

Labor Markets and Social Protection in China: Experiences and Issues

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1 Recent developments in the Chinese labor market

With fast economic growth in the past decades, China has also witnessed substantial labor market development by introducing market mechanism in labor allocation, reforming the social protection system, and improving regulations. Developments in the Chinese labor market have been indicated by both labor mobility driven by labor market signals and institutional changes guided by the labor market policies. In details, recent labor market developments in China could be briefed as the following aspects.

Moving Out of Countryside

In the early reform period – namely from early 1980s through mid 1990s, the employment of rural and urban China expanded mainly through the transformation of farmers from agricultural job to non-agricultural job. Job creation by township and village enterprises and massive labor migration from rural to urban sectors are most impressive, unique and worldwide-recognized “China miracle”.

Since 1990s, rural to urban migration has played a dominant role in labor mobility. In 2010, migrant workers from rural areas totaled 153 million, which has become an indispensable component in urban labor market. Because the course of rural-to-urban migration was initiated by the large scale of surplus labor in rural area, it generates two effects of transition and development. The first is the effect of resource re-allocation, namely, labor transfer from sectors with low productivity (agriculture) to those with high productivity (secondary and tertiary sectors) alone contributed 21 percent to the overall GDP growth rate during the early reform period (Cai and Wang, 1999), and 16.7 per cent in the past decade (Cai, et. al., 2010). The second one is income effect – namely, while the wage rate of migrant workers is lower than urban workers with local *hukou* on average, the enlargement in total number of migrants has enhanced the total income of rural households as a whole.

Shattering Iron Rice Bowl

The planning economy was characterized by rigid employment system in firms. Prior to the reform, SOEs seldom had rights to make hiring or firing decisions. In the middle of 1980s, the Chinese government began to relax the restrictions on SOEs

and endowed more rights to the enterprises, including some of on employment decisions. More significant reforms happened in 1990s when SOEs abandoned full employment protection for its employees. The reform is so called *shattering iron-rice bowl*, which characterized the introduction of market mechanism in urban economy, in particular, in SOEs. Reforming employment system of SOEs makes the Chinese labor market more competitive than before.

Meanwhile, the laid-offs and the unemployed started to seek jobs in informal sectors, which led to informalization of the urban labor market. In order to cope with the disadvantages of informalization, the social safety nets that are compatible with market economy have been set up.

Facing Turning Point

Both quick demographic transitions and fast economic growth drive the Chinese labor market passing through the Lewis turning point. Accompanying increasing total employment, shortage for unskilled workers appeared firstly in China's fast growing regions where the industry has been dominated by labor intensive sectors and then the shortage spread to other parts of China. In recent years more frequent labor shortages have taken place and the wages for unskilled workers have been rising, which convinces that China has passed through the Lewis turning point.

The implications of the turning point are comprehensive and the most obvious one is that the workers who had weak bargaining power in the labor market previously have more choices by *voting with feet*. Since the demographic transition has been one of the most important driving forces that caused labor shortage, it is good to believe that the phenomenon is the beginning of long term trend rather than a temporary one.

From Relaxation to Regulation

If we see rural to urban migration and urban economic restructuring as approach to relaxing labor allocation, the improvement of legal framework in recent years will be a procedure to regulate labor market. The Lewis turning point implies a possibility approaching to a more regulated labor market without losing of competitiveness if the tradeoff between flexibility and security is finely chosen. A bunch of labor related laws have been enacted in recent years. Meanwhile, it is also a beginning for China to seek a suitable point in the labor market that both achieve flexibility and security.

2 Economic Growth and Employment Creation in China

It is well known that China has experienced fascinating economic growth during the

past three decades. Although the economic growth in China has been subject to fluctuations when outside shocks took place, for example, the Asian Financial Crisis in 1990s and the recent Global Financial Crisis, 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 five 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 RMB with respect to USD. Despite being hit by the recent global financial crisis, GDP growth rate still achieved 9 percent in 2008, and more than 10 per cent in 2009 and 2010. In 2010, China's GDP was 39,798 billion yuan and GDP per capita reached 29,748 yuan, according to the middle exchange rate in 2010 (equivalent to USD 6,021 billion and USD 4,500 respectively).

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 10.6% in 2009. 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 42.4 percent in 2009.

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*, the coastal areas started accepting the industries transferred from New Industrialized Economies (NIEs) in the mid-1980s. Since then China has made a good use of its competitive advantages in labor intensive industries. As a result, the share of secondary sector in GDP has been stable since 1978, fluctuating around 45 percent with a small standard deviation of 2.02 percentage points.

1. According to the definition employed in the Chinese statistics system, only agriculture is accounted as primary sector.

China has taken advantage of its labor after WTO entry and has become the world factory, as evidenced by the dominant role of “*made in China*” in international trade. In 2009, 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.

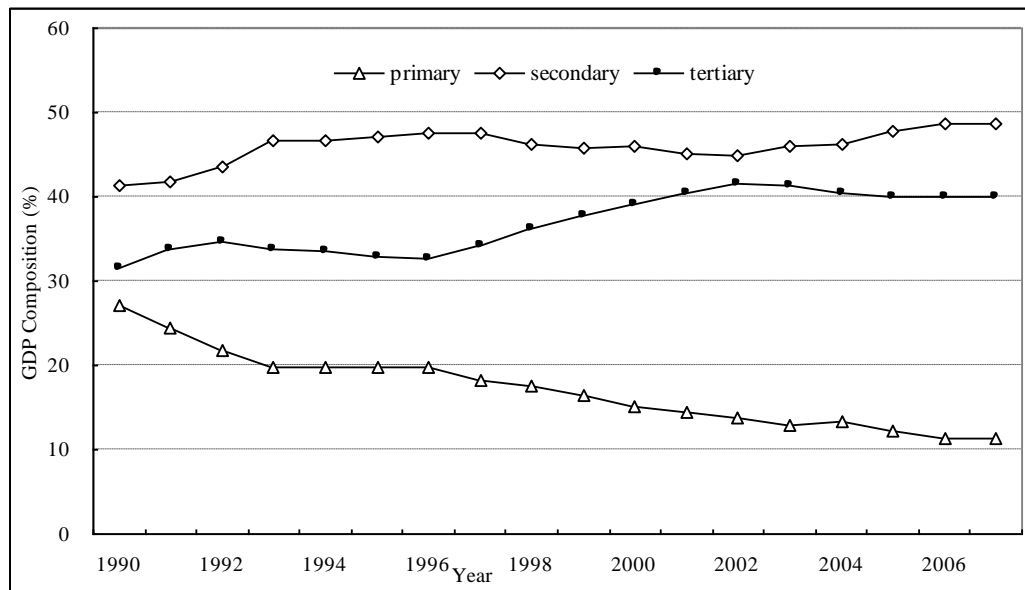


Figure 1 GDP Composition in China: 1990-2007

Source: NBS, the Statistical Yearbook of 2008, China Statistical Press.

The growth pattern is also reflected by the labor 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 also leads to employment shift among economic sectors, 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 labor market changes, it increased the employment instability by greater integration with other economies for both labor demand and outside shocks.

Table 1 presents the major labor market outcomes in the Chinese case. Although recent study (Du and Wang, 2011) combining various sources of information indicates an overestimation in total employment, the following statistics shows the trend of increasing total employment. Despite the urban economic restructuring caused significant labor 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. Also, China has quickly recovered from the recent global financial crisis, as evidenced by the growth of total employment.

