

EMPLOYMENT AND INEQUALITY OUTCOMES IN CHINA

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EXECUTIVE SUMMARY

China has experienced fascinating economic growth during the past three decades. Despite of the interruption by the Asian financial crisis and recent economic crisis, China has been one of the economies with the highest economic growth rates in the world since 1990. Thanks to the fast economic growth, the total employment has kept increasing, accompanying a significant shift of employment from primary sector to secondary and tertiary sectors.

The changes in the Chinese labour market are characterized by the increasing flow of rural to urban migration, a restructured urban employment system, and the stricter regulations.

The total employment growth and employment sectoral shift lead to a large flow of labour migration. In 2007, the total number of rural migrant workers reached 136 million. This massive and still growing internal migration, described as the largest peacetime movement of people in history, is one of the most significant phenomena characterizing the contemporary Chinese labour market. The first outcome of this increasing migration flow is to exhaust young and well educated labour forces in rural areas. Combining with the demographic transition resulting in decreasing new labour market entrants, it is good to believe that China is going to face a turning point of development with limited labour supply. It seems that the recent financial crisis stop the trajectory of the movement. It is reported that 20 million of migrant workers returning home towns because of the shrinking employment opportunities. If we separate long term effects from cyclical factors, however, the judgment facing *Lewisian* turning point will still hold.

In mid-1990s, urban economic restructuring and reforms on SOEs caused urban labour market dislocations, as evidenced by high unemployment rates at that time. The unemployed, who enter informal sectors, combining with rural migrant workers, drive the trend of informalization in the Chinese labour market. Workers in the informal sectors tend to work with low pay, less social protection, and more vulnerability. To deal with the informalization, some social policies have been proposed in urban areas, however, the migrant workers and rural residents have not been covered effectively so far. Empirical studies using urban household survey data indicated that the social assistance programs reduced poverty and income inequality in urban areas.

The impacts of the labour market changes on income inequality are mixed. Rural to urban migration is an effective way to eradicate rural poverty and to equalize the regional income disparities. With coming *Lewisian* turning point, it could be a possible way to reduce the rural-urban income difference. The informalization increased the total employment, which is helpful for income equality, but could increase the difference among income earners. The social policies have been directly targeting the low income group, which is an effective policy instrument to reduce poverty and inequality in urban areas. However, the social assistance programs do not sufficiently cover the rural residents and migrants, which could be a source of inequality between urban and rural areas.

1. Growth patterns and labour market outcomes

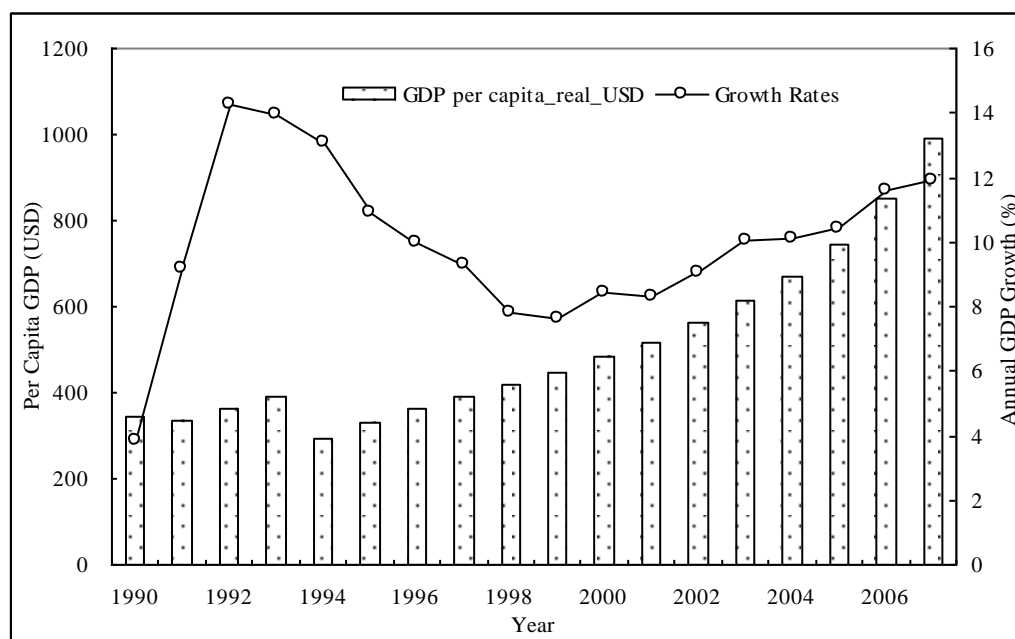
1.1. Growth patterns in China

It is well known that China has experienced fascinating economic growth during the past three decades. Although the economic fluctuation took place at the end of the 1990s due to the negative impacts of Asian economic crisis and the economic restructuring of State Owned Enterprises, China has been one of the economies with the highest economic growth rates in the world since 1990. Since 1978 when China began to implement the strategy of Opening up and Reforms, the average growth rate of real GDP has been 11 percent per annum at 1978 prices.

In the new century, China maintains the striking economic performance even after keeping high growth rates for a quarter of a century. It only took China 5 years to increase its GDP per capita from USD 1,000 up to USD 2,000 at current prices although that is partly due to appreciation of CNY with respect to USD. In 2007, GDP growth rate was 11.9% and real GDP per capita grew 11.4% more than the previous year. Despite being hit by the recent financial tsunami, GDP growth rate still achieved 9% in 2008. In the same year, China's GDP was 30,067 billion CNY and GDP per capita reached 20,543 CNY, according to the middle exchange rate in 2008 (equivalent to USD 4,328.6 billion and USD 2,958 respectively).

Figure 1 displays economic growth rates of GDP and GDP per capita between 1990 and 2007. At the early 1990s, Chinese economy boomed after Mr. Deng Xiaoping made his famous speech in South China, which directly led to formal acceptance of market economy in China. In the middle of the 1990s, China slowed down the economic growth due to both the Asian Financial Crisis and the urban economic restructuring. After China's entry into WTO in December 2001, the export-oriented sectors have played a pronounced role in driving economic growth. Since then, the export annual growth rates have been above 9%.

Figure 1. GDP growth rates and per capita GDP, 1990-2007



Source: NBS, *The Statistical Yearbook of 2008*, China Statistical Press.

Accompanying the fast economic growth, a substantial sectoral shift has taken place in the past decades. There are two features of sectoral shift that are worth noting here, which in turn has affected the labour market outcomes significantly.

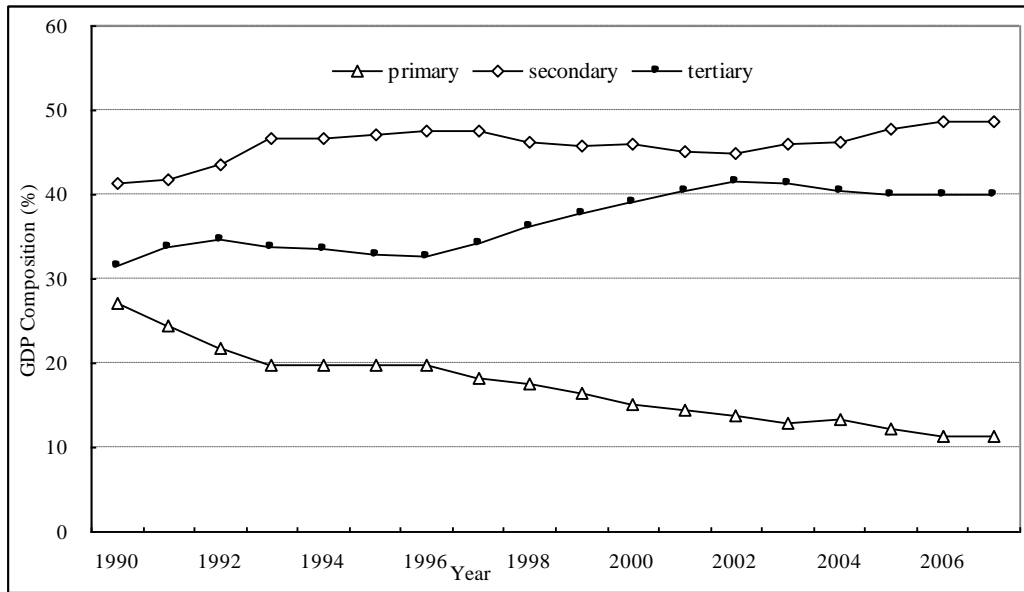
First, as a developing economy, China follows the typical growth pattern of shrinking primary sector. Figure 2 depicts the general trend of economic transformation in which the share of the primary sector in GDP keeps declining. In 1990, the value added of primary sector¹ accounted for about 27.1% of total GDP and the proportion decreased to 11.3% in 2007. In contrast to the primary sector, non-agricultural sectors have progressively increased their shares in the Chinese economy. For instance, in 1990 the value added of the tertiary industry accounted for 31.6% of GDP, and went up to 40.1% in 2007.

Second, the manufacturing sectors keep a stable proportion in the economy, which is a unique pattern for an economy with economic restructuring. According to the observations on the process of economic shift in developed economies, the expansion of the tertiary sector takes place with a simultaneous shrink of the secondary sector. Data from the World Bank Development Indicators show that even the lower middle income countries have already displayed such a trend. The pattern does not happen in China yet. As per the *Flying Geese Model*,² the coastal areas started accepting the industry transferred from New Industrialised Economies (NIEs) in the mid-1980s. Since then China has made a good use of its competitive advantages in labour intensive industries. As a result, the share of secondary sector in GDP has been stable since 1978, fluctuating around 45% with a small standard deviation of 2.02%.

China took advantage after its WTO entry and is called the world factory because “*made in China*” dominates the international trade in manufacturing. In 2007, the ratio of total value of exports to GDP was 0.37 while the ratio was 0.20 in 2001 when China just entered WTO.

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1. According to the definition employed in the Chinese statistics system, only agriculture is accounted as primary sector.
 2. Flying Geese Model is a paradigm for international division of labour in East Asia based on dynamic comparative advantage. The paradigm postulated that Asian nations will catch up with the West as part of a regional hierarchy where the production of commoditized goods would continuously move from the more advanced countries to the less advanced ones. The underdeveloped nations in the region could be considered to be “aligned successively behind the advanced industrial nations in the order of their different stages of growth in a wild-geese-flying pattern” (Ozawa 2005, 9).

Figure 2. Changes of GDP composition, 1990-2007



Source: NBS, *The Statistical Yearbook of 2008*, China Statistical Press.

The growth pattern is also reflected by the labour market outcomes. First, fast economic growth has created job opportunities and has sustained the growth of total employment in China. Second, the economic shift from agricultural sector to non-agricultural sectors leads to employment shift among economic sectors too, and in turn causes the large flow of rural to urban migration. Third, the booming export-oriented sectors created a large amount of job vacancies. As evidenced by recent labour market changes, it increased the employment instability by greater integration with other economies for both labour demand and outside shocks.

1.2. Increasing total employment

Although the urban economic restructuring caused significant labour market shocks in the 1990s, thanks to fast economic growth after the crisis, total employment has kept increasing in the past decade, as shown in Table 1. The net increase of total employment from 1997 to 2007 was 78 million. Total urban employment was 95.1 million in 1978 and reached 231.5 million by the end of the last century to reach 293.5 million in 2007 (41% higher than in 1997).

