhere and all the time, which results in increasing wages gap between unskilled and skilled workers as return on human capital increases. On the other hand, the household registration (or *hukou*) system, which, by institutionally segmenting labor market between rural and urban sectors, has practically legitimized the wage discrimination against migrant workers, who work in cities without legal residence identity.

After the Chinese economy reached its Lewis turning point in 2003, while the demand for skilled workers remains unchanged, the unskilled workers become scarcer in labor market. In the meantime, the widespread shortage for labor, particularly for migrant workers, creates disincentives for managers to continue their practice of discriminating against migrant workers in wage formation. Both tend to bring about a wages convergence between unskilled and skilled workers. This essay provides evidence of such a wages convergence and draws implications for a bigger picture of the Chinese economy.

Three Major Participants of the Labor Market in Urban China

In coping with the shock brought about by the global financial crisis in 2008 and 2009, the Chinese government designated migrant workers, college graduates, and the urban working vulnerable as groups needing special assistance. In fact, the urban working vulnerable is only a part of urban resident workers, thus the urban employment can consist of migrant workers, college graduates, and urban resident workers, from which the college graduates are deducted. In 2009, the new entrants of migrant workers to urban labor market were 4.9 million, that of urban resident workers were 3.8 million, and that of college graduates were 5.2 million (overlapping with that of urban resident workers).

These three major participants represent both differences in human capital and in *hukou* status of the urban workforce, and those differences result in differentials of wages between and within groups. While there are within group differentials of wages, for example, that between unskilled and skilled wages among migrant workers and among urban resident workers, there are also differentials between groups, for example, that between migrant workers and resident workers and that between ordinary workers and college graduates.

Since we always use migrant workers as a proxy of relatively less-educated and less-protected workers in urban labor market, we can compare the changes of their wages to that of the rest groups' in order to see the trend of wages convergence. In addition, within group differentials of wages also deserve examination.

Changes in Wages Differentials between Migrants and Others

Let's start with looking into the wages convergence between migrant and urban resident workers by reviewing the published statistics. Comparing migrants' wage with average wages of manufacturing and construction, respectively (both sectors are absorbers of unskilled workers), we found that the ratios of average wages of the two sectors to wage of migrant workers have remained little changed in the period 2003 to 2008. This does not show strong evidence of wages convergence, because the two sectors are also characterized by employment of unskilled workers. By utilizing survey data collected in 5 Chinese large cities, we can make a clear-cut distinction between migrant and urban resident workers. The survey data show that the ratio of average wage of urban workers to wage of migrant workers dropped from 1.17 in 2005 to 1.08 in 2010.

Furthermore, we need to do a little bit more sophisticated statistics – namely, we run a regression of wage determination in urban labor market with mixed samples containing both migrant and urban resident workers to see how the factors determining wages have changed in recent years. The results show that controlling for other factors, the effect of *hukou* status on wages differentials between migrants and urban residents reduced significantly. By simply holding non-urban *hukou*, average wage rate of migrant workers was 11% lower than that of their urban resident counterparts in 2001, that effect was reduced to 9% in 2005 and 5% in

2010.

A more striking fact is the wages convergence between migrant workers and first employed college graduates. In the period 2003 to 2009, the annual growth rate of migrants' wage rate was 9.9% and that of first employed graduates' wage rate was 4.3%, which pushes the wages of those two groups to converge – namely, the ratio of graduates' to migrants' wages reduced from 2.25 in 2003 to 1.65 in 2009 (Figure 7). Among the 145 million migrant workers outside their home townships in 2009, 89.6% were graduated with senior high and lower levels of schooling. Therefore, the narrowed gap of their wages towards college graduates' wages indicates that the effect of labor shortage became bigger than the effect of education return after the advent of the Lewis turning point.