Table 1 Total Employment, LFP, and UR in China

| Economically Active Population | Total Employment (million) | Urban Labour Market | | | RUR (%) |
|--------------------------------|----------------------------|----------------------|---------|--------|---------|
| | | Employment (million) | LFP (%) | UR (%) | |
| | | | | | |

| | (million) | | | | | |
|------|-----------|--------|--------|-------|------|-----|
| 1990 | 653.23 | 647.49 | 170.41 | 78.0 | 3.26 | 2.5 |
| 1991 | 660.91 | 654.91 | 174.65 | 83.0 | 3.32 | 2.3 |
| 1992 | 667.82 | 661.52 | 178.61 | 72.6 | 3.41 | 2.3 |
| 1993 | 674.68 | 668.08 | 182.62 | 66.9 | 3.49 | 2.6 |
| 1994 | 681.35 | 674.55 | 186.53 | 72.3 | 3.52 | 2.8 |
| 1995 | 688.55 | 680.65 | 190.40 | 75.9 | 3.98 | 2.9 |
| 1996 | 697.65 | 689.50 | 199.22 | 72.9 | 3.93 | 3.0 |
| 1997 | 708.00 | 698.20 | 207.81 | 72.1 | 4.50 | 3.1 |
| 1998 | 720.87 | 706.37 | 216.16 | 71.2 | 6.29 | 3.1 |
| 1999 | 727.91 | 713.94 | 224.12 | 72.9 | 5.87 | 3.1 |
| 2000 | 739.92 | 720.85 | 231.51 | 66.1 | 7.61 | 3.1 |
| 2001 | 744.32 | 730.25 | 239.40 | 67.3 | 5.55 | 3.6 |
| 2002 | 753.6 | 737.40 | 247.80 | 66.5 | 6.14 | 4.0 |
| 2003 | 760.75 | 744.32 | 256.39 | 63.4 | 6.02 | 4.3 |
| 2004 | 768.23 | 752.00 | 264.76 | 64.0 | 5.78 | 4.2 |
| 2005 | 778.77 | 758.25 | 273.31 | 62.5 | 5.80 | 4.2 |
| 2006 | 782.44 | 764.00 | 283.10 | 63.64 | 6.12 | 4.1 |
| 2007 | 786.45 | 769.90 | 293.50 | 63.00 | 5.34 | 4.0 |
| 2008 | 794.23 | 774.80 | 302.10 | 62.64 | | 4.2 |
| 2009 | 798.12 | 779.95 | 311.20 | 62.39 | | 4.3 |

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

Labor force participation and unemployment rate reported in China, do not follow the standard international definitions proposed by the ILO. According to the definition of Registered Unemployment, 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. As we may see in the table, there are very small fluctuations in registered unemployment rates, which imply that the indicator is not an ideal one reflecting the labor market situations in China.

Alternatively, with some assumptions, 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 labor 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 labor market witnessed a significant dislocation. The declining unemployment rate reflects the improved

labor market situation in recent years.

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. Again, official employment statistics may bias the employment structure, but the trends of structural changes in employment could be reflected. As Figure 2 presents, the employment in primary sector accounted for a decreasing proportion in total employment. In 1990, 60 percent of the total labor force worked in agriculture while the share dropped to 41 percent in 2007. The advantage in labor 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 27.8% in 2009. This trend results in a significant migration flow in China.

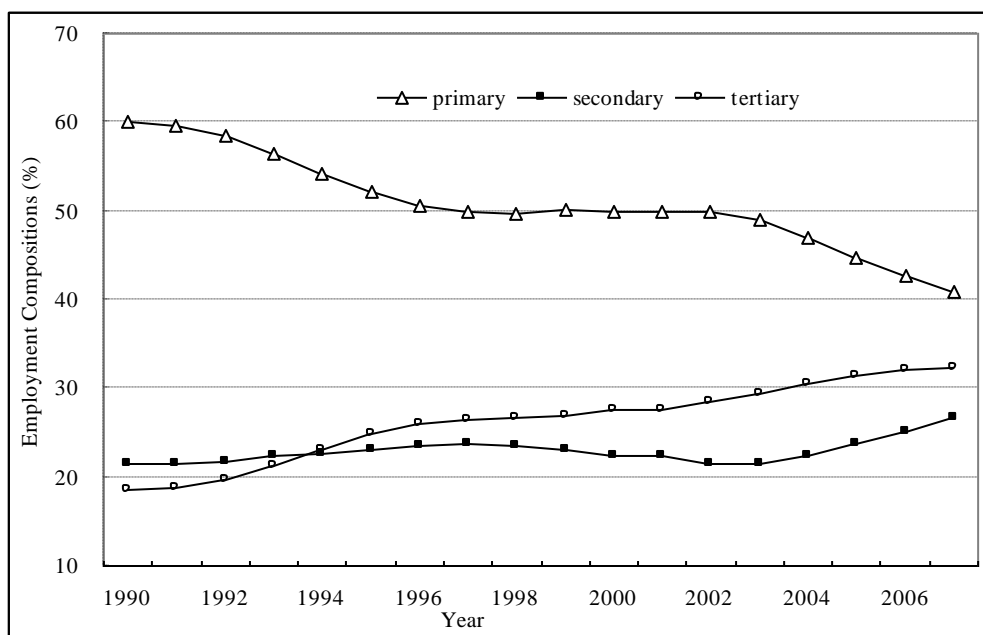


Figure 2 Employment by economic sector, 1990-2007

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

China has witnessed its largest labor migration in the world since reform and opening up policies were implemented. According to the most recent statistics, the total number of rural to urban migrant workers has been increasing in the past decades, as figure 3 depicts. The migration flow has propelled the economic and societal transition in China through the increase of labor productivity and social restructuring. Accordingly, the Chinese government has adapted its migration policies to increasing migration flow and changes in the labor market.

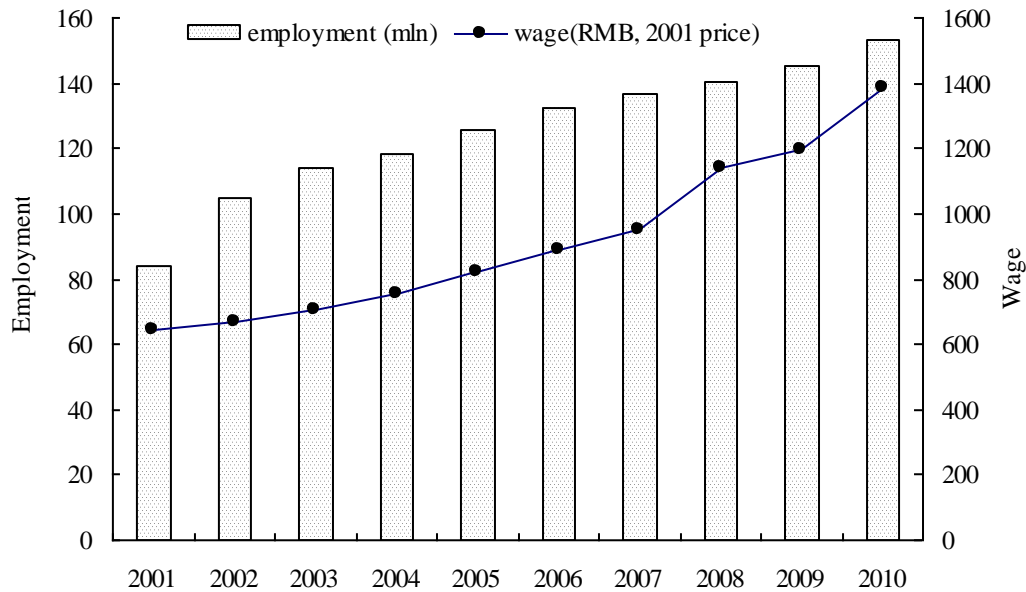


Figure 3 Employment and Real Wage for Migrant Workers

Source: cite from *Migrant Workers Monitoring Report in 2010*, mimo.

Migrant workers have been the stable sources of labor supply in urban labor market in the past decades. In recent years, in addition to growing employment, their average monthly earnings have been increasing. For instance, the annual growth rate of real monthly earnings (in 2001 price) for migrant workers was 19.6% in 2008. In 2009, although suffering from the global financial crisis, we still see an increase in employment and wage growth for migrant workers. In 2010, as one of the outcomes of economic recovery, average real monthly earnings for migrant workers increased 15.5 percent.