Labour force participation and unemployment rate reported in China do not follow the standard definitions. According to official definitions, registered unemployed persons in urban areas refer to the persons with non-agricultural household registration at certain wages (16 years and above), who are capable of working, unemployed and willing to work, and have been registered at local employment service agencies to apply for job. Under such a definition, working status and willingness to work are not the only conditions for unemployment definitions while *hukou* status and registration for unemployment are also indispensable factors.

However, it is possible to estimate the surveyed urban unemployment rate according to various sources of data published by the National Bureau of Statistics (NBS). Both surveyed unemployment rates and registered unemployment rates are shown in Table 1. It is thus not strange that the registered unemployment rate underestimates the actual unemployment situation in urban labour market. As Table 1

presents, the surveyed unemployment rate is always higher than registered unemployment rate. The gaps between the two rates have been more substantial since the middle of 1990s when urban labour market witnessed a significant dislocation. The gap also implies that registered unemployment rate is not a good indicator to reflect labour market situation in urban China.

Table 1. **Total employment, labour force participation and unemployment rates, 1990-2007**

Year	Economically Active Population (in million)	Total Employment (in million)	Urban Labour Market			
			Employment (in million)	Labour Force Participation (in percentage)	Surveyed Unemployment (in percentage)	Registered Unemployment (in percentage)
1990	653.2	647.5	170.4	78	3.26	2.5
1991	660.9	654.9	174.7	83	3.32	2.3
1992	667.8	661.5	178.6	72.6	3.41	2.3
1993	674.7	668.1	182.6	66.9	3.49	2.6
1994	681.4	674.6	186.5	72.3	3.52	2.8
1995	688.6	680.7	190.4	75.9	3.98	2.9
1996	697.7	689.5	199.2	72.9	3.93	3.0
1997	708.0	698.2	207.8	72.1	4.50	3.1
1998	720.9	706.4	216.2	71.2	6.29	3.1
1999	727.9	713.9	224.1	72.9	5.87	3.1
2000	739.9	720.9	231.5	66.1	7.61	3.1
2001	744.3	730.3	239.4	67.3	5.55	3.6
2002	753.6	737.4	247.8	66.5	6.14	4
2003	760.8	744.3	256.4	63.4	6.02	4.3
2004	768.2	752.0	264.8	64.0	5.78	4.2
2005	778.8	758.3	273.3	62.5	5.80	4.2
2006	782.4	764.0	283.1	-	6.12	4.1
2007	786.5	769.9	293.5	-	5.34	4.0

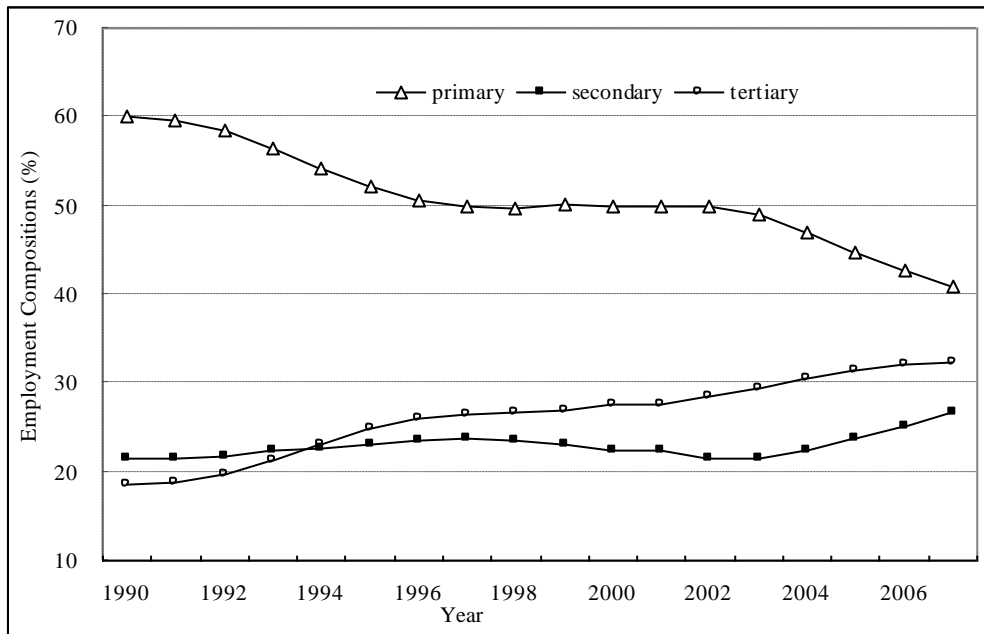
Source: NBS, *China Statistical Yearbook* (various years), China Statistical Press.

1.3. Sectoral shift in employment

In urban labour market, the State Owned Enterprises (SOEs) damage many job opportunities during the late 1990s, whereas the private sector started to grow and provided job opportunities for both new entrants to the labour market and the unemployed. Thus the shift from the State owned sector to the private sector is one of the most important structural changes in urban employment. Despite growing population, the total employment in rural areas remained at a relatively constant level due to the significant rural to urban migration: while employment in non-farm sectors kept growing, employment in farm sector decreased.

China has been transformed from a dual economy to an industrialized country and holds the general trends of declining primary sector too. Accompanied by the economic restructuring already described, secondary and tertiary industries have become the dominant economic sectors providing job vacancies in China. As Figure 3 presents, the employment in primary sector accounted for a decreasing proportion in total employment. In 1990, 60% of the total labour force worked in agriculture while the share dropped to 41% in 2007. This trend resulted in a significant migration flow in China, which will be discussed afterwards.

Figure 3. **Employment by economic sector, 1990-2007**



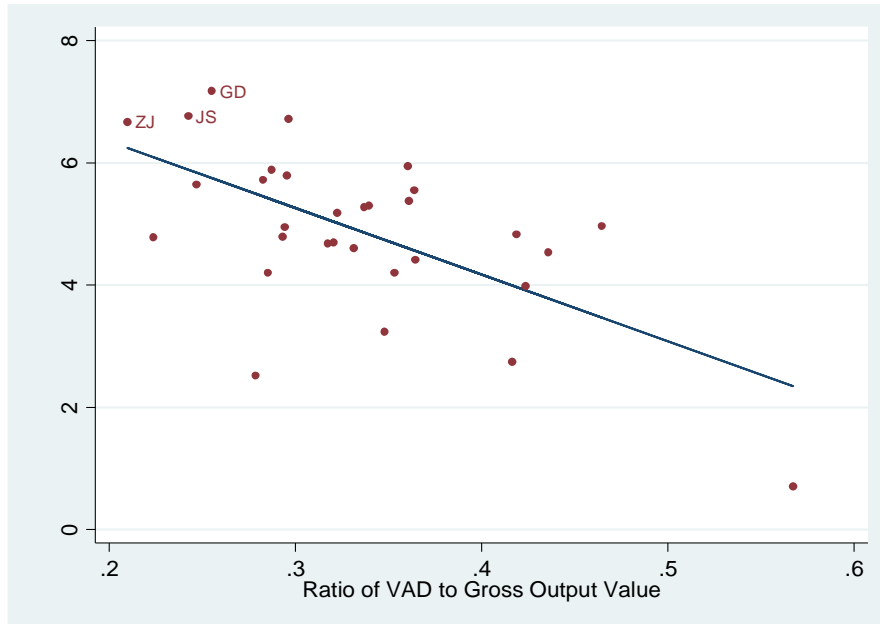
Source: NBS, *China Statistical Yearbook* (various years), China Statistical Press.

The advantage in labour intensive industry and globalization made possible for China to take advantage of its rich human resources. Unlike other economies, China has kept its share of manufacturing at a stable level. In 1997, employment in secondary sector accounted for 23.7% of total employment and the proportion had increased to 26.8% in 2007.

1.4. Export-oriented employment

The fast growing regions, for example, Pearl River Delta and Yangtze River Delta, concentrate most of the employment in China. These two regions are the first places receiving industries that were transferred out of NIEs. For this historical reason, both economic and employment structure are more labour intensive and export-oriented in these areas. Figure 4 displays the relationship between employment intensity and economic intensity by province in 2007. The horizontal axis is the ratio of value added to gross output value in manufacturing that reflects the capacity of production of net outputs of the economy while the vertical axis is the log employment in manufacturing. It is evident that an economy with high ratio tends to employ fewer workers. Naturally, when facing the same shock the regions lying in the right part of the figure may lose more GDP while those in the left part may lose more employment. As marked in the figure, Pearl River Delta (in Guangdong province) and Yangtze River Delta (in Zhejiang and Jiangsu Province) locate at the very left part of the figure, which implies that the employment shock from the crisis will be substantial. It goes without saying that coping with the labour market shock should be prioritized rather than simply stimulating economic growth.

Figure 4. The relationship between employment and economic intensity by province



Note: GD, JS and ZJ stand for Guangdong, Jiangsu, and Zhejiang respectfully.

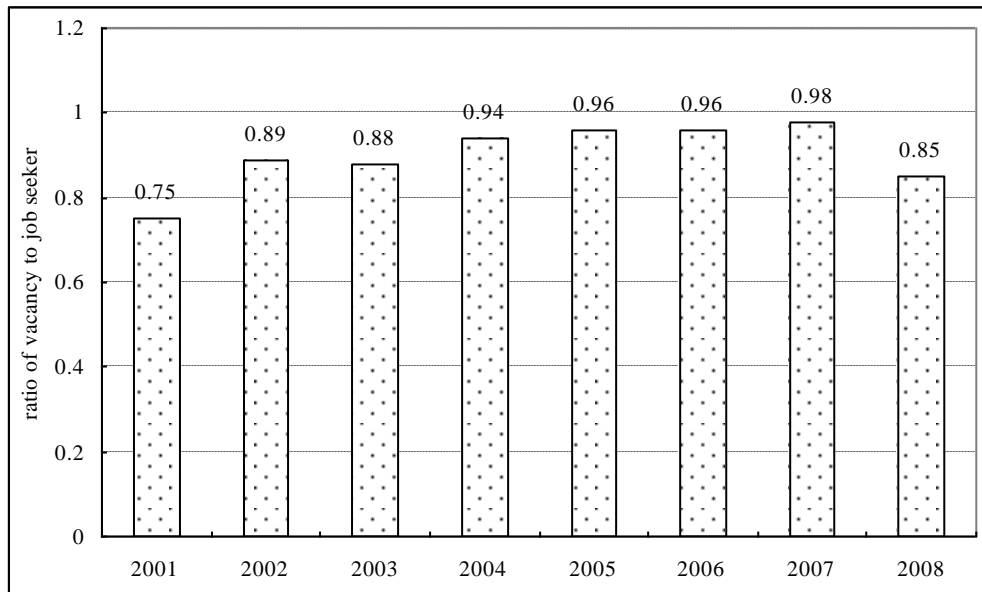
Source: NBS, *the Statistical Yearbook in 2008*, China Statistical Press.

1.5. Impact of economic crisis on employment

The financial tsunami started affecting the Chinese economy and employment. As the rest of the world, China's economic growth will plunge in 2009 although a severe recession is not expected. The export oriented sectors that are also labour intensive sectors are suffering job losses. Unfortunately, China has no real time labour surveys and is unable to report monthly unemployment rate following international standards. So, it is hard to know how serious the impact of the international crisis really is on Chinese labour markets. But some pieces of official messages help to portrait the picture of the labour market. According to recent messages released by government officials, among the 136 million migrant workers (Table 2), 15.3% of them have lost their jobs during the crisis downturn (Chen, 2009). It goes without saying that coping with the labour market shock should be prioritized rather than simply stimulating economic growth.

