

Analysis of Urban Poverty in China (1989-2009)

WANG Xiaolin, ZHANG Deliang
(The International Poverty Reduction Center in China)

Development-oriented poverty reduction policies in China have long focused on addressing poverty in rural areas, as home to the majority of poor populations living in absolute poverty. Based on 2009 statistics, Wang Xiaolin (2012) estimates that rural China and urban China contribute 75.5% and 24.2% respectively to the multi-dimensional poverty headcount ratio^[1]. With greater socioeconomic development and the implementation of a rural poverty reduction initiative and subsistence allowance system, China has ensured sufficient food and clothing for its people. Therefore, the government has shifted its focus from development-oriented poverty reduction in rural areas going forward (2011-2020): it must both raise the level of subsistence (solve absolute poverty), and narrow development gaps (solve relative poverty). However, urban poverty in China is becoming increasingly pressing as urbanization, industrial restructuring and the reform of state-owned businesses intensifies, increasing the importance of such research and policy interventions.

1. Two Controversial Issues in Urban Poverty Research

Issue I: Definition of urban poverty. Research into urban poverty first requires establishing a definition of urban poverty. The definition of urban poverty in China must also involve consideration China's household registration system (*hukou*), which divides urban and rural areas and correlates with many local policies, leading to many problems of poverty related to this *hukou* system such as healthcare, housing, social assistance, old-age support and children's access to schools for migrant populations. Some researchers define urban poverty as poverty within urban areas and therefore should include poor populations without urban *hukou*. Alternatively, others interpret urban poverty as poverty restricted to populations with urban *hukou*, especially considering the availability of data and mobility of migrating populations. In this paper we examine statistics of urban *hukou* holders, though believe that poor rural migrant workers should be counted in poor urban populations, a belief consistent with urbanization trends and urban characteristics.

Issue II: Urban poverty line as it relates to the scale of poor urban populations. The poverty line is the basis of

poverty measurement. However in China, due to a lack of a uniform, official poverty line applicable to urban areas, there is no consensus on the size of the poor population. When discussing urban poverty in China, the more frequently used urban poverty line is the basic subsistence line, a line that shows the volume of cash transfers to poor populations with local *hukou* compared to local socioeconomic development, income and consumption, and fiscal strength. Since cities and local financial situations differ, representing the size of poor urban populations by an aggregate size of subsistence allowance receivers nationwide lacks uniform foundation and comparability. Still, in practice it is easier to implement

poverty reduction policies by estimating poor urban populations by the size of urban subsistence allowance receivers. At the end of 2011, there were 11.457 million households and 22.768 million people covered by the subsistence allowance system^[2]. This paper will use both the relative poverty line and the absolute poverty line to measure urban poverty. According to surveys by the National Bureau of Statistics, Ministry of Civil Affairs and local governments, there are twice as many urban poor as there are subsistence allowance receivers; in other words, there are about 50 million urban poor in China, a figure that has been widely recognized^[3].

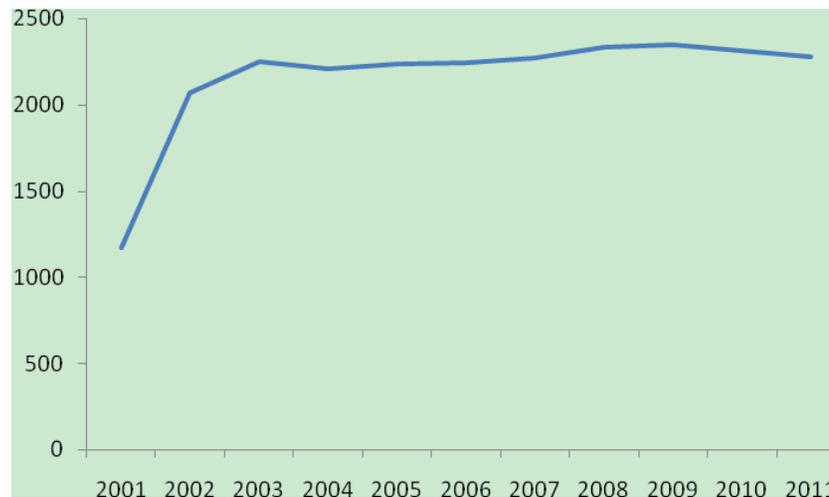


Figure 1: Urban Subsistence Allowance Receivers in China Since 2001 (100,000s)

Data Source: *Statistical Report of PRC on Social Services Development in 2010*, *Report of PRC on Social Services Development in 2011*

2. Evolution and Characteristics of Urban Poverty in China

As urbanization gains pace and urban populations explode, urban poverty has become an issue of international interest.