During the era with dual economic structure, the transferred labor forces from rural areas would enhance their marginal productivity no matter working in manufacturing or service. Therefore, labor reallocation from low to high productivity sector results in improvement in economic efficiency, which contributes to overall economic growth. Previous studies have demonstrated that labor mobility between rural and urban areas had contributed 16%-20% to overall economic growth during the first two decades of reforming period (Cai and Wang, 1999; the World Bank, 1998). With passing through the Lewis turning point, the contribution of labor migration to overall economic growth declines, even though it is still an important source driving growth. From 2001 to 2009, the average share of contribution to overall economic growth is 16.7% and has been decreasing in recent years (Cai, et. al., 2010). The rural to urban migration has stylized the labor market in the past decades, together with fast employment growth and economic transitioning. As indispensable component in urban labor market, policy makers have to concern about the needs of migrant workers when aiming to improve the welfare of workers.

3 Social Protection System in China

3.1 the informality in the Chinese labor market

Although the total employment has been increasing, the Chinese labor market also exhibits the informality that is supposed to be one of the significant features in developing labor market. The trend of informality in China has been changing since China started its marketized reform. It is believed that both the urban economic restructuring and the rural to urban migration have contributed to the informality in urban labor market. However, due to the data limitations, it is difficult to measure the trend of informality using public data sources. As an alternative, Cai and Wang (2004) suggest that the difference between total employment and aggregated employment by sectors in published data by NBS could be approximated as the amount of informal employment. If the “employment residual” approach is applied, the size of urban informal sector accounted for 31.5% of urban employment in 2008 while it was 36.1% in 2005. The informality in urban labor market is mostly from migrant workers. According to a report by NBS (2010), if the self-employed and wage employment without contract are defined as informal, 60% of migrant workers worked informally in 2009.

However, there is no national representative data at micro level to measure the overall size of informal employment in urban labor market and to distinguish its components. Here, the three waves of China Urban Labor Survey are employed to look at the changing trend of informality in urban China. As figure 4 presents, overall size of informal employment in sampled cities increased from 2001 to 2005 and decreased by 2010.



Figure 4 the Size and Components of Informal Employment in Urban Labor Market

Source: authors' calculation from CULS data.

Figure 4 also characterizes the labor market development at different stages. For instance, between 2001 and 2005, the increased informality was mostly from increases of informal employment of urban local workers due to SOEs restructuring. From 2005 to 2010, the declined informality was mostly from increased formality of migrant workers, as a result of stricter labor market regulation during the period than before. This trend also implies that employment quality might have been improved in the past years where the next sections show the empirical evidence.

3.2 the Framework of Social Protection System

To deal with the informality, the Chinese government has taken great efforts to construction of social protection system. Although the informality is composed by rural migrant workers and local workers, the construction of social protection system was firstly initiated to protect the workers with urban *hukou* suffering from labor market dislocations in 1990s. Since 1998, the government has been trying to establish and improve the three social safety nets, comprising a guarantee of basic living expenses for the SOE laid-off workers, and unemployment insurance and *dibao* for urban residents. While under the umbrella of the reemployment service centre of SOEs, laid-off workers can receive the basic living allowance, which is jointly paid by the government, enterprises, and the society, and issued by the reemployment centre along with other employment services, including information and training. Those laid-off workers and other unemployed persons who fail to get reemployed after they leave the centre, can, according to regulations, receive unemployment insurance compensation for up to two years if they have participated in the unemployment insurance program and paid the premium in full. Those laid-off and unemployed workers with a per capita family income lower than the local *dibao* line, as discussed later on in this paper, can enjoy the minimum living standard subsidy of urban residents according to regulations.

When the negative shocks to urban labor market disappeared in the early of this century, the social protection framework in urban areas has been established preliminarily. Thanks to the improving fiscal capacity at national level and the fact that increasing resources have been available for constructing social protection system, the Chinese government is able to raise new social programs so as to cover more vulnerable people, in particular to rural people. Figure 5 depicts the framework of social protection system in China. The social protection system mainly consists of both social insurance programs and social assistance programs as well, which are characterized as contributory or non-contributory respectively. For social assistance program, *dibao* has played a dominant role in terms of both the coverage and the benefit transferred as well. The social insurance system in urban areas is quite complete, meanwhile, a series of new programs have been raised in rural

areas although participants only get limited benefits compared to those in urban programs.

Due to the gradualism that is applied to the construction of social protection, the current system is far more from a complete one and is subject to adjustment, improvement, or further reforms. Several features of this system are worth noting here.

The most significant feature of current social protection system in China is its segmentation between rural and urban areas. Given the legacy from dual society, the gap of social protection between urban and rural areas was substantial. Although some new programs, for instance, the New Cooperative Medical System, Rural Pension System, and etc., have been implementing, the social protection disparities between rural and urban areas are still obvious. To some extent, the rural residents have been better off since new social protection programs were introduced in rural China. Meanwhile, China has been facing with the challenges to integrate different systems and to reduce the gaps of benefit among different groups of people. The segmentation may translate into determination of job quality as we may see later on in this paper.

The second one is segmentation across various branches of government. As China starts to prioritize social protection as one of the most important government functions, different government agencies began to raise new programs in succession, which increases the coordination costs. For example, the rural medical system is run by Ministry of Health while the urban health care system is administered by Ministry of Human Resources and Social Security. Another example is that, in addition to rural pension programs, the Commission of Population and Family Planning kicked off special program aiming to support the parents of one-child.

In addition, the interaction between central and local government in construction of social protection system is worth noting. Most social protection programs are funded by both central and local governments as well. Given the disparities in economic development across regions, it is easy to understand that people in some poor areas are less protected due to the constraints of limited fiscal capacity at local level. Furthermore, it leads to segmentation across regions because the rich areas tend to keep the benefit locally.

3.3 the Pillar of Social Assistance: *dibao* System

The program of Minimum Living Standard Guarantee, the so called *dibao* program, is one of the most important pillars of social assistance programs in China. The program directly targets the poor without considering their employment status. In 1993, Shanghai was the first city introducing the *dibao* program that support the

poor whose income below official poverty line. Central government positively evaluated Shanghai's experiment. In the next year, Ministry of Civil Affair proposed to extend Shanghai's practice to the other urban areas of China. All cities and the towns where county government locate were required to set up the program since 1999. In 2003, the Ministry of Civil Affair claimed that in 2002 *dibao* program has covered all the urban poor whose income are below local *dibao* line. As figure 6 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 and the average per capita *dibao* transfer was 141 yuan. However, the *dibao* program has been implemented based on locality of *hukou*, which means that migrants have been excluded from the program despite of inclusion of them in urban population statistics.