The other evidence comes from the data collected by the Ministry of Human Resources from the employment intermediary agencies. An indicator called “ratio of vacancy to job seekers” could reflect the relationships between labour demand and supply. Figure 5 presents the changes of this indicator for the fourth quarters since 2001. The ratio kept growing from 2003 to 2007, but dropped dramatically in 2008, suggesting that the impact of the crisis has already translated to the labour market as an external shock.

Figure 5. Ratio of vacancy to job seeker



Note: Data are for the fourth quarter of each year.

Source: China Labour Market Information Monitoring Centre, www.lm.gov.cn.

2. Development in the Chinese labour market

With fast economic growth in the past decades, China has also witnessed labour market development by introducing market mechanism in labour allocation, constructing legal framework and improving regulations. As an essential part of reforms, the developments of the labour market incarnate the nature of gradual reform. Labour market development first took place in rural areas by relaxing the labour allocation in agriculture and allowing migration. Then, the reform in urban economy abandoned the employment system of planning economy. In the new century, China has been experiencing both a turning point of the labour market situation and an improvement of labour market regulation.

2.1. Moving out of countryside

In the early reform period –from early 1980s through mid-1990s, the employment of rural and urban China expanded mainly through the transformation of farmers from agricultural to non-agricultural work. Job creation by township and village enterprises (TVEs)³ and massive labour migration from rural to urban sectors were impressive, unique and worldwide-recognized as the “China miracle”. In the urban area, the employment allocation system started its reform – meaning that an increasing part of new entrants into the labour market were not taken care of by the government labour planning, which laid a starting point for labour market development.

In the 1980s, there was only a small amount of labour migration. The composition of migration flows was dominated by craftsman who moved within rural areas. With increasing labour productivity in agriculture, rural labour forces began to move out of rural areas in growing numbers. According to

3. TVEs are industries owned by townships and villages. At the early stage of the reform they were the main forces driving the rural industrialization in the 1980s and the 1990s. In 2007, the employment in TVEs reached 150.9 million.

estimations by MOA (2001), rural migrants were only 2 million in 1983 but reached 30 million by the end of the 1980s. The economic booming after 1992 encouraged migration further. Fast economic growth in coastal areas attracted more and more rural labour forces from other parts of China to seek off-farm job vacancies.

In the new century, NBS started collecting the information of migrants in rural household survey, so one can get a continuous series of size of migration based on consistent sampling surveys. As Table 2 displays, the total number of migrants has kept growing and reached 136 million in 2007, suggesting that China is experiencing an unprecedented size of migration flow in history. It is obvious that migrant workers have had a substantial role in urban labour market. In 2007, migrant workers accounted for 46.5% of total urban employment.

Table 2. **Migrant workers and urban employment, 2000-2007**

Year	Migrant workers (in million)	Urban employment (in million)	Ratio (%)
2000	78.5	212.7	36.9
2001	84.0	239.4	35.1
2002	104.7	247.8	42.3
2003	113.9	256.4	44.4
2004	118.2	264.8	44.7
2005	125.8	273.3	46.0
2006	132.1	283.1	46.7
2007	136.5	293.5	46.5

Source: The size of the migrant workforce comes from National Bureau Statistics (NBS), various years (a) Yearbook of Rural Household Survey, China Statistical Press. Data on urban employment are from NBS, various years (b) Yearbook of Labour Statistics in China (various years), China Statistical Press.

Because rural-to-urban migration was initiated by large scale surplus labour in rural areas, it generated two effects of transition and development. The first is a resources reallocation effect – namely, the transformation of workforce from low productivity (agricultural) sector to high productivity (secondary and tertiary) sectors alone contributed 21% to the overall GDP growth rate during the reform period (Cai and Wang, 1999). The second is an income effect – namely, while the wage rate of migrant workers had not increased much, the enlargement in total number of migrants has enhanced the total income of rural households as a whole. As a result, labour migration has been an effective way to both poverty reduction and narrowing the income gap between rural and urban areas.

2.2. Shattering Iron Rice Bowl

The planning economy was characterized by rigid employment in firms. Prior to reform, SOEs seldom had rights to make hiring or firing decisions. In the mid-1980s, the Chinese government began to relax the restrictions on SOEs and endowed more rights to the enterprises, including some on employment. As the state gradually granted autonomy to enterprises, managers of SOEs have been legitimated to select and dismiss workers and to determine and adjust compensation in accordance with enterprise's profitability and worker's performance. With this change of institutional environment and with increasing competition pressure on enterprises, employment has become more and more market-oriented and the "iron rice bowl" gradually broke up.

The reform program "activating the system of permanent employment" initiated in 1987 touched upon the core system of the "iron rice bowl", revising the legacy of traditional labour policies under the planning

system. The legal basis of this reform is *Temporary Regulations on Labour Contract System of State-owned Enterprises* issued by the administration in 1986,⁴ under which all SOEs are required to recruit new workers based on voluntary contracts. Under the newly introduced labour management, workers currently working at an enterprise were to be re-chosen and contracted based on their work performance and efforts. With this reform, workers began to learn there is a risk to be unemployed due to overstaffing, shirking and misbehaviour. However, enterprises were asked not to lay-off workers at the same time.

More significant reforms happened in the 1990s when SOEs abandoned full employment protection for its employees. When SOEs began to face stronger outside competition in the 1990s, the relaxed state regulations of labour allocation and autonomy of employment obtained by enterprises became a stimulus for labour market development. As competition from non-state sectors sharpened and comparative advantage changed, numerous SOEs entered into losses and were forced to lay-off their redundant workers. The massive flows of rural labour to the cities brought a shock to urban workers, not being able to compete with their migrant counterparts who had advantages with low pay.⁵ Moreover, the urban non-state sectors, by employing low cost migrant workers, put further pressure on SOEs. In sum, the increased competition has deepened the reform of labour policy and thus has pushed forward the labour market development.

During the economic downturn of the 1990s due to outside shock and internal economic restructuring, many SOEs which lost their comparative advantage and competitiveness, were unable to fully utilize their production capacity since the late 1990s. As a response to this difficult situation, SOEs managers were forced to exercise their autonomy and thus hundred thousand urban workers left their work in recent years.

The severity of the unemployment problem induced two kinds of policy interventions. First, urban governments strengthened their protection for urban workers. Given the responsibility of local governments for political stability, and to avoid social tensions, urban governments have enacted various policy measures deterring labour market development. For example, urban governments have intervened in enterprises' employment adjustment and sometimes have directly restrained enterprises from laying-off workers, regardless of the enterprise situation. To protect urban workers from competition of migrant workers, governments have also issued discriminatory employment regulations against migrants working in urban sectors by restricting jobs that migrant workers can take up and imposing heavy charges for migrants entering the city (Cai *et al.*, 2001).

Secondly, being aware of the failure of planned labour force allocation, the governments took advantage of market mechanism to solve the problems of employment and reemployment. As a result, small sized non-state enterprises and service sector, which used to be artificially depressed by government, were encouraged both politically and financially. This helped China's employment structure to be diversified.

In 1978 when the economic reform was about to begin, nearly 80% of urban labourers were employed in state sector, and state and collective sectors almost employed all urban workers. This domination has remained until the 1990s when non-state sector began to increase its share of employment in the whole economy. Since then, things have changed dramatically – in 2007, employment shares of state and

4. In the same year, the state issued other relevant regulations such as *Temporary Regulations on Dismissal of Lawbreaking Worker in State-owned Enterprises*, *Temporary Regulations on State-owned Enterprises Workers*, *Temporary Regulations on State-owned Enterprises Recruitment of Workers*, *Temporary Regulations on Laid-off Workers of State-owned Enterprises*, and so on. These documents signalled the start of the reforms of urban labour policies.

5. Studies show that there is only a small overlap between migrants' and urban workers' jobs because of the existing institutional segmentation (*hukou* system), therefore migrants actually are not direct competitors of their counterparts in the cities (*i.e.* Solinger, (1999) and Cai, (2000)).

collective sectors dropped to 21.5% and 2.4%, respectively, while that of non-state sector increased substantially to 76.1%.

2.3. From deregulation to regulation

Among the unemployed and laid-off workers, most are unskilled, low-skilled, or poorly educated. It is very hard for them to get reemployed in formal sectors. Even if they become reemployed, most of them were employed in informal sectors with unstable work and low wages (Knight and Song, 2005). Some of them cannot even find jobs due to their low human capital, low skills or old age. Most of the rural migrant workers that increasingly came to the cities were also employed in informal sectors.

Many labourers can't get good wages and social security, especially those working in informal sectors. Compared with formal sectors, the unregulated labour use and the disputes between employers and employees are higher in informal sectors. For example, the proportion of workers who conclude labour contracts with their employers is very low in informal sectors, especially for unskilled workers.

Furthermore, the labour demand and supply situation in China has changed much during recent years. With the sustainable and rapid economic development and population age structure changes, China has ended the era of unlimited labour supply. Structural labour shortage have emerged in coastal areas first and then spread to inland provinces. This has created good opportunities to protect lawful rights and interests of labourers.

Under this circumstance, in order to protect lawful rights and interests of labourers better, a series of regulations and laws on China's labour market have been issued since the end of the 1990s, especially since the new century, which include Wage Guideline System (1999), Minimum Wage Regulations (2004), *Employment Contract Law (2008)*, *Employment Promotion Law (2008)* and *Labour Disputes Mediation and Arbitration Law (2008)*. These regulations and laws can basically be seen as the more detailed and revised version of *1994 Labour Law*. The contents of *1994 Labour Law* is very comprehensive. However, the regulations of the law on many aspects are not that detailed. The newly issued regulations and laws since the end of 1990s have been much more detailed than *1994 Labour Law*. Furthermore, many new situations have emerged, and these new regulations and laws are mainly used to resolve these new issues.

2.4. Facing turning point

As the result of demographic transition, declining participation rates, and fast economic growth, China is facing a turning point in the labour market, suggesting the end of the era of unlimited labour supply. In coastal areas, the most developed regions in China, shortages of both skilled and unskilled workers have been widely reported in recent years. An indication of labour shortages is the rise of average wages. After being constant for decades, average wages for migration workers started rising up in 2003. According to surveys on migration workers, in 2006 the wages of migration workers increased more than 10% compared to previous year (Cai *et al.*, 2007). A survey conducted in 2,749 villages of rural China indicated that three out of four villages exhausted their young human resources (Cai *et al.*, 2007).