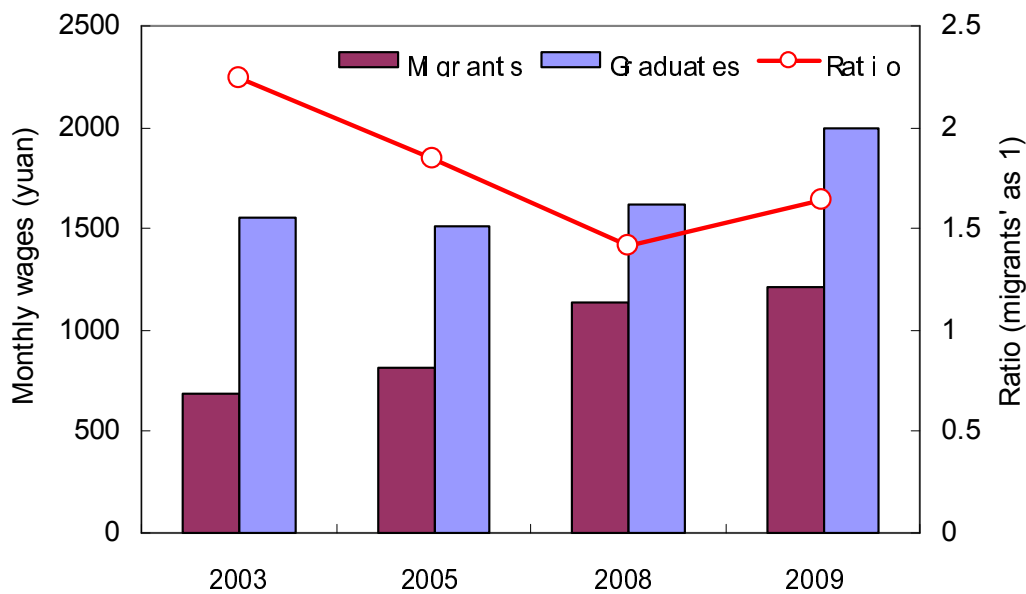


Figure 7 Wages Convergence between Migrants and Graduates

Wages Convergence within Migrant Workers

Migrant workers hold different education attainments and thus their earnings differ in accordance with differentiated returns to schooling. Among them, 11.7% have education at elementary school level or are illiterate, 64.8% have education of junior high school, 13.1% have education at senior high school, and 10.4% have higher education. The returns to those three levels of education have reduced between 2001 and 2010. An econometric estimate based on survey of migrant workers in 5 Chinese cities shows that the wages differentials

among workers caused by different education attainments reduced. That is, taking the return to junior high as reference group, relative return to higher education (the extra return comparing with that of junior high) reduced from 80.4% in 2001 to 75.3% in 2005 and 57.1% in 2010, and relative return to senior high reduced from 25.9% in 2001 to 17.3% in 2005 and 16.9% in 2010.

As a result, migrants' wages have converged after the Lewis turning point arrived in 2003. Taking Gini coefficient as a measurement of wages differentials, from the surveys conducted in 5 Chinese cities, we found that the Gini coefficient of migrants' wages reduced from 0.396 in 2001 to 0.334 in 2005 and 0.319 in 2010. Figure 8 shows that migrant workers at lower end of wages in earlier years (2001 or 2005) gained faster growth in wage rates in the period 2001/2005 to 2010, while those at higher end gained relatively slower growth in wages.