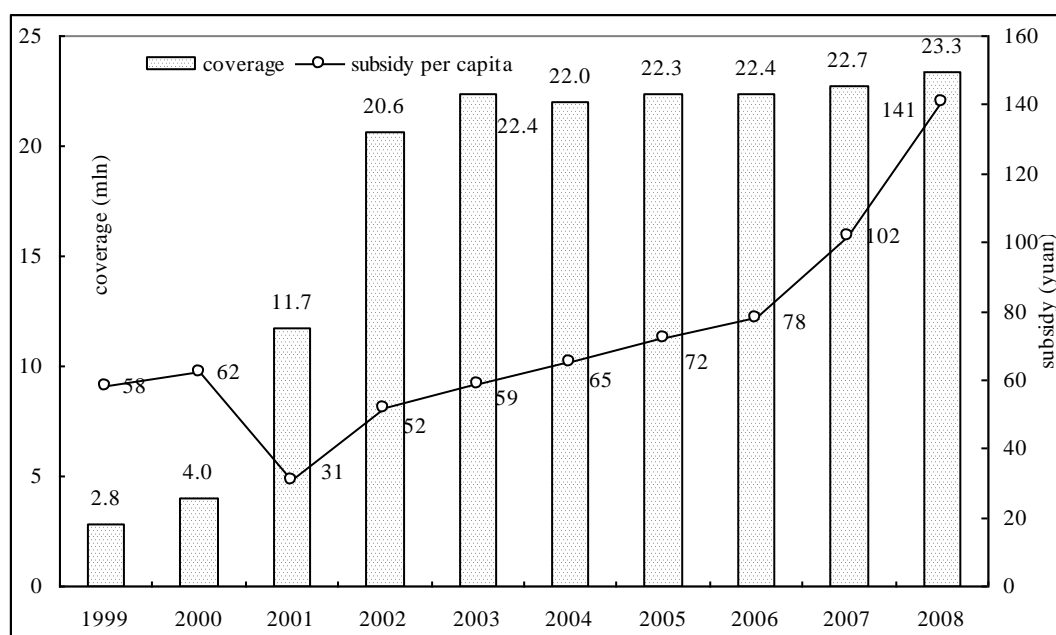


Figure 6 the coverage and transfer of *dibao*: 1999-2008

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

Taking advantage of urban household survey data, it is possible to look at the income transfer of the *dibao* program and its transitioning role when China sets up the social assistance system. Figure 7 plotted the distribution of transfers based on the two rounds of household survey data. 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*, *xiagang* 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 percent population gets about 35% unemployment transfers, about 40% *xiagang* subsidy, and 55% *dibao* transfers. This means that in 2001 the system of social assistance was not systematic and the roles of different programs are not clear. In addition, they have mixed functions. In 2005,

however, *dibao* curve was more concave than that in 2001, but it is not the case for other two. The poorest 20 percent population gets about 25% unemployment transfers, about 25% *xiagang* subsidy, and more than 80% *dibao* transfers. This also indicates that *dibao* has been the dominant social assistance program in urban China.

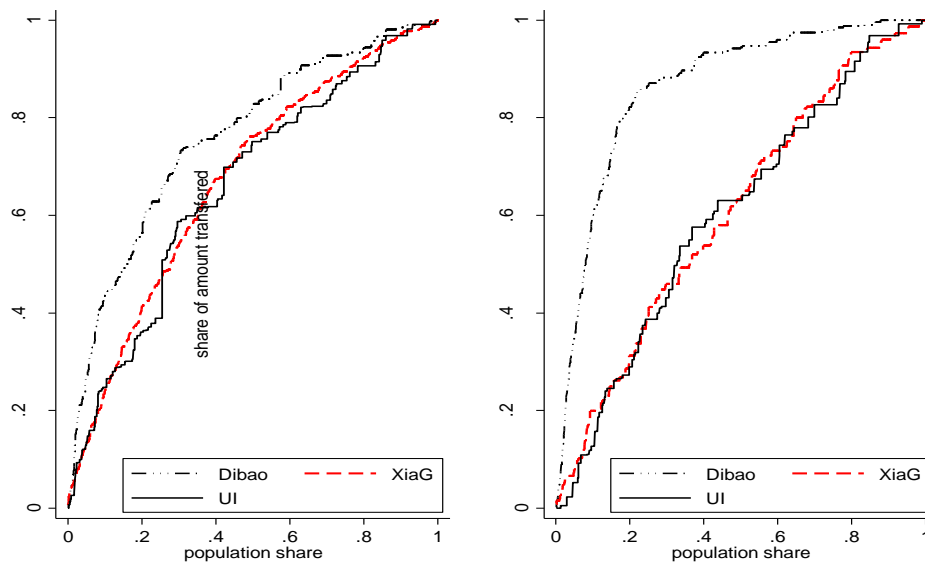


Figure 7 Concentration Curves of Income Transfer Programs

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

As noted earlier, the *dibao* program is also segmented between rural and urban areas. Since the end of 1990s, China has implemented *dibao* program in rural areas. By 2007, *dibao* program has been implemented all over rural China. The coverage of the program in rural areas has been increasing (Figure 8). The number of beneficiaries has increased from 2.66 million in 1999 to 35.66 million in 2007 and the number of households has increased from 1.57 million in 2002 to 16.09 million in 2007. The average monthly subsidy is 70 yuan in 2007. It is obvious that efforts need to be made to bridge the gap between rural and urban areas, even within the program.

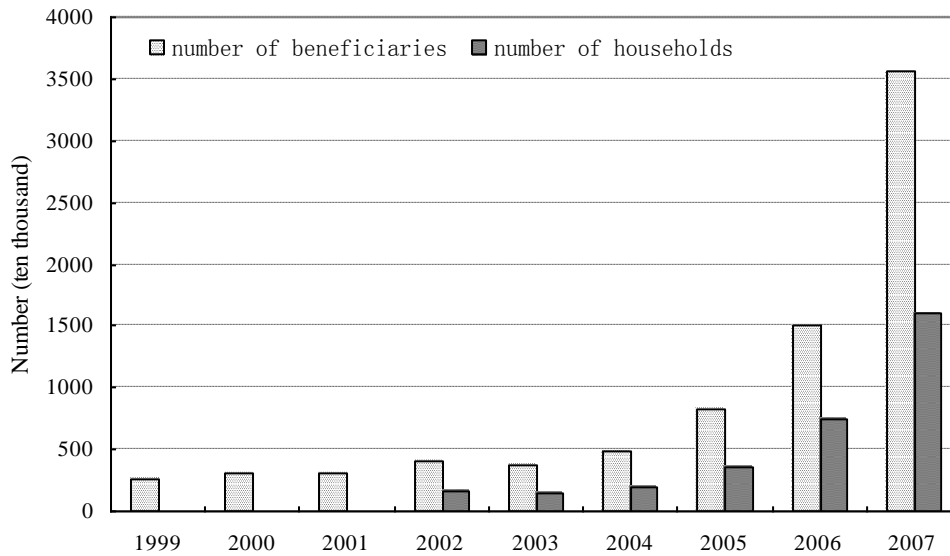


Figure 8 Increasing Coverage of Rural *dibao* System

Source: Ministry of Civil Affairs, *China Civil Affairs Statistical Yearbook* (various years), China Statistical Press, Beijing.

3.4 Protecting the Elderly

Due to quick demographic transition, China has already been an aging society even the economic development is still at low level. Among the social protection programs, therefore, the system to support elderly is the most influential and pressing one to be constructed. To deal with the challenge from an aging society, China has to set up a pension system to support more and more old people. Current urban pension system is Pay-As-You-Go because the workers who had long experiences in SOEs actually have no accumulation for their pensions. For such a reason, increasing the coverage of the pension system has been one of the key elements for the establishment of social security system. As Figure 9 shows, in the new century the total number of participants in the pension system has been increasing and reached 187.7 million in 2006. Meanwhile, the total number of retirees with pension, the number of men over 60 and women over 55, has also increased steadily with aging.