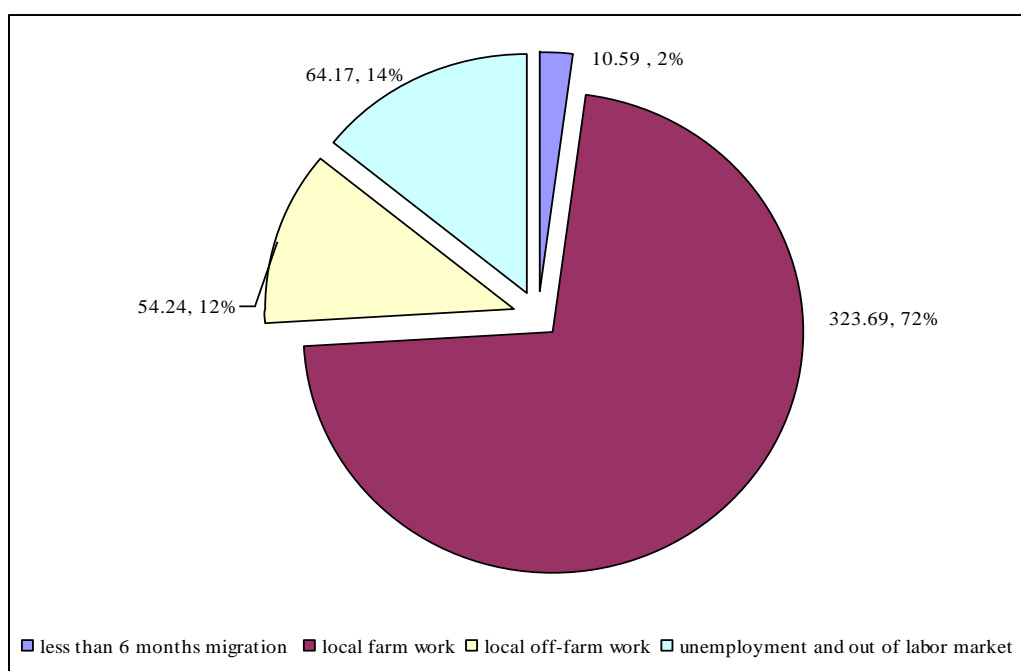
Demographic data in rural areas also confirm this trend. Looking at the age profile of rural migrants, it is easy to find that only a very limited number of those below 30 years old, work in agriculture. Considering that agriculture labour productivity is low in China due to the land tenure,⁶ agriculture still requires a large amount of labour input. In addition, in rural areas older workers have relatively lower years of schooling and are more difficult to reallocate in non-farm sectors than the youngest generations.

6. The rural land is collectively owned and the farmers have the right to cultivate it, but leads to a small average size for each farm.

However, the argument of a turning point is quite controversial as both academics and the public opinion find hard to believe the existence of a labour shortage based on the large amount of labour stock in China. To further defend this argument a deeper analysis on rural population is needed. When calculating the possible migration flows from agriculture, previous studies have often used aggregated data and predicted the number of migrants by deducting estimated labour for agriculture. One of the vital drawbacks of the estimation is to get the surplus number without considering the heterogeneity among individuals. In fact, given the disparities in terms of human capital, age, experience, household composition, and the local conditions in sending places, the propensity of migration varies from person to person.

According to 1% population sample survey in 2005, in addition to unemployment and exiting labour market, rural labour forces⁷ were distributed in agriculture, local off-farm work, and migration work. If excluding the workforce that left sending places for more than 6 months, we may look at the distribution of local labour forces (Figure 6). Our focus group is those who worked in agriculture and accounted for 72% of local labour force in 2005 because the unemployment rate in rural areas is pretty low and farmers who are engaged in off-farm work or work outside less than 6 months could be taken as transferred labour. The total number of this group was 324 million whereas the surplus number of rural labour varies depending on the estimation for labour use in agriculture.

Figure 6. **Distribution of local labour forces**



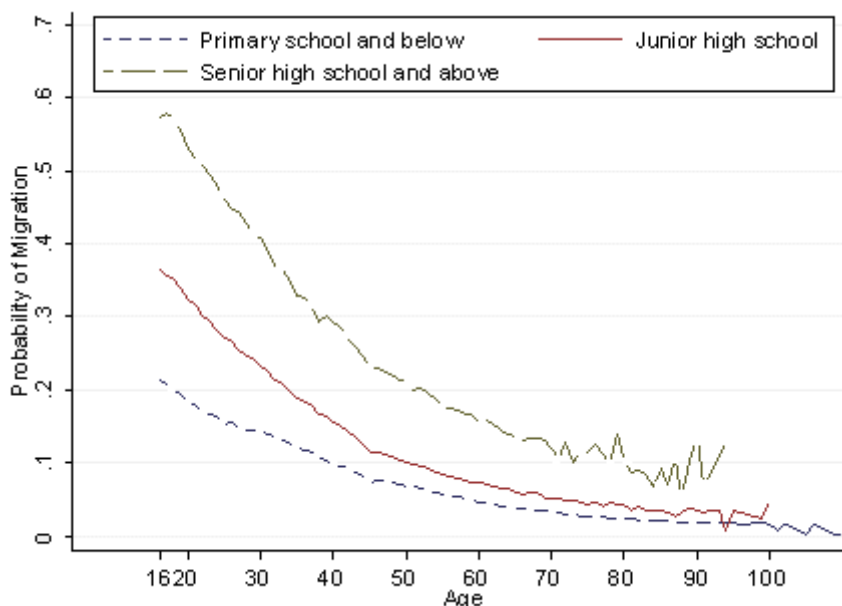
Source: Authors' calculation from 1% population sampling survey in 2005.

The advantage of individual level data from a national representative sample survey is to capture individual disparities by predicting each individual's migration probability. For that purpose, a *Probit* model has been used where the dependent variable is whether migrating more than 6 months. The regressors include education, health status, gender, experience and its square term, and dummies for provinces. Based on the predicted probability, it is possible to get the average probability of migration for each group categorized by age or education. As shown in Figure 7, the probability of migration varies

7. Labour force is defined as one who is 16 or above, out of school, and able to work in terms of health status.

among different education groups, declining with age increases for each group. It is easy to find out that the migration probability for people with low education and more than 40 years of age is particularly low.

Figure 7. Predicted probabilities by age with different level of human capital



Source: Authors' calculation from 1% population sampling survey in 2005.

As Table 3 shows, those remaining in agriculture and having a low probability to work off-farms are the oldest with lowest human capital. The predicted number labour available for non-agricultural industries sum up 43.5 million workers. The analysis is based on the assumptions that willingness to participate in urban labour market and the structure of demand for rural labour are unchanged. It is however, difficult to forecast if economic growth and rural development will modify farmers' behaviour. Furthermore, industrial development in China will demand more labour with higher human capital, giving reasons to think that the actual migration number could be even smaller than the predicted 43.57 million.

Table 3. Rural labour force and migration probability

Age and education group	Number of labour (in million)	Predicted probability	Predicted migrants (in million)
16-20	17.16	-	4.97
Primary School or below	4.44	0.189	0.84
Jr. High School	12.03	0.315	3.78
Sr. High School or above	0.69	0.505	0.35
21-30	50.08	-	11.18
Primary School or below	15.39	0.142	2.18
Jr. High School	32.24	0.248	7.99
Sr. High School or above	2.46	0.41	1.01
31-40	88.96	-	13.44
Primary School or below	39.45	0.109	4.31
Jr. High School	46.69	0.178	8.29
Sr. High School or above	2.82	0.298	0.84
41-50	76.48	-	8.29
Primary School or below	39.86	0.078	3.10
Jr. High School	30.52	0.123	3.76
Sr. High School or above	6.10	0.235	1.43
+50	93.70	-	5.69
Primary School or below	76.30	0.053	4.04
Jr. High School	15.51	0.084	1.30
Sr. High School or above	1.88	0.182	0.34
All	326.39	-	43.57

Source: authors' calculation from 1% population sampling survey in 2005.

The long-term demographics and the emerging trends in China's labour market reinforce one another. Changes in population pattern and the diminishing surplus labour in rural areas imply that the feature of unlimited labour supply is vanishing – namely, the *Lewisian* turning point is bearing down upon the Chinese economy, dividing development stages and having important implications for labour market policies.

One might doubt whether China is facing the *Lewisian Turning point* when a serious labour market shock happened and millions of migrant workers return to their home towns. However, it is good to believe that the Chinese labour market is going to come back to the previous track based on the flowing factors. First, to a large extent, coming to the turning point has been driven by the outcomes of demographic transition. As a result of declining fertility rate, the number of new entrants into the labour market is decreasing while the fertility rate is a quite stable indicator, which is determined by long-term factors and will not be changed in the short run. Second, facing *Lewisian* turning point symbolizes a stage of economic development, as happened in Japan (Minami, 1968) and in some other newly industrialized economies (Bai, 1982). Therefore, it is of importance to separate cyclical effects from long term effects. These economies may suffer the same labour market shock as China, but one cannot deny the fact they surpassed the *Lewisian* Turning point.

3. Evolution of the informal sector

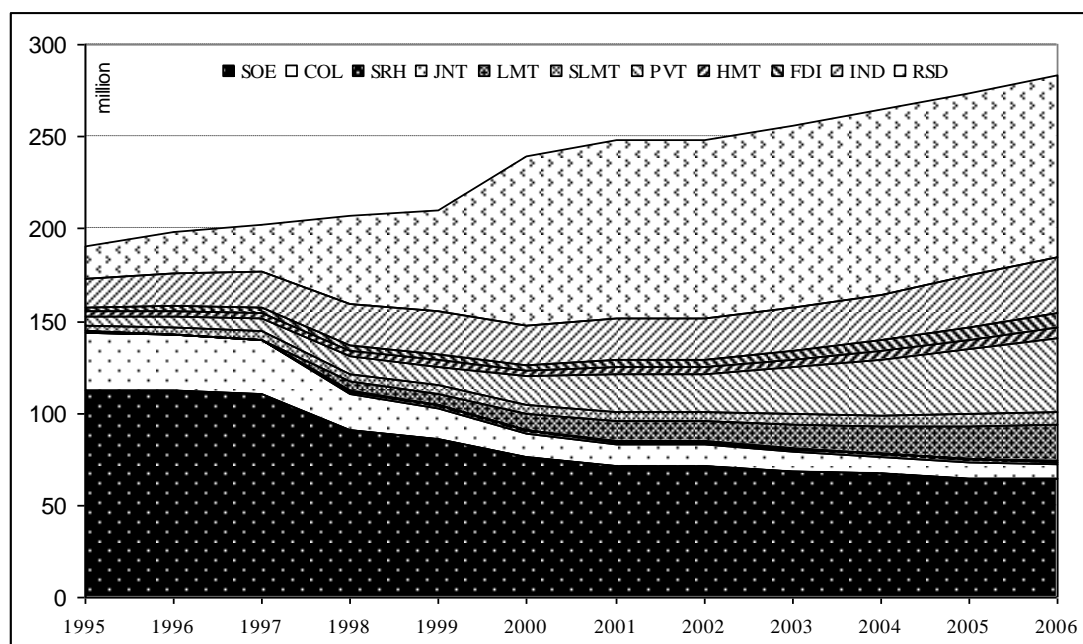
Both the increasing flow of rural to urban migration and the shrinking size of employment in SOEs have led to an informalized urban labour market. Those who work in informal sectors are characterized by high working intensity, relatively low pay, and less social protection. Despite of these disadvantages, the informal sector provided sufficient employment opportunities when the labour market dislocation was serious, becoming an effective way to reduce urban poverty arising in the 1990s.

3.1. Trend of informalization

According to the 1994 Labour Law, employment contract is the most important document to set up the labour relations and to specify rights and obligations of both sides. Although signing contract is far away to assure full protection for employees' rights, it still plays an active role. The following categories are defined as informal workers: a blue collar worker starting a job since 1998 without contract; a worker in private sector without contract; the self-employed.

In practice, urban employment has been growing since the reform started and reached 293.5 million in 2007, 10 million more than the previous year (Table 1). As shown in Figure 8, residual employment represents 98.6 million urban employees in 2006, which is more than the sum of state and collective employment and accounts for 34.8% of urban total employment. Understanding this gap and its sources helps to understand the trend of informal employment in urban labour market.

Figure 8. Changes in employment structure since the Reform



Note: SOU – State-owned Units, COL – Collective-owned Units, SRH – Share-holding Cooperative Units, JNT – Joint Ownership Units, LMT – Limited Liability Corporations, SLMT – Share Holding Corporations, Ltd., PVT – Private Enterprises, HMT – Units with Funds from Hong Kong, Macao and Taiwan, FDI – Foreign Funded Units, IND – Self-employed Individuals, RSD – Residual.