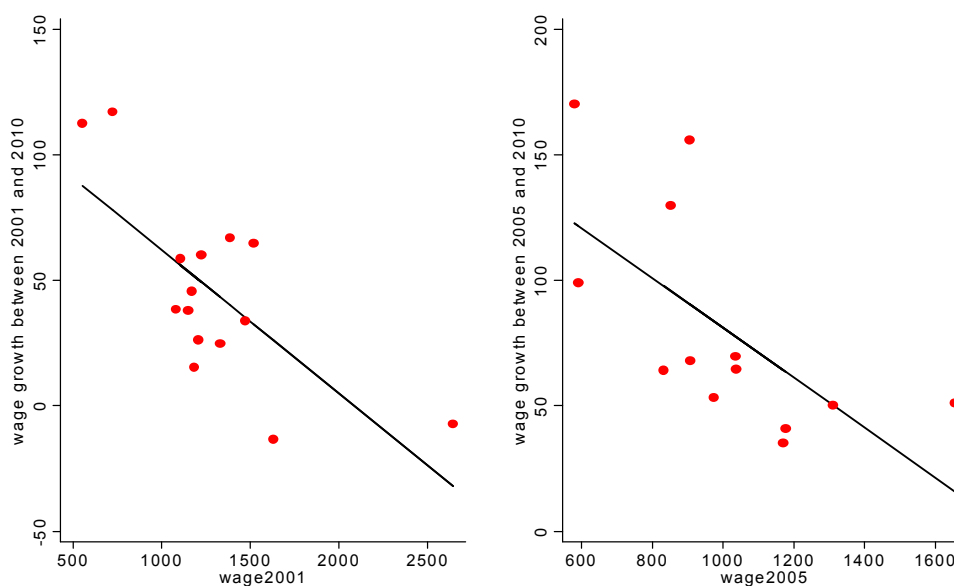


Figure 8 Wages of Lower End Migrants Grew Faster

Implications of Wages Convergence

Professor Minami, a Japanese economist who has long studied the turning point of the Japanese economy, argues that the wages convergence between unskilled and skilled workers is one of the criteria confirming the advent of the Lewis turning point. The emerging wages

convergence implies that there might be an opportunity for the Lewis turning point to intersect with Kuznets turning point, at which the famous Kuznets inverse U-shaped curve for income inequality reaches its peak and begin to drop. If that happens in China, income distribution can be expected to improve, which not only smoothens the existing social tension caused by income inequality, but also sustains the economic growth by creating mass domestic consumption. However, whether the meeting of Lewis turning point with Kuznets turning point can be translated into a stimulus of improving income distribution and of spurring the growth lies on related policy adjustments and institutions building.

First, labor market institutions building is necessary condition for a rational movement in wages of ordinary workers at such a stage of development. The wages increase is in fact a double-edged weapon. On the one hand, it leads to an improvement of household income, potentially strengthens social cohesion, and sustains economic growth. On the other hand, it increases production costs for enterprises, and even causes inflation if it goes too fast. When the conflicting effects kink one another, there would emerge social instability or growing pains. The lessons from the past experiences in both advanced countries and those trapped in middle income stage tell us that labor market institutions, including labor relation legislation, minimum wage regulations, collective bargaining, and social protection, serve as a platform to coordinate the demands by different interests groups and reach compromises.

Second, as the Chinese population ages, labor shortage will become a normal phenomenon in labor market, which makes the growth of the Chinese economy more a neoclassical pattern. That is, as the scarcity of labor is assumed, the inputs of physical capital will meet its diminishing return. Therefore, the economic growth can hardly be sustained, if a noticeable improvement of total factor productivity does not occur. Hayashi and Prescott found that the lost 10 years of the Japanese economy can largely attributed to by its bad performance of total factor productivity, which were caused by protecting the inefficient firms and falling industries. The large share of state-owned enterprises in the whole economy also provides the Chinese economy with a risk to step Japan's footsteps.

Finally, the increase and convergence of wages indicate a change in comparative advantages, though that does not necessarily imply an immediate disappearance of comparative advantage in labor-intensive industries for the Chinese economy as a whole.

Taking precautions, the workers, including those already in and those are going to participate in labor market, are urgently required to upgrade their education attainments and skills to meet the demand of the upgraded industrial structure. Even in developed country like the United States, the left-behind workforce whose skills cannot meet the need of the fast-upgraded industries are experiencing the pains of jobless recovery. One of the alerts for China is that the wages convergence, which means that it becomes easier for the unskilled laborers to find a job at reasonable wage rate, tends to generate a disincentive to complete schooling as long as possible. To avert the potential trap requires the education system and labor market to jointly work out a way to cope with it.