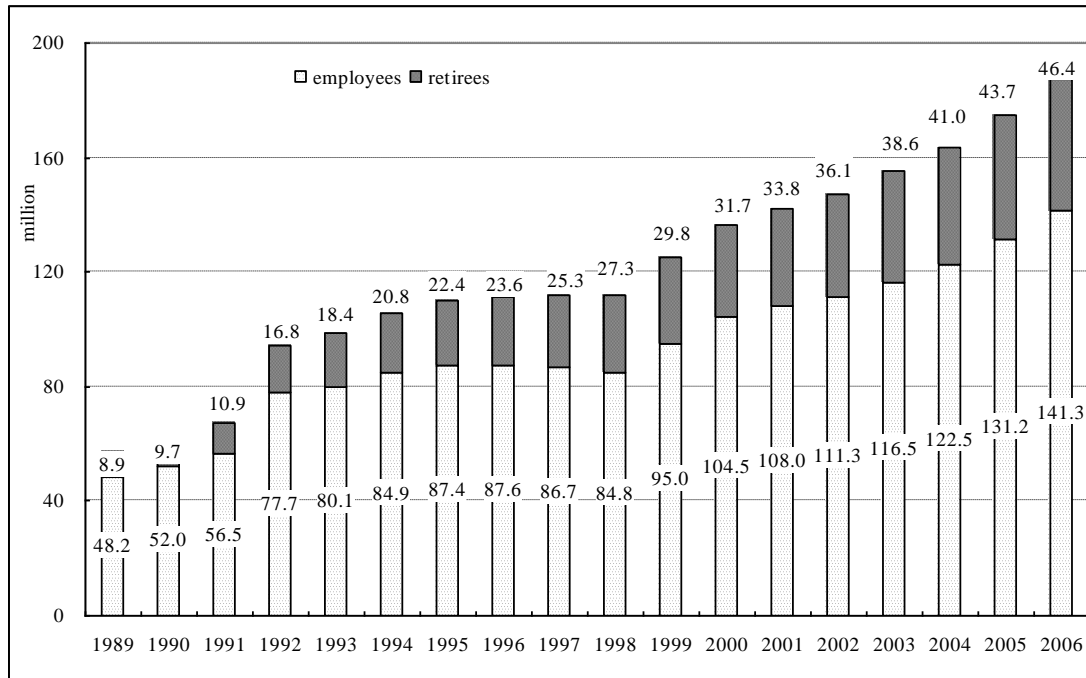


Figure 9 Increasing Coverage of Urban Pension System

Source: NBS, *China Statistical Yearbook* (2007), China Statistical Press, Beijing.

Since early 1990s, rural pension system has been experimented in some counties. By the end of 1992, more than 700 counties have constituted regulations on rural social pension system, nearly 20 counties have established basic rural old-age pension systems which cover all the farmers and more than 35 million rural people have participated in this program. By 1994, 28 provinces, autonomous regions and municipalities have piloted to develop rural old-age pension system.

The administration of rural pension system was transferred from Ministry of Civil Affairs to Ministry of Labor and Social Security in 1998 when the government organization reform was carried. In the July of 1999, the State Council pointed out that rural areas have no capability to construct pension system universally by so far and decided to stop accepting more people to participate in the system. Areas with enough capability can transfer to commercial pension insurance gradually.

In 2002, the report to the 16th National Congress of the Communist Party of China points out the specific direction of construction of rural pension system. Both the document *Regulations by The Central Committee and the State Council on Push Socialist New Countryside* and *Eleventh-Five-Year Plan* put forward that China should establish rural old-age pension system which is compatible with rural economic development level.

In recent years, the rural pension system has been piloted by various regions. Unlike urban pension system that has a matured and nationally universal plan, rural pension system has been at the experimental stage with large variations in terms of

program design, level of benefit, level of pooling, and coverage rates.

In 2009, the Central government formally promoted pension program to rural areas after pilots at local level for years. The State Council issued the *Suggestions on Launching New Rural Pension Programs* in September, 2009. According to the *Suggestions*, 10 percent of counties will pilot the program in 2009 and the program will cover all rural areas in 2020. Combining with household support, land tenure, and social relief, the objective to implement this program is to support the rural elderly. In practice, the programs have been raised more rapidly than planned.

Migrant workers are special group of people working in the urban areas with rural identity. The coverage rate of pension program for migrant workers in urban areas is very low while the rural programs are not able to meet their demand. There exists controversy about the directions of pension programs for migrant workers. It seems an undesirable plan if simply apply current urban plan to migrant workers due to their mobility. However, exclusion of migrants out of urban pension system will keep the social gap between those migrants and urban residents.

3.5 Integrating Social Protection Programs

Thanks to gradual reforms, China is on the way to a complete social safety net at the price of segmented social programs. It is widely accepted that integration of social programs is the key issue to improve China's social safety nets in the near future, which includes the reforms in the following areas.

The inequality of access to social security brings about the welfare gaps between residents with rural identity and urban ones, which is also the drawback of current system that is widely criticized. Limited by the fiscal affordability, it was not possible to provide social security and social services for rural residents. Even though some social programs started implementing in rural areas, they still have much difference in terms of benefit. However, with increasing fiscal revenue, it is time to discuss how to integrate rural people into a modern social security system.

Lack of portability has been one of the most essential shortcomings of current social programs for a long time, which also becomes a barrier that limits the labor mobility across regions. Social programs piloted by local governments have very low level of pooling, which makes the individual account difficult to transfer among regions. In recent years, it is quite often to migrant workers withdraw their contributions from social security system when they decide to move to other places.

The gradual reforms have also brought about the issue of coordination between social programs. In China, one government agency is in charge of a specific social program, which increased the difficulties to coordinate between programs. For

example, in rural and urban areas different means is used in terms of the social assistance for the poor. The rural poverty is basically targeted on region and poverty reduction is achieved through regional economic development. Unlike rural poverty, the social assistance for the urban poverty is targeted on household through *dibao* program. Owing to the difference of policies between the rural and the urban, especially the discrepancy of subsidized level between the two regions, it is hard for local city government to include migrants into their social safety nets, which results in a segmented poverty alleviation policies between urban and rural China.

4 Inequality and Its trend

It is widely observed that since the economic reform and opening-up policy initiated in the late 1970s, while China has achieved unprecedented fast economic growth, its income distribution has widened (World Bank, 2009; CDRF, 2005; Ravallion and Chen, 2007).

No matter what measurements are employed by researchers, they all indicate that inequalities in both income and consumption among rural and urban residents have increased in most of the time of reform period, and the myth that stated relatively smaller income inequality in China by international standard has been proven mistaken (Gibson, Huang and Rozelle, 2000). The nationwide Gini coefficient of per capita income enlarged from 0.31 in 1981 to 0.447 in 2001 (Ravallion and Chen, 2007) and/or 0.46 in 2002 (Khan and Riskin, 2004). This degree of income inequality is indeed relatively high, no matter comparing to China's own past or to international general level (CDRF, 2005).

In the more detailed examination (Ravallion and Chen, 2007), Gini coefficient of per capita income among rural residents increased from 0.25 in 1981 to 0.37 in 2001, while Gini coefficient of per capita income among urban residents increased from 0.19 in 1981 to 0.33 in 2001. In each of the periods, Gini coefficient of income² – namely 0.31 in 1981, 0.35 in 1990 and 0.45 in 2001, were bigger than that in either rural or urban areas, respectively, implying the existence of large and increasing income gap between rural and urban areas.

Using the same dataset and methodology as Ravallion and Chen (2007), the recent report by the World Bank (2009) extends the estimation on national Gini to 2005. The result indicates that the Gini coefficient of income inequality has risen to 0.453 in 2003 and slightly dropped to 0.443 in 2005 when controlling for the difference in cost of living. The World Bank report (2009) also indicates that the spatial cost of living makes difference in measuring income inequality. If the spatial cost of living is adjusted, the Gini index dropped from 0.453 to 0.411 in 2005.

² As described by Ravallion and Chen (2007), the complete micro data are not available for any year. See the World Bank (2009) for the same discussion.

Although it is widely reported that overall income inequality and the difference between rural and urban incomes in China have reached historically high levels, it is hardly to believe that China can maintain a stable society to support fast economic growth when media report high inequality levels. As a flock of studies found that the increasing inequality may be detrimental to economic growth (Persson and Tabellini, 1994; Alesina and Rodrik, 1994; Clarke, 1995; Sabot, Pinckney and Birdsall, 1996; Rodrik, 1999), it is hard to explain the coexistence of big gap of income distribution and the fastest economic growth in the world. In particular, Rodrik (1999) points out that the countries with the most unequal income distribution have been suffering the lowest economic growth since 1975. In this regard, it is likely that either the inequality prior to the reform was underestimated or the inequality trend in China was overestimated for some reasons.