Source: NBS, 2007.

Statistically, the residual between total and unit employment appeared in 1990. Prior to that year, figures of urban employment were collected through all production units with independent accounts and registered individual enterprises. Currently, official statistics on employment come from two statistical

systems: the Comprehensive Labour Statistics Reporting System (CLSRS), which provides information of employment covering all independent accounting units and the household survey based on the Sample Survey on the Population Changes (SSPC) that covers 1% of total population.

Under the CLSRS, the information about employed people in enterprises (units) comes from the statement of the labour situation of all units including the state-owned units, collective-owned units, share-holding cooperative units, joint ownership units, limited liability corporations, and share holding corporations, Ltd., units with funds from Hong Kong, Macao and Taiwan, and foreign funded units. Adding the numbers of self-employment and the employment of private enterprises provided by the State Administration for Industry and Commerce, the sum gives the total urban employment of CLSRS.

Under this data source, at least three factors might underestimate employment. The first is that some units were never included in the numerical statement system, which causes the error of “missing units”, as a result of enormous changes in the boundaries of enterprises with SOE restructuring. The second is that units had a motivation to deliberately underreport the numbers of employees, or even not to report the numbers at all, in order to reduce their burdens because the employment number in a unit is related to some obligations such as paying premiums to the social security programs. The third factor is that the employment numbers of private enterprises and self-employed business obtained from the registration of enterprises and family business at State Administration for Industry and Commerce usually reflect employment when the enterprises register their business, and do not include the increased numbers in the process of the development of the enterprises.

Concerning the SSPC that covers 1% of total population and was initiated in 1996, the urban sample is based on residence. Because this survey follows common statistics standards and ILO recommended definition of employment/unemployment, these data are more accurate and comparable. The difference between the larger numbers of urban employment collected from SSPC and the smaller number of employment from CLSRS results in missing employment (Cai and Wang, 2004), and most of it is informal employment. Even if assuming that the discrepancy between total urban employment and the sum of sectoral employment provides a low boundary for informal employment, this sector accounted for about 35% of total employment in 2007.

Quality of labour and quality of jobs

The expansion of the missing employment not only manifests the difficulty of official labour statistics to reflect the actual labour market situation under the diversified and complicated economic structure, but also indicates a progress of marketization and a tendency of informalization in allocating labour force. This informal channel has overwhelmingly employed rural-to-urban migrants and reemployed the unemployed/laid-off who previously worked in SOEs. It is good to understand the nature of the informal employment by looking at the characteristics of these workers and their jobs.

Using two waves of urban household data⁸ it is possible to estimate the structure of informal employment. In Table 4, demographic characteristics and human capital working history are presented by residence and by region for both rounds of the CULS survey. It is found that migrant workers are younger

8. The two waves of China Urban Labour Survey (CULS) were conducted by Institute of Population and Labour Economics, in 2001 and 2005, respectively. In 2001 survey, within each city, a proportional population sampling approach was used to sample urban households, using the 2000 population census as an aid to sampling clusters and households. Proportional population sampling approach was also used to sample migrants. In order to get a separate representative sample of migrants, the survey used the 2000 population census to first sample neighbourhood clusters. Once a neighbourhood was selected for the migrant sample, the administrative records of the neighbourhood were used to constructing a sample frame of all registered migrants within the neighbourhood. The sampling method in 2005 survey is very similar to that in 2001.

than local workers but there is no significant difference between informal and formal sectors. For most indicators, male workers have advantages over female because the former have higher labour market participation rates or migration probability. Labourers with fewer years of schooling tend to work in informal sector whereas local workers have higher educational attainment.

Table 4. **Characteristics of workers employed informally**

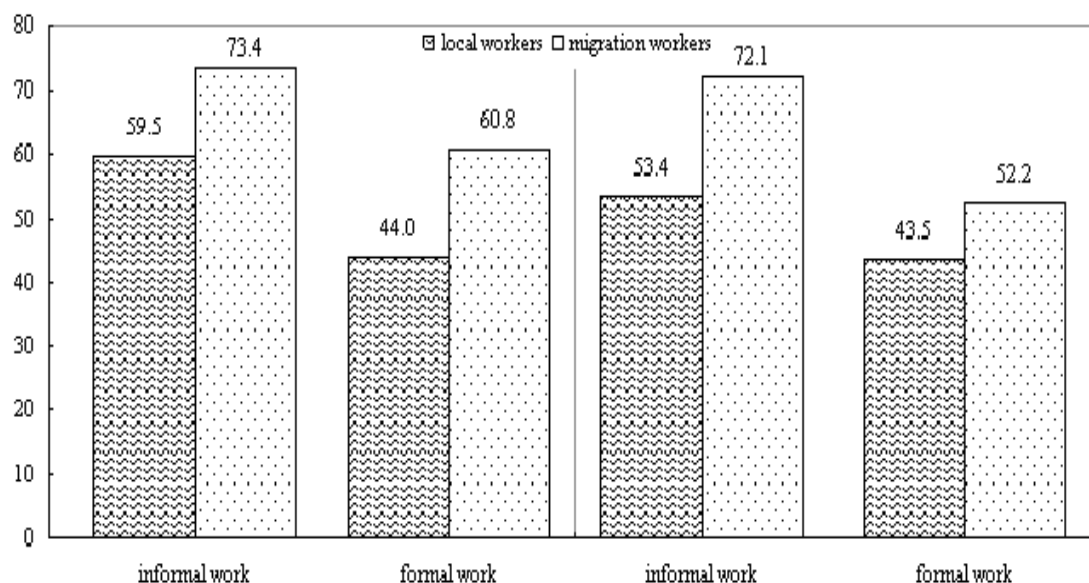
Workers characteristics	CULS1 in 2001		CULS2 in 2005	
	Local workers	Migrant workers	Local workers	Migrant workers
<i>Informal Employment</i>				
Age	40.4	30.6	40.6	34.2
Sex (% male)	56.9	60.6	52.5	56.2
Health status	6.42	6.04	5.97	6.44
Years of Schooling	9.7	7.97	11.0	8.34
<i>Formal Employment</i>				
Age	40.9	29.3	40.8	31.7
Sex (% male)	57.7	68.5	58.6	58.8
Health status	6.51	6.14	6.21	6.52
Years of Schooling	11.6	8.55	12.37	9.7

Note: for migration labour, only rural to urban migrants are included.

Source: Authors' calculation from CULS.

Workers in informal sector tend to work more intensively than those who have formal jobs. As presented in Figure 9, the working hours differ among groups in various dimensions. For each group of workers, there were less working hours per week in 2005 than in 2001. People who work in informal sectors work more intensively than those in formal sector. Also, it is clear that migration workers tend to work more intensively than their urban counterparts in both formal and informal sectors. Considering that migration workers work dominantly in the informal sector (Du *et al.*, 2006), the working intensity of migrants is more severe.

Figure 9. Working hours per week: migrants versus local workers



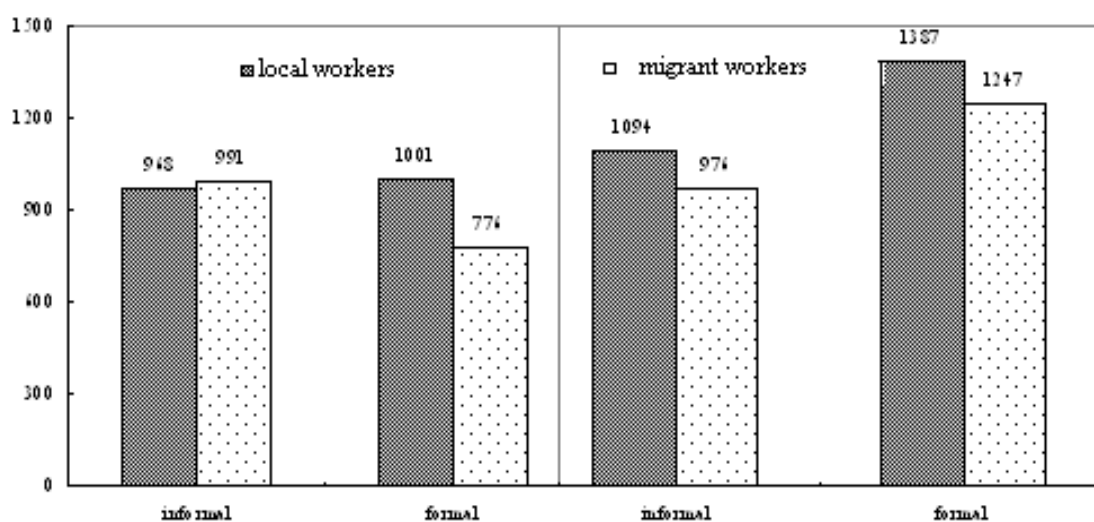
Note: the left panel was calculated from CULS1 in 2001 and the right panel was from CULS2 in 2005.

Source: Authors' calculation from CULS.

When comparing the monthly and hourly earnings between informal and formal sector over time, it is found that the gap of monthly earnings between formal and informal sector was insignificant in 2001, partly because of urban labour market shock touched insufficient employment and employees tended to bear low pay to keep their jobs in SOEs (Figure 10). Afterwards, the employment pressure has been relaxed and the formal sector has enjoyed a fast growth of monthly earnings. From 2001 to 2005, monthly earnings increased 38.6% and 13.0 in formal and informal sector respectively. That is why a bigger earning difference between informal and formal sector is observed in 2005.

Figure 10. Monthly earnings between informal and formal sectors

(in CNYs)

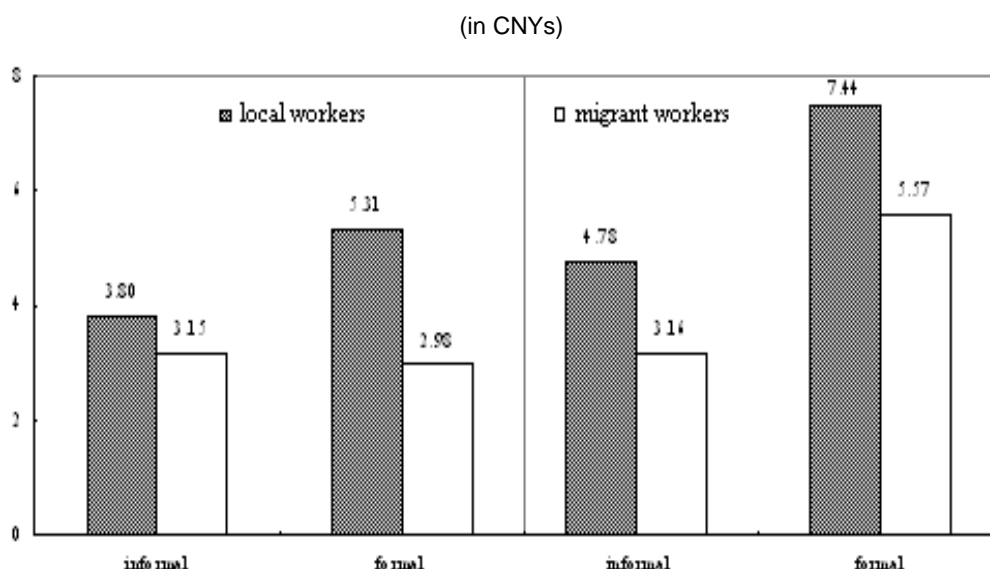


Note: the left panel was calculated from CULS1 in 2001 and the right panel was from CULS2 in 2005.