Since the foundation of the PRC, demographically, the percentage of rural populations has been decreasing while that of urban populations has been increasing, which means that China is urbanizing. According to *China Statistical Yearbook*, the

population of China in 1949 was 540 million, of which 89.36% were rural and 10.64% were urban; by 1980, the total population reached 990 million with 80.61% rural and 19.39% urban; by 2010, there were 1.34 billion people in China with an equal split between rural and urban populations. During the early 1990s, poverty was mainly a rural phenomenon, and the size of urban populations was negligible in comparison. This was because rural populations could not migrate to cities freely. Meanwhile, before the adoption of the reform and opening-up policy, cities operated as planned economies which restricted and controlled employment and remuneration of urban residents, a policy resulting in low wages, yet high employment and benefits and employer provision of social benefits and labor security. This meant that the standards of living among urban residents were marked by relative equality. Therefore, the central government has only targeted rural areas in designing specific poverty reduction programs since the 1980s, especially in poor villages in central and western China.

In the mid-1990s, urban poverty was becoming increasingly problematic. Urban poverty in China began with two distinct changes: the reform of state-owned enterprises, and the flow of migrant workers from rural to urban areas. With deepening reforms of the urban economic structure in the late 1980s, the system that supported urban residents began to shatter. Reform of state-owned businesses was initiated to separate the role of enterprises as social

service providers from their role as market players. Social service functions, especially social security functions, were then shouldered by newly-established social security institutions. To increase efficiency, state-owned enterprises began the layoff of a large number of workers. The number of laid-off state-owned enterprise employees peaked at 6.572 million at the end of 2000 (Table 1). At the same time, the private economy gained new room for development as foreigners began investing in China, causing the pattern of primary income distribution to change. Income disparity and widening living standards made poverty more of an issue. In addition, many rural migrant workers flooded into cities, some of whom have since settled down in parts of the city after years of hard work. Among those who stay in cities without an urban *hukou*, most are employed informally, thus are denied equal access to social security, education and healthcare. Living in cities, rural migrant workers earn less than urban residents, yet they buy commodities and services at the same price. Rural migrant workers usually work in poor environments and live in areas with poor sanitation and transportation facilities. Thus, they are in a vulnerable position compared to urban populations with registered *hukou* residence. If these workers return home to the countryside with money earned, they would then not be counted among the poor rural population according to the rural poverty line. Some rural migrant workers habitually live in cities and rarely go back to rural areas, and their children are unwilling to go back, these

families drift around cities. Although there are no “slums” in urban areas in China as in India, Brazil and other developing nations, rural migrant workers who temporarily live in “urban villages” or “shanty towns” and

semi-urban areas deserve attention. With rapid urbanization, urban poverty of rural migrant workers will become a large component of future urban poverty, and these workers will likely remain poor.

Table 1 SOE Employees Laid Off Year-end Nationwide (1998-2004)

Year	1998	1999	2000	2001	2002	2003	2004
People (10k)	594.8	652.5	657.2	515.4	409.9	260.2	153.0

Data Source: *China Labor Statistical Yearbook 2005*

Rural-urban migration has gone through four stages. The first stage was during the 1980s when many rural residents engaged in non-agricultural activities in rural areas. The number of such rural workers increased from two million in the early 1980s to 30 million in 1989. At that time, township enterprises were major employers of rural workers. During this stage, there was an increase in trans-provincial migration, but still low, only 23% in 1989. The second stage was between the early 1990s and the early 2000s, when large-scale trans-regional migration occurred. The number of rural workers seeking jobs outside their hometowns increased from 60 million in the early 1990s to 100 million in the early 2000s. These workers were mainly employed in eastern coastal regions and in secondary and tertiary sectors. Trans-provincial migration rose considerably, reaching 44% in 2001. Seeking employment elsewhere became the dominant pattern of rural employment. The third stage was between the early 2000s and 2007, when the number of rural migrant workers increased steadily. Between 2002 and 2007, the annual average growth of rural

migrant populations was about 6.5 to seven million, a weak yet steady growth rate. Rural migrant workers continued to concentrate in eastern coastal regions and in secondary and tertiary sectors in cities, and became employed in export-oriented sectors. The fourth stage is since 2008, when the global financial crisis hit. Over 20 million rural migrant workers returned home in the second half of 2008. In Q2 of 2009, rural-urban migration recovered rapidly with 145.33 million rural migrant workers seeking jobs in cities at year-end. But, there have been significant changes in where they choose to work in terms of location and sector, as well as in the overall labor supply and demand. After these four stages of development, rural migrant workers now account for the majority of rural workers. Most of them have moved to urban areas, thus exerting a huge influence on urban areas, including on urban poverty.

In addition to laid-off SOE employers and rural workers, the demographics of urban poverty in China also include the so-called “Three Withouts” (persons without

sources of income, without labor capacity and without statutory caregivers), the unemployed (Figure 2), those dismissed by or retired from the collective sector or private sector, other persons not covered by social insurance or physically ill who are without income, and those who changed *hukou*

status from “agricultural to non-agricultural”, as well as new college graduates yet to find a job or steady job. Due to a lack of authoritative data on these poor urban populations, the ratio of different groups contributing to urban poverty remains unknown.