To understand the income inequality in China correctly, some unique aspects in the Chinese market and statistical system need to be addressed. As a transition economy with fast economic growth, the stories of both reform and development complicate the issue of inequality. Therefore, before going through the inequality issues, it is of importance to understand the institutional changes that has taken place over the reform period.

Since 1980s, household responsibility system has been introduced into rural China, which significantly improved the incentives for rural households in agricultural input. With this manifold increase of the work effort, there was a significant decline in the labor time needed for agriculture, and a labor surplus emerged. In order to absorb it, peasant households, which now had operational autonomy, firstly switched their work from being used solely for grain production to other agricultural sectors, and then from cultivation to the overall development of agriculture, forestry, animal husbandry, fisheries and household sideline production, greatly changing the agricultural production structure, and improving labor utilization and income levels. With the improvement of agricultural productivity, however, the capacity of either cultivation or “big agriculture” (including farming, forestry, animal husbandry, sideline production and fisheries) to absorb labor was ultimately limited.

Gradual abolition of institutional obstacles has been the key to increased labor mobility. Observing the narrowing capacity to absorb surplus labor in the rural sectors, the government began in 1983 to allow farmers to engage in long distance transport and marketing of their products beyond local market places. This was the first time that Chinese farmers had obtained legitimate rights to do business outside their hometowns. In 1984, regulations were further relaxed, and farmers were encouraged by the state to work in nearby small towns. A major policy reform took place in 1988, when the central government allowed farmers to work in enterprises or run their own business in cities under the condition of self-sufficient

staples³.

In the 1990s, the central government and local governments all took a series of measures, suitably relaxing policies restricting migration, implying a certain degree of reform in the household registration system at each stage of the reform process. In this period, policies towards labor mobility across regions diverged. The divergence can be found first between central and local governments. Concerning employment, income and social security of the country as a whole, central government encouraged labor migration between rural and urban areas and across provincial borders, while attitudes towards migration of local governments differ between sending and receiving places. In relatively poor regions whose proportion of surplus laborers and share of agriculture are high, policies towards labor migration are encouraging and supportive, and the governments take measures to help farmers move out to seek better jobs and pays. The more advanced regions, however, are more concerned with security of local employment, and welcome migrant workers only when local economies need extra labor force. In those regions, policies towards inflows of migrants change cyclically as employment pressures facing local governments change over time – that is, each time when the local unemployment problems become severe, they tend to take measures to supplant migrant workers (Cai, Du, and Wang, 2001). With labor market developments, the situations have changed over time.

By the 21st century, the decision-making power for timely reform of the household registration system was actually devolved to local, in particular urban governments. At the time, the policy orientations of migrants-receiving regions diverged as well. Recognizing that while legitimacy of policies on migration is based on *hukou* system, in reality, institutional factors restricting the flow of labor are not only the *hukou* system itself. Concerning policy costs and benefits related to provisions of social security, social welfare and other public services behind the *hukou* system, two kinds of local government have changed their rejective attitude towards migration, because they do not see any expected loss of local welfare. The first kind is those fast-growing cities that have significantly benefited from the ample supply of migrant workers. The second is those whose local budgetary ability is uptight so that the provisions of public services have been too limited to worry about inclusion of migrants.

Many researchers have tried to relate the widening income inequality with the institutional restriction of labor mobility. For example, by combining Lewis model with a price scissors model, Knight and Song (1999) depicted the distorted rural-urban relationship, which is characterized by large income gap and conditioned by unlimited supply of labor. Yang and Cai (2003) examined the changes of institutions influencing labor mobility and their impacts on rural urban income

³ At the time, rationing system of food and necessities had not been abolished and people without local *hukou* were not entitled to coupons for buying food and other necessities on the local market.

gap. Labor migration means that people move from agriculture with low productivity to non-agricultural sectors with higher productivity. Through the convergence of marginal productivity of labor between agricultural and non-agricultural sectors, rural and urban income gap is expected to be narrowed. Logically, China economists tend to believe that with the elimination of institutional barriers deterring migration, the insistent income gap can be eventually reduced by full labor mobility across regions and sectors.

For example, based on a simulation, Whalley and Zhang (2004) suggest that once the obstacles imposed by *hukou* system to prevent labor from free migration are abolished, all the existing income inequality will disappear. Here, their relatively strong assumption is that *hukou* system is the single important obstacle of labor migration. Lin et al. (2004) estimate a responsive elasticity of migrants to income gap and conclude that migration is indeed a mechanism of narrowing the income gap. In the mean time, they also suggest that the present scale of migration is not adequate to reduce the existing income gap because of the presence of *hukou* system and fast growth in coastal areas.

In addition to the factors mentioned above, the regional disparities have been contributor to overall inequality over the past decades. Considering that the individual income is determined, to some extent, by the level of local economic development, the regional disparities would translate into household income inequality. Estimates based on large nationally representative samples indicate that the provincial disparities contribute 23.4% to overall income inequality in 1995 and 12.9% in 2003 (the World Bank, 2009).

Although regional economic disparities can not explain the whole story of household income inequality provincially, it is good to know trend of regional disparities which are one of the important determinants of household income gaps. In the 1980s, the economic reform was focused on reforming micro economic system in both rural and urban areas, which improved technical efficiency of micro unit that has universal effects on economic growth. The coastal areas where their growth potential had been suppressed before the reform caught up quickly in 1980s. Based on provincial data released by NBS (2009), it is easy to observe that the Gini coefficient of per capita GDP among provinces dropped from 0.347 in 1978 to 0.268 in 1990. The two coefficients are 0.241 and 0.213⁴ respectively if weighted by population.

In 1992, the Chinese government formally accepted the concept of market economy and kicked off the reforms on macro economic system. The provincial economic performance has been determined by allocative efficiency since then. As a result,

⁴ The developed coastal areas are also the most populous areas in China. Therefore, the inequality measures weighted by population are relatively smaller while this effect has been ignored by many studies.

the regional disparities had increased because the coastal areas have kept fast growth and the rest of China lagged behind. In 2003, the Gini coefficient of per capita GDP among provinces peaked at 0.34 (0.277 if weighted by population) while it was 0.29 (0.24 if weighted by population) in 1991.

In many economies, for instance, the United States, Japan, and other OECD countries, regional inequality that is one of the contributors to overall inequality is observed to decrease with economic development (Barro and Sala-i-Martin, 1995). It seems that the Chinese economy has displayed the similar pattern since the regional disparities started declining in 2003. Thanks to a series of regional development strategies implemented in the new century, for example, Western Development Strategies, Plan of Revitalizing Northeast China, and Plan of Rising Central China, the Gini coefficient of per capita GDP among provinces dropped to 0.29 in 2008. If taking the early 1990s, when China formally accepted the market economy system, as the starting point, Figure 10 presents an inverted U shape track since 1990 that is a typical Kutznets curve.