Source: Authors' calculation from CULS.

Informal employment is also characterized by high working intensity as people in the informal sector have to work more hours while the workers in formal sector suffer from insufficient employment. The gap of hourly earnings between the two sectors increased in 2005 mainly because of a faster wage rate growth in formal sector. As a result, for local workers the ratio of hourly earnings in formal sector to informal sector increased up to 1.56 in 2005 compared to 1.40 in 2001 (Figure 11).

Figure 11. Hourly earnings between informal and formal sector



Note: the left panel was calculated from CULS1 in 2001 and the right panel was from CULS2 in 2005.

Source: Authors' calculation from CULS.

Two other features relating to social protection emerge. First, workers with formal employment are better protected than workers with informal employment. According to CULS2, 82.1% of local workers and 29% of migrant labourers joined a pension program, whereas the numbers were of 54.8% and 2.1% respectively for informal workers (Table 5). Second, local workers are better protected than migrant labourers. Even among those local workers who work in informal sectors, more than one half have pension and near one third have health insurance, much more than their migrant's counterparts.

Table 5. Social protection for informal and formal employment

Type of protection	Informal Employment		Formal Employment	
	Local workers	Migrant workers	Local workers	Migrant workers
Pension	54.8	2.1	82.1	29
Unemployment insurance	12.6	0.4	39.7	17.8
Accident Insurance	6.0	1.2	29.1	31.7
Health Insurance	32.6	1.3	71.4	29.7

Source: Authors' calculation from CULS.

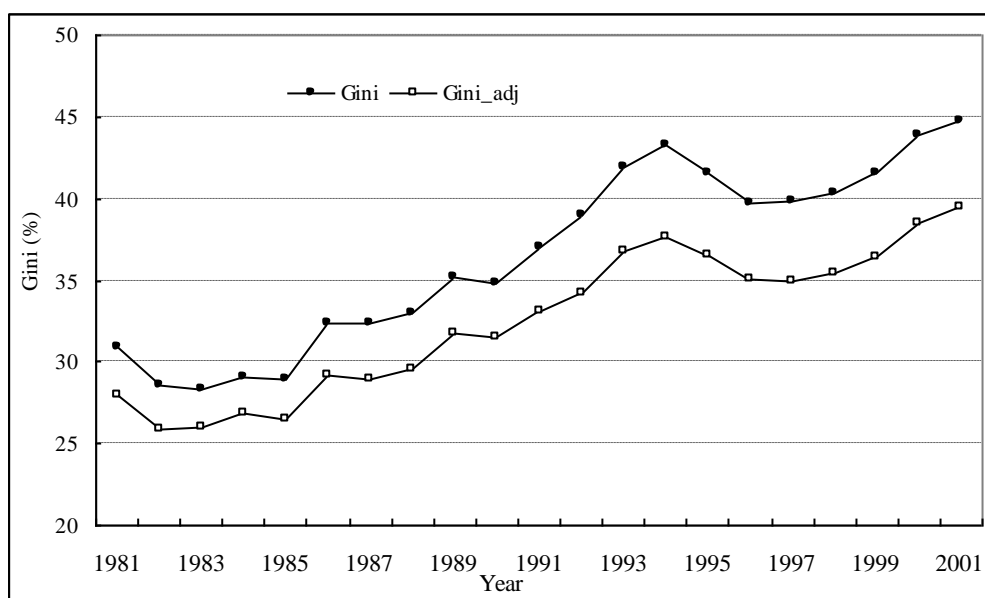
This confirms that while the employment shock resulting from SOEs' restructuring deprived many SOE' employees from formal jobs, these workers continued to benefit from social security programs and

other government protection. However, even within the informal sector, huge heterogeneity between local workers and migrant labourers exists. In recent years, a significant increase of social security coverage has happened in urban China, but still social protection for migrant workers has little improved, that is why this group needs special attention in terms of social protection and other social policies.

4. The impacts of labour market on poverty and income inequality

It is widely discussed that growing income inequality has taken place in China since the reform and opening up. Unfortunately, few empirical evidences based on national representative surveys and reliable statistical methodologies describe the trend of the past three decades. Ravallion and Chen (2007) is an exception. Using the Rural Household Survey (RHS) and the Urban Household Survey (UHS) conducted by NBS, these authors suggest that overall inequality has increased in the first two decades since the reform. As Figure 12 shows, income inequality grew prior to the middle of the 1990s and displayed a U shaped curve since then.

Figure 12. Income inequality in China, 1980-2001



Source: Ravallion and Chen (2007).

4.1. The impact of migration

Although the RHS and UHS are the best data to analyze the income inequality in China, it is worth noting that some change in the labour market that is not captured by the surveys might bias the estimation. The most pronounced factor is the rural to urban migration. As noted in Table 2, migrant workers accounted for 46.5% of urban employment in 2007 and became an indispensable component in the urban labour market. Considering that more and more migrant workers move to urban areas with their families, the actual size of the floating population in urban China would be even bigger.

RHS or UHS are not well adjusted to this structural transition. The National Bureau of Statistics modified the definition of residents as those living in a place more than 6 months in the year, implying that most rural migrant workers and their families are defined as urban residents in population data. Migrants living out of the countryside for more than half a year are not defined as rural residents anymore. In that case, surveys based on *hukou* registration system are biased in two ways. On one hand, long-term migrants

who earn high income in rural areas are excluded in the RHS; on the other, they are not effectively included in the UHS, which may up-bias the urban residents' income estimation on average.

When the size of migration was relatively small, the sampling strategy would not bias the estimation on income inequality very much. For example, according to estimates of the Ministry of Agriculture, there were about 30 million migrant workers by the end of the 1980s, equivalent to 3.5% of total rural population at that time. However, the ratio of rural migrant workers to rural population went up to 18.6%. Considering that the family migration is more widespread than in the 1990s, the ratio is just a lower bound.

Missing income of long-term migrant households brings insufficient information and distortion on actual income in urban areas. Based on data provided by NBS (2006), in 2005, disposable per capita income of urban households was 10,493 CNY, whereas the net income per capita of rural households was only 3,255 CNY. However, according to CULS survey, per capita income of rural-to-urban migrant households was 8,368 CNY, equivalent to 2.6 times per capita income of rural households and 80 percent of that of urban households. Although a disappearance in rural urban income gaps can hardly be claimed, the huge magnitude of the migrant population undoubtedly reduces the rural-urban income gap. Obviously, income inequality could be exaggerated if the substantial middle income group is ignored.

4.2. The implication of Lewisian turning point to inequality

Under a dual economy, wage rates for unskilled workers -like migrant workers- persist at a subsistence level until the expanding modern sector exhausts the surplus labour. This has been the case in China till the beginning of this century. As a consequence of emerging labour shortage, the competition for labour inevitably lead to a rise of wages in the modern sector and in agriculture, and the relationship between wage rate and productivity in agriculture became close to what was expected.

As we have already mentioned, in 2003, a shortage of migrant workers occurred in the Pearl River Delta region. Since then, the phenomena spread to the Yangtze River Delta region, and even to provinces in central China, from which migrant labourers are generally sent out. This trend has however been suspended by the current financial and international crisis. These labour shortages resulted in growing average wage for migrant workers after being constant for almost a decade. As Table 6 presents, the average wages for both migrants and local workers have grown in recent years, both in nominal and real terms.

Attaining the *Lewisian* turning point will tend to equalize individual incomes. Before urban economic restructuring in the mid-1990s, the wage rates in formal sectors, as in SOEs, were set by institutional factors rather than by market forces. Meanwhile, in the informal sector where most migrant workers are employed, wage formation is determined by supply and demand labour. With unlimited labour supply from agricultural surplus, the wage rates for migrant workers had been kept constant for a long time even in nominal terms. Although the incomes migrants earned in the urban labour market were still higher than in agriculture and contributed to poverty reduction in rural China, income inequality increased between migrant workers and those employed in formal sectors.

Table 6. Average wages in the urban labour market, 2001-2007

(in CNY)

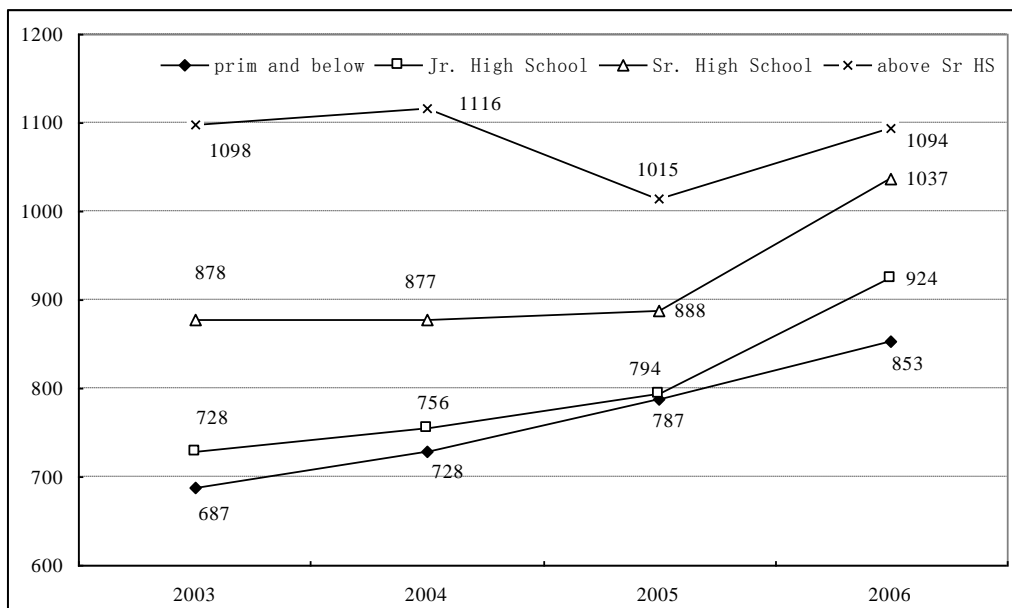
Year	Migrants (NBS)		Migrants (MOA)		Local Workers	
	Nominal	Real	Nominal	Real	Nominal	Real
2001	644	644	-	-	903	896.7
2002	659	665.7	-	-	1031	1041.4
2003	702	702.8	781	774	1164	1153.6
2004	780	755.9	802	776.4	1327	1284.6
2005	861	821.3	855	841.5	1517	1493.1
2006	946	889	953	938.9	1738	1712.3
2007	1015 ^a	912.8	1060	1014.4	2078	1988.5

Note: a: Average monthly earnings for the first three quarters of 2007.

Source: Urban local wages are from China Statistical Abstract in 2008, and migrant's wages are from the Statistical Report of NBS and Research Centre of Rural Economy, MOA.

Figure 13 displays migrant workers' wage changes by education attainment in the past few years. We found that in 2003 the wage gap between skilled and unskilled workers was quite substantial and converged in the following years. Because labour shortage was more pronounced among low-skilled workers with junior high school, they had the most significant and stable wage increase with an annual growth rate of 9 percent. Similarly, for workers whose education attainments are primary schooling or below, the annual growth rate was 8.1 percent. Wage rising of low-skilled workers implies that labour shortage is not a transitory or structural phenomenon but caused imbalance between aggregated demand for and supply of labour. As a result, this trend is helpful to narrow the income gaps between migrant workers and those who worked in formal sectors.