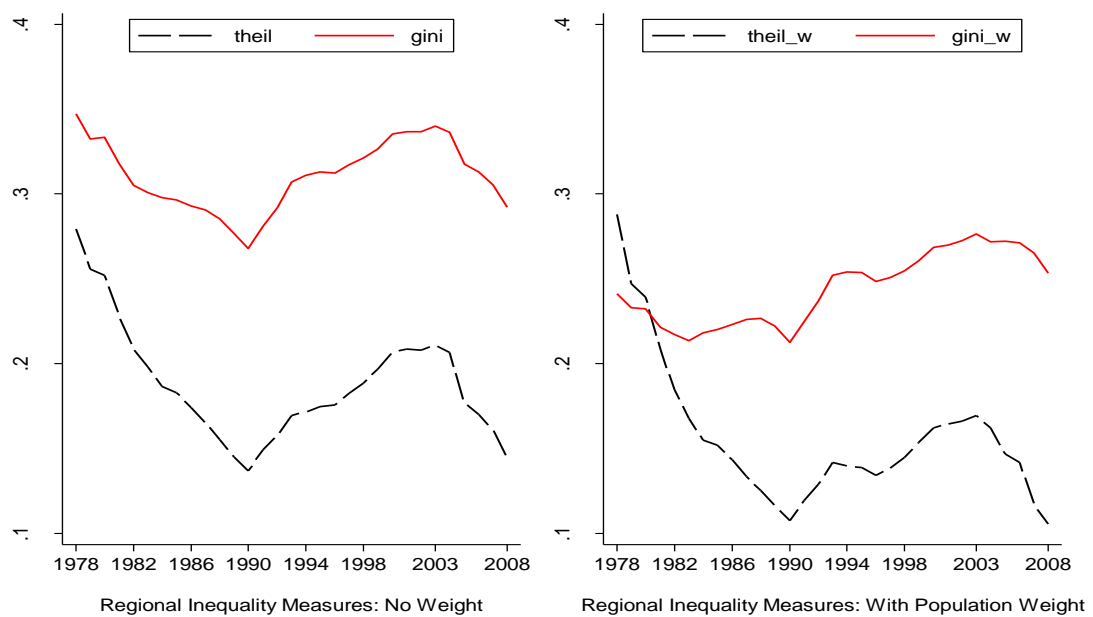


Figure 10 Gini and Theil Index of Provincial Per Capita GDP in China: 1978-2008
 Source: National Bureau of Statistics (NBS), *China Statistical Yearbook* (various years), China Statistical Press.

Thanks to the economic reform that corrects the distorted economic system, the increased inequality partly reflect the effect of the reforms on the correction. For instance, a flock of studies (for example, Zhang, et. al, 2005) finds that the returns to education on the Chinese labor market have been increasing during the reform period, which implies that the egalitarianism shaped in the planning economic system has been reformed In turn, this effect would translate into the inequality.

Goh et al (2008) find that the earning difference between skilled and unskilled workers explains most of the increase inequality during the period of 1989 and 2004. Sicular et al. (2007) show that 25-30% of the income inequality between urban and rural China could be attributed to the difference in education. In this regard, part of the increased inequality is understandable and the policy to contain the inequality should be focused on providing more equal opportunities in human capital accumulation rather than on the outcomes per se.

Given the importance of the labor income in income formation, the labor market institutions and then the labor market outcomes have direct links with income inequality. A more equal earnings distribution in labor market will equalize household distributions in current case. Since 1990s, the Chinese labor market has witnessed substantial development, as evidenced by increasing total employment, significant sectoral shifts, and institutional changes. Each of those components of labor market development links with inequality trends. From both urban household survey and rural household survey, it is easy to observe that incomes from labor market are of great importance to households. Figure 11 shows the share of wage income from labor market to household income in both rural and urban areas. Before the radical reform in urban labor market happened in mid-1990s, comprehensive employment in urban areas had been guaranteed. That is why we see more than three fourth of incomes for urban households from labor market. The urban economic restructuring and development of capital market diversifies the urban household income⁵. Even though, labor income still accounted two thirds of urban household income in 2008. Thanks to rural to urban migration, wage income has been more and more important in rural households. The proportion of wage income in net income almost doubled from 1990 to 2008. Given labor inputs in agriculture, the share is quite substantial.

⁵ According to NBS definition, household incomes are categorized as wage incomes, asset incomes, transfer income, and business incomes.

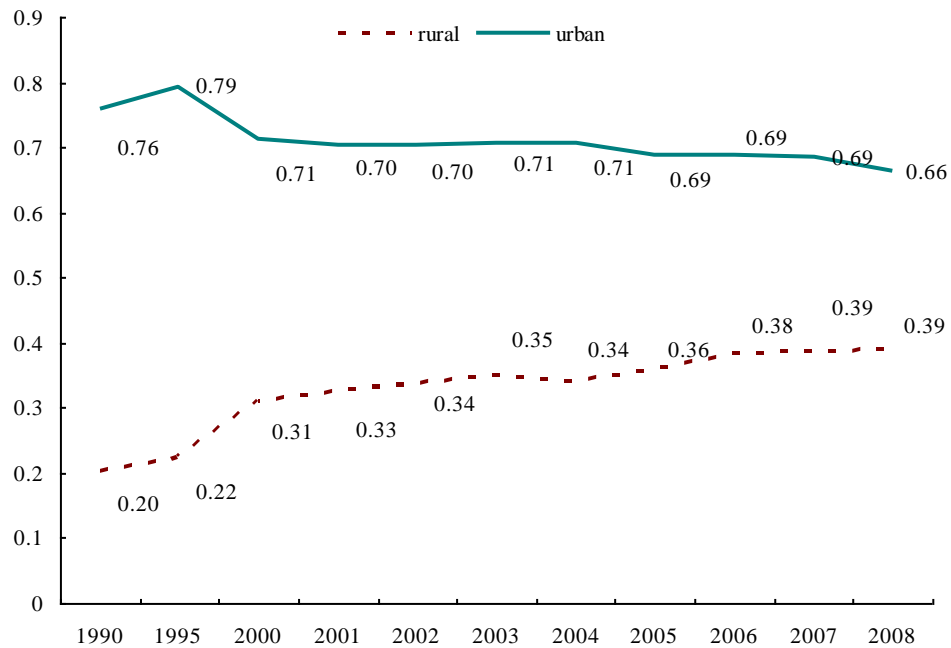


Figure 11 the share of labor income in household incomes

Source: National Bureau of Statistics (NBS), *China Statistical Yearbook* (various years), China Statistical Press.

Although it is too early to observe the substantial turning in income distribution, there are some indications bridging the income gaps as follows.

First of all, wages for unskilled workers have been increasing substantially in recent years. This trend of migration and inequality changes have been reinforced in recent years when the Chinese labor market has been approaching to *Lewisian* turning point and the migrant workers began to see their wage rate grown after two decades of stagnation. Figure 12 presents the annual wage growth rate since 2002 and its acceleration in recent years, both in real and nominal terms. Meanwhile, labor shortage appeared frequently. Even with the shock from financial crisis, the average monthly wage for migrants reached historically high 1334 yuan in 2008, 55 percent of average of earning in urban units, and 19.6 percent more than previous year in real terms. It is good to believe that the income growth for low income group is helpful to fill the gap between urban and rural residents. In 2010, the rural households have a faster growth in incomes than urban households.

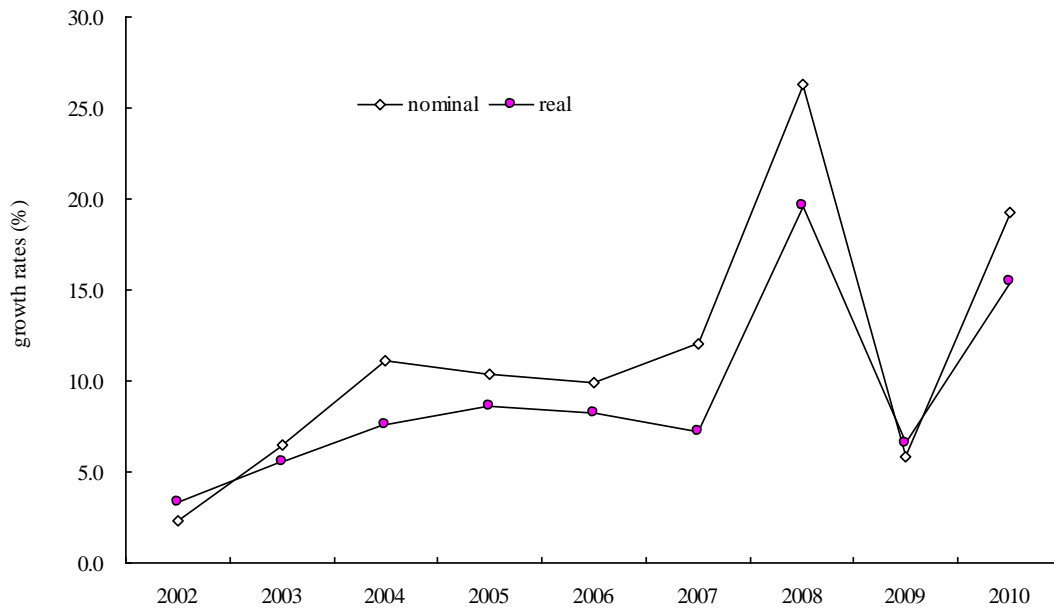


Figure 12 Annual Wage Growth Rates for Migrant Workers

Source: Authors' calculation based on data from Statistical Reports of National Bureau of Statistics (NBS).

Second, previous estimations on overall income inequality are subject to sampling bias. As pointed out by Park (2008), current measurements of inequality are subject to a number of sources bias, including sampling bias, exclusion of some categories of income, classification of rural and urban areas, and differences in the cost of living. Some previous studies have already noticed that the rural-urban migration created sources of bias when measuring the income inequality. Until 2002, NBS urban sample excluded migrants living in urban areas. After they were included, they represented less than 2 percent of the sample (Park, 2008), even though the 2005 1% Population Sampling Survey found that 22 percent of population living in cities were migrants. Using rural data from 19 provinces and urban data from 11 provinces, Sicular and others (2007) find including migrants in calculating urban per capita income reduces the urban-rural income ratio from 2.27:1 to 2.12:1. Ravallion and Chen (2007) also realized that rural-urban migration could be a source of bias to inequality calculation although their measurement was based on urban household survey and rural household survey.

Third, it seems that recent institutional changes in the labor market facilitate to equalize income distribution. With the sustainable and rapid economic development and population aging, China has ended the era of unlimited labor supply and structural labor shortages have emerged. This has created good opportunities to protect lawful rights and interests of laborers. Under this circumstance, China has sped up the pace to construct labor market institutions. A series of institutions and policies on China's labor market have been enacted recently, which include the *Employment Contract Law*, the *Labor Disputes*

Mediation and Arbitration Law, the Wage Guideline System, the Minimum Wage Regulations and the Employment Promotion Law. In addition, the Chinese government has proposed active and passive labor market programmers to respond to labor market fluctuations. During the period with robust employment demand, these new regulations may not have negative effect in reducing total employment but increase the workers' earnings significantly. The empirical study (Cai and Du, 2010) also indicates that recent institutional changes in the labor market actually facilitate the equalization of incomes.

5 Conclusions

As the largest developing country, China has to provide enough job opportunities to make use of its most plentiful resources. In the past three decades the development path in China has followed the typical economic development strategy by exploiting its advantage in labor. Through the expansion of labor intensive sectors, China succeeds in transferring the surplus labor out of agriculture, which contributes to overall economic growth. When the labor forces in rural areas keep moving out of rural areas and the outcomes of demographic transition is translated into labor market, China starts facing the Lewis turning point, as evidenced by frequent labor shortage and rising wages for unskilled workers.

When passing through turning point, it is time to promote social protection through institutional arrangement. Firstly, the substantial transition in labor situation makes it possible for workers to bargaining their rights. Secondly, the employers tend to compete for labor and are willing to provide more protection due to the scarcity of labor. Thirdly, as the country escapes poverty trap as a whole, the government has the capacity to raise new social protection programs.

Although it is widely accepted that China is facing with serious income inequality, the on-going labor market transition may play active role to remedy the trend. The increasing wages for unskilled workers improve the income distribution at bottom part. Labor mobility between rural and urban areas bridges the gap between the two areas which is supposed to be the most important source contributing to the overall inequality in China. In addition, the sampling bias in the data that were used in previous estimation on income inequality has to be concerned while it would overestimate the inequality without considering the bias.

Even though the labor market situation is improved, the institutional arrangements have to be made in order to make the meeting between Lewis turning point and Kuznets turning point. The experiences in China have already revealed the importance of social protection in constructing a harmonious society. Among the stakeholders building the social protection system, In particular, great efforts from the government is worth more attention. When the enterprises are challenged by

the growing labor costs, the government ought to shoulder more responsibility to finance new programs.

China still has long way to go to integrate the social protection system. Right now, more protection for migrant workers is important and pressing. Increasing the coverage of social protection, especially for migrants, is of great importance to achieve inclusive growth under current situations. Due to instability of migrants' employment and high contribution rates of various social security programs, there is lack of incentives for both migrant workers and their employers to participate in those programs, giving rise to their low coverage. Those exclusions of labor market institutions and social protection put them in a position of being exposed to labor market risks and prevent them from serving main force of urban labor market stably. Migrant workers' needs thus should be in the center of labor market institutions and social security system building.

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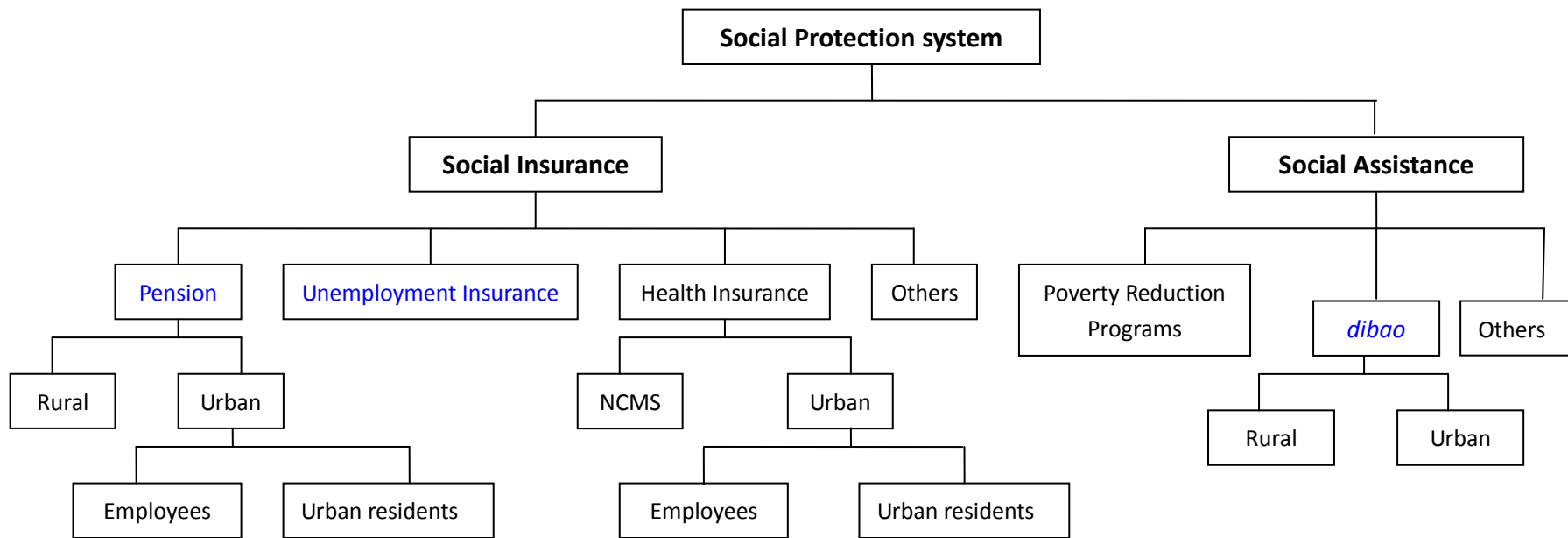


Figure 5 the Structure of Social Protection System in China