Figure 13. Wage trends of migrant workers by educational attainment, 2003-2006



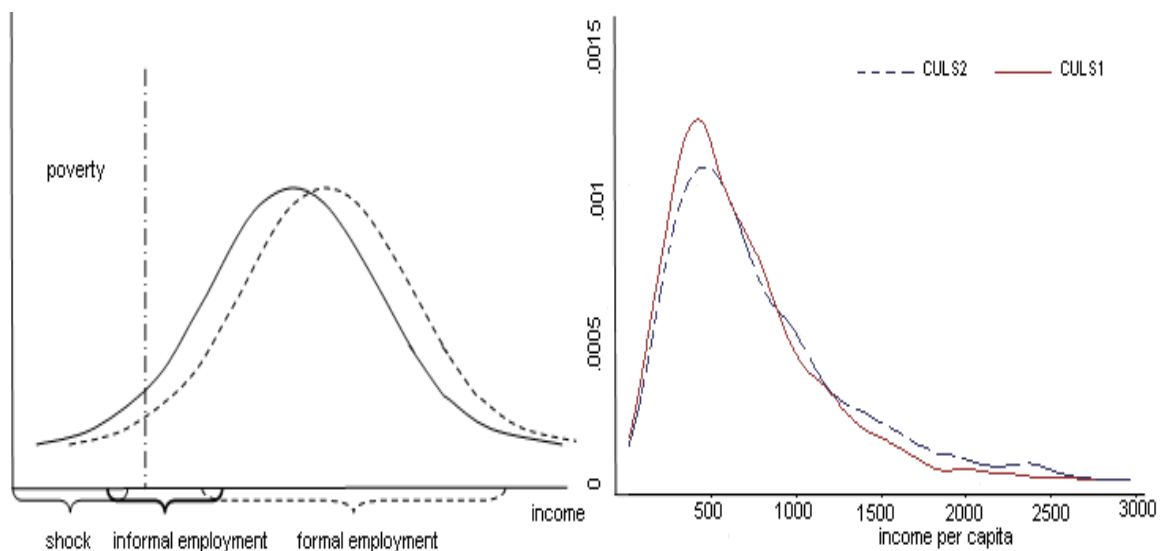
Source: Author's calculation from RCRE data.

4.3. Impacts of informality

During the period of serious labour market dislocation, labour market informalization helped reduce poverty by increasing the size of total employment. But, the role of informal employment on income generation has been different with changing situations of labour market. During the early stage of economic restructuring, there were three groups of labour market participants: the unemployed, informal workers, and formal workers. Compared to the unemployed, informal workers generated some income which had a positive effect on poverty reduction.

When the unemployment rate goes down, the income distribution curve will shift to the right, as the left part of Figure 14 shows, the effect of informal employment on income generation will not be as obvious as before. Of course, because of the relatively fixed (absolute) poverty line that is determined by subsistence expenditure, earnings from informal work are still helpful for poverty reduction although they are not good income generators any more (Cai, *et. al*, 2006).

Figure 14. Impacts of informal employment on income and poverty



Source: The right panel was calculated from CULS data in 2001 and 2005 respectively.

Considering that migrant workers account for a large share of informal employment, it is of importance to make use of urban labour market to provide income sources for those migrants. Working even in informal sector, migrant workers enhance productivity compared to their productivity in the primary sector. According to the statistics from NBS (2007), wage income accounted for 38.3% of average net income in rural households in 2006. In some typical migrants sending provinces the ratio is even higher (45.6% in Chongqing and 42.8% in Hunan). Therefore working in the informal sector is an essential income generator for rural residents.

4.4. The impact of social policies

In addition to active labour market programs initiated in the 1990s, China has been reforming the social benefit system after the labour market dislocation. In urban areas, the on-going reforms of the social benefit system have already made great achievement in terms of social protection for vulnerable groups. At the very beginning, the policies attached closely with employment status were mainly used to target the

employees suffering from the labour market shocks. When urban poverty emerged, the Chinese government initiated a social assistance program, Minimum Living Standard Allowance (*dibao*), to support the urban poor people. Gradually, the *dibao* program has become the main instrument against urban poverty.

During the urban labour market dislocation, unemployment took two forms – explicit unemployment and lay-off (*xiagang*). With *xiagang*, workers lost their work but keep connection with their former employees and received a certain amount of subsidies. Reemployment Centres⁹ were established in all SOEs with the requirement to be responsible to pay laid-off workers' pension insurance and basic living allowances that were shared by governments at central and local levels, enterprises and part of unemployment insurance funds. Therefore, the *xiagang* subsidy was the first form of social transfer dealing with labour market dislocations. Subsidizing the laid-offs was conceived as a temporary program to cover workers who previously worked in SOEs but the employer could not fully fire the workers through *xiagang* program as the laid-offs still had work relations with SOEs.

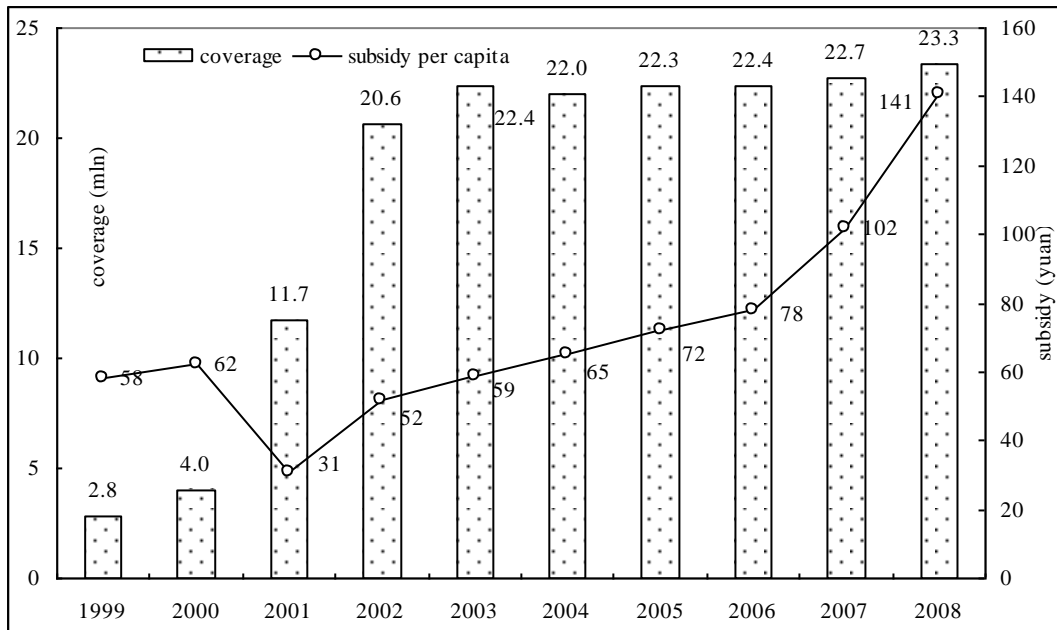
In 1999, the Chinese government enacted the *Regulations on Unemployment Insurance* in order to transfer the *xiagang* subsidy to the unemployment insurance. Since 2000, government tends to protect the unemployed through unemployment insurance rather than *xiagang* subsidy. In 2004, 16 provinces removed their Reemployment Centres, and the laid-offs started to get support from the unemployment insurance. In 2005, the Ministry of Labour and Social Security (MOLSS)¹⁰ asked all provinces to close the Reemployment Centres by the end of the year and cover the unemployed through unemployment insurance program. In 2006, the MOLSS claimed that the transformation from support workers from *xiagang* subsidy to unemployment insurance was completed (MOLSS, 2007). Therefore, since the mid-1990s, unemployment insurance has become the second social assistance program.

Unlike *xiagang* and unemployment insurance that are employment related, *dibao* program directly target the poor no matter their employment status. In 1993, Shanghai was the first city introducing the *dibao* program to support people whose income was below the official poverty line. Central government positively evaluated Shanghai's experiment. In the next year, Ministry of Civil Affairs proposed to extend Shanghai's practice to the other urban areas of China. All cities and towns with county governments were required to set up the program since 1999. In 2003, the Ministry of Civil Affairs claimed that in 2002 *dibao* program has covered all the urban poor whose income was below local *dibao* line. As Figure 15 shows, the number of the poor covered by *dibao* increased dramatically since 1999 and has been stable since 2002. In 2008, 22.33 million urban residents were covered by *dibao* program with the average per capita *dibao* transfer being of 141 CNY. However, the *dibao* program has been implemented based on locality of *hukou*, which means that migrants have been excluded from the program, despite including them in urban population statistics.

9. Shanghai was the first province to establish Reemployment Centres in 1996.

10. In 2007, the Ministry of Labour and Social Securities (MOLSS) was merged with the Ministry of Personnel. The new Ministry that came out is the Ministry of Human Resources and Social Securities.

Figure 15. Coverage and transfer of *dibao*, 1999-2008



Source: Ministry of Civil Affair, *Statistic Report of Civil Affair*, various years.

To look at the impacts of implementing these programs on poverty and inequality of urban residents, the household survey data from CULS have been used. Table 7 indicates that in 2001 *xiagang* subsidy had most significant impacts on poverty reduction while in 2005 *dibao* is the major tool. In 2001, *xiagang* subsidy lowered the poverty rates measured by *dibao* line about 1 percent and the poverty rates measured by *CBN* line about 1.5%. In 2005, *xiagang* subsidy lowered both rates about half percent. On the contrary, *dibao* plays a different role. In 2001 *dibao* decreased the two rates (*dibao* line and *CBN*¹¹ line) 0.86 and 0.56% respectively. In 2005 the effects were 2.09 and 2.38% respectively.

11. The Cost of Benefit Necessities is a way to define poverty line. Please refer to Meng, *et al.*, (2005) for details.

Table 7. Poverty incidence rate changes after each income transfer program

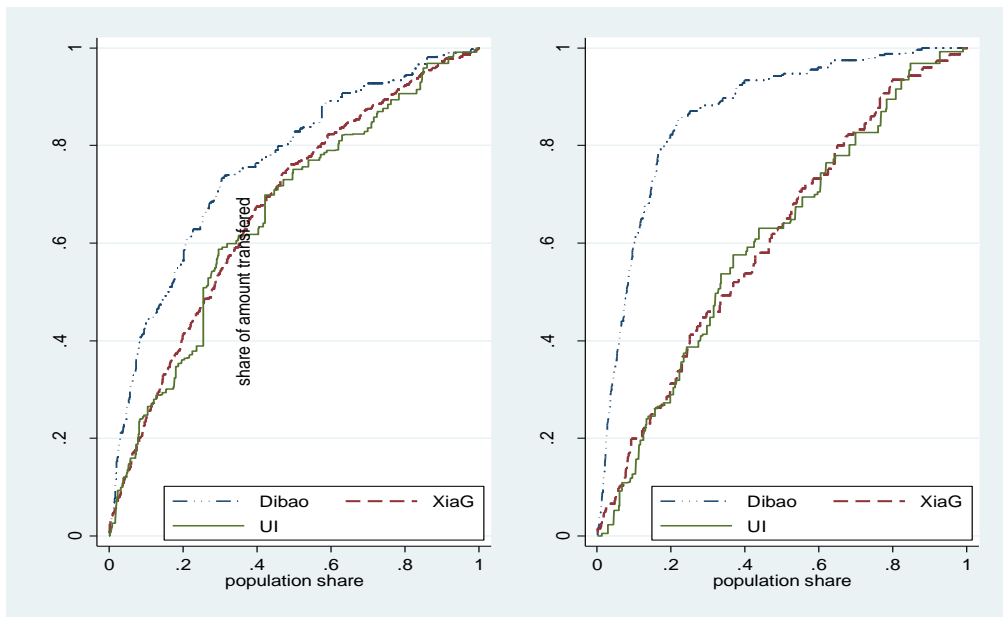
Poverty lines	Pre-Transfer	After <i>xiangang</i>	After unemployment insurance	After <i>dibao</i>	Post-Transfer
<i>CULS1 in 2001</i>					
<i>Dibao</i>	9.07	8.06	8.75	8.21	7.00
CBN	10.73	9.22	10.53	10.17	8.19
\$/day	3.30	2.71	3.03	2.82	2.27
2\$/day	8.59	7.51	8.15	7.64	6.58
3\$/day	17.16	15.82	16.75	16.65	13.85
Subjective	15.65	14.32	15.31	15.18	12.88
<i>CULS2 in 2005</i>					
<i>Dibao</i>	9.44	8.95	9.22	7.36	6.76
CBN	11.23	10.64	11.04	8.85	8.25
\$/day	4.53	4.46	4.50	3.07	3.03
2\$/day	12.97	12.74	12.71	11.70	11.09
3\$/day	24.23	23.79	24.11	23.80	23.06
Subjective	23.35	22.69	23.14	22.54	21.84

Note: The reported poverty incidence rates are weighted by city population. From column 2 to 4, each transfer income is added separately for calculating poverty incidence rates. The last column is based on pre-transfer income plus all the transferred income. The subjective poverty line is estimated using data from the 2004 NBS Urban Short Form Survey. This survey included questions on the households' own assessment of the adequacy of their income to meet their basic needs. Using this information, the subjective poverty line for 2003 for urban areas is estimated at 4147 CNY per capita per year for 2003. The Bank lines and subjective line are based on 2003 national urban prices. Regional prices are adjusted based on Brant and Holz (2004).

Source: *China Urban Labour Market Survey*, Institute of Population and Labour Economics, CASS.

When comparing the programs, we need to see if the transfers really go to the poor. In other words, do the poor get more transfers than the rest of the population? Figure 16 plots the distribution of transfers based on the two rounds of CULS. The horizontal axis is sorted by household income per capita before transfer. The curves show distribution of cumulative amount of transfer among people and each curve represent one of the programs, which are *dibao*, *xiangang* subsidy, and unemployment insurance respectively. The two round surveys show different patterns. In 2001, the three curves have similar shape. For example, the poorest 20% population gets about 35% unemployment transfers, about 40% *xiangang* subsidy, and 55% *dibao* transfers. This means that in 2001 the system of social assistance was not systematic and the roles of different programs were not clear. In addition, they have mixed functions. In 2005, however, *dibao* curve was more concave than in 2001, it is not the case for the other two instruments. The poorest 20% of the population get about 25% unemployment transfers, about 25% *xiangang* subsidy, and more than 80% *dibao* transfers. This also indicates that *dibao* has been the dominant social assistance program in urban China.

Figure 16. Concentration curves of income transfer programs



Source: China Urban Labour Market Survey, Institute of Population and Labour Economics, CASS.

Although the income transfer from social safety programs is pro-poor and most of the transfer goes to the poor, it has very limited effects on overall inequality. After all income transfer, the Gini coefficients that are insensitive to income transfer showed no changes in 2001 and a very slight decrease in 2005 (Table 8). In 2001, when lump-sum payments were frequently used to subsidize laid-offs, it is found that after temporary transfer to the laid-offs, the ratio of the top 10% to the bottom 10% of the population, increased. The ratio has slightly decreased after transfer of unemployment insurance and more significantly after *dibao* transfer. In 2005, when social programs were dominated by *dibao* program, the ratio declined after each transfer because lump-sum payments were very limited. Even if the ratio before transfer was bigger than in 2001, the post-transfer one was smaller, indicating that the tools were more effective in terms of poverty reduction.

However, changes of bottom-sensitive inequality indices suggest that social programs are helpful for increasing income equality. By calculating the so-called equity-sensitive average income, the Atkinson Index is more strongly correlated with the extent of poverty. With increasing risk aversion parameter, society attaches more weight to income transfers at the lower end of the distribution and less weight to transfers at the top. For that reason, the Atkinson index has a significant declining when applying the risk aversion parameter to 2 that is typically used value of such a parameter. For CULS1, the Atkinson index (with 2 of risk aversion parameter) was 0.65 before income transfer and declined to 0.53 after income transfer. In the case of CULS2, the index was 0.52 and 0.46 respectively. In particular, the index has the largest amount of decrease after *dibao* transfer, which implies that among those social programs *dibao* is more pro-poor than other measures (Table 8).

Table 8. Inequality changes after each income transfer program

Inequality Lines	Pre-Transfer	After <i>xiagang</i>	After unemployment insurance	After <i>dibao</i>	Post-Transfer
<i>CULS1 in 2001</i>					
p90/p10	6.326	6.544	6.291	6.195	6.407
GE(-1)	0.932	0.873	0.931	0.607	0.552
GE(0)	0.289	0.286	0.289	0.278	0.276
GE(1)	0.275	0.268	0.275	0.272	0.265
GE(2)	0.43	0.385	0.429	0.426	0.382
Gini	0.387	0.388	0.387	0.385	0.387
A(0.5)	0.128	0.127	0.128	0.126	0.125
A(1)	0.251	0.249	0.251	0.242	0.241
A(2)	0.651	0.636	0.651	0.548	0.525
<i>CULS2 in 2005</i>					
p90/p10	6.818	6.667	6.667	6.429	6.164
GE(-1)	0.551	0.524	0.549	0.425	0.379
GE(0)	0.28	0.278	0.278	0.265	0.26
GE(1)	0.263	0.262	0.262	0.257	0.254
GE(2)	0.339	0.337	0.338	0.335	0.33
Gini	0.391	0.39	0.39	0.387	0.384
A(0.5)	0.125	0.125	0.125	0.122	0.12
A(1)	0.244	0.243	0.243	0.233	0.229
A(2)	0.524	0.512	0.523	0.459	0.431

Source: China Urban Labour Market Survey, Institute of Population and Labour Economics, CASS.

5. Conclusions and discussions

The Chinese economy has maintained a fast growing pattern in the past three decades. The economic restructuring happened simultaneously with fast economic growth. In 2007, the value added in the primary sector only accounted for 11.3% of total GDP. Thanks to the high economic growth rate, the total employment in non-agricultural sectors has grown too. Even in 2008, suffering from the shock of the international financial tsunami, the total urban employment increased by 11.13 million. Meanwhile, the employment shift to secondary and tertiary sectors is obvious, as evidenced by nearly 60% of workers working in non-agricultural sectors in 2007.

Employment growth and the employment sectoral shift lead to large flows of labour migration. In 2007, the total number of rural migrant workers reached 136 million. This massive and still growing internal migration, described as the largest peacetime movement of people in history, is one of the most significant phenomena characterizing the contemporary Chinese labour market. The first consequence of this increasing migration flow is the exhaustion of the young and well educated labour force in rural areas. Combining with the demographic transition resulting in decreasing new labour market entrants, it is good to believe that China is going to face a turning point of development with limited labour supply. It seems that the recent financial crisis stopped the trajectory of this movement. It is reported that 20 million of migrant workers have returned to home towns because of the shrinking employment opportunities at the end of 2008. If we separate long term effects from cyclical factors, however, the judgment facing *Lewisian* turning point will still hold.

China has also witnessed labour market development in the past three decades. As an essential component of economic transition, China evolved to a labour market through gradual reforms, like in other areas. Labour market mechanisms were firstly introduced in rural China by allowing farmers to make labour allocation decisions, which in turn lead to labour mobility from rural to urban areas and across regions. When China started restructuring the economy of SOEs and experienced some years of labour market dislocation, the governments tends to relax their direct control on labour allocation in urban economies. Instead, the market mechanism was recognized in hiring and firing decision and wage formation, as evidenced by the 1994 *Labour Law*.

However, labour market development has been accompanied by a growing trend towards labour market informalization. The informal sector has two main components: a) workers affected by labour market shocks of the mid-1990s, that after losing their jobs in SOEs, entered the informal sector; and b) rural migrants working in urban areas. Migrant workers working in informal sectors accounted for more than 80% of migrants' employment in 2005. Since the features of the informal employment differ from these two groups of workers, the policy to deal with informalization should also be different.

One way to handle the informalization is to extend the social safety nets. The urban labour market dislocation revealed the disadvantage of traditional welfare system that attached employees' welfare to work units. In the past decade, social insurance has been significantly improved in urban China and social assistance programs have been helpful to reduce urban poverty and inequality. Despite the progress in the coverage of social insurance, social programs in China remain under developed. In particular, the social protection for rural residents and migrants is insufficient.

In addition, the government was inclined to strict regulations to formalize the labour market. The *Employment Contract Law* enacted in 2007 is a milestone symbolizing China's approaching a more regulated labour market. Based on the facts that workers are less protected and are facing many risks, from working safety to social safety, the purpose of this law is to protect labour by emphasizing the obligation to sign employment contracts. Although its implementation is very recent (only one year) and it is hard to evaluate its impact on labour market or economic development, a case study interviewing the firms in developed areas indicates that the law has been strictly enforced (Cai and Du, 2008).

The implications of the turning point are rich to economic development in several aspects. The changing situations of the labour market have brought about more choices to workers, so workers may require good working conditions and pay from employers otherwise they can *vote with feet*. In response to this change, the Chinese labour market tends to be more regulated than before when approaching the *Lewisian* turning point. To strengthen the labour market regulation, China has made efforts to consolidate a legal framework for the labour market. In recent years, a series of laws and regulations have been enacted to regulate wage formation, hiring and firing behaviours, labour standards and social security coverage. For this reason, the *Lewisian* turning point should be also taken as a turning point on labour market from relaxation to regulation.

As many other countries, China has made a priority to react to the international financial crisis. The government proposed a stimulus package of 4 trillion CNY for the next two years. However, the policy makers have to value the employment recovery as much as the economic growth. Based on the current plan, most resources will be used to invest in infrastructure and other capital intensive investments, so it is hard to predict how effective the package will be for employment growth.

For that reason, policy instruments should value the following aspects. First of all, the recovery programs should more specifically target employment as the first goal of the current recovery plan is try to keep economic growth rate above 8 percent. The economic growth rate is a necessary, but not a sufficient condition, to maintain employment growth. The experiences dealing with the Asian financial crisis

indicated that government consumptions focused on physical investments would not increase employment when the labour intensive industries were ignored (Cai, *et. al*, 2004).

Second, the most affected group during this economic downturn is the migrant workers group who need support from the recovery plan. In fact, China successfully coped with the shock from the Asian financial crisis that caused urban unemployment by initiating active labour market program, *Reemployment Project*. Concerning the most affected groups this time, the active labour market program should be extended to migrant workers, including training, distribution of employment, information, etc.

Finally, the extension of the social protection system to rural residents and migrants, will not only have immediate effects to mitigate the negative impacts of the economic crisis, but will also be helpful to correct the economic structure that heavily relies on demand from export and maintains low levels of domestic consumption. In fact, it is widely recognized that China is an over saving country with low consumption. The low coverage of social protection, in particular for migrants and rural residents, is one of the most essential reasons that lead to high precautionary saving rates. Therefore, it is good to believe that increasing government spending on health, education, pension system, and other social protection system for both rural and urban residents would translate into domestic demand through incremental consumption.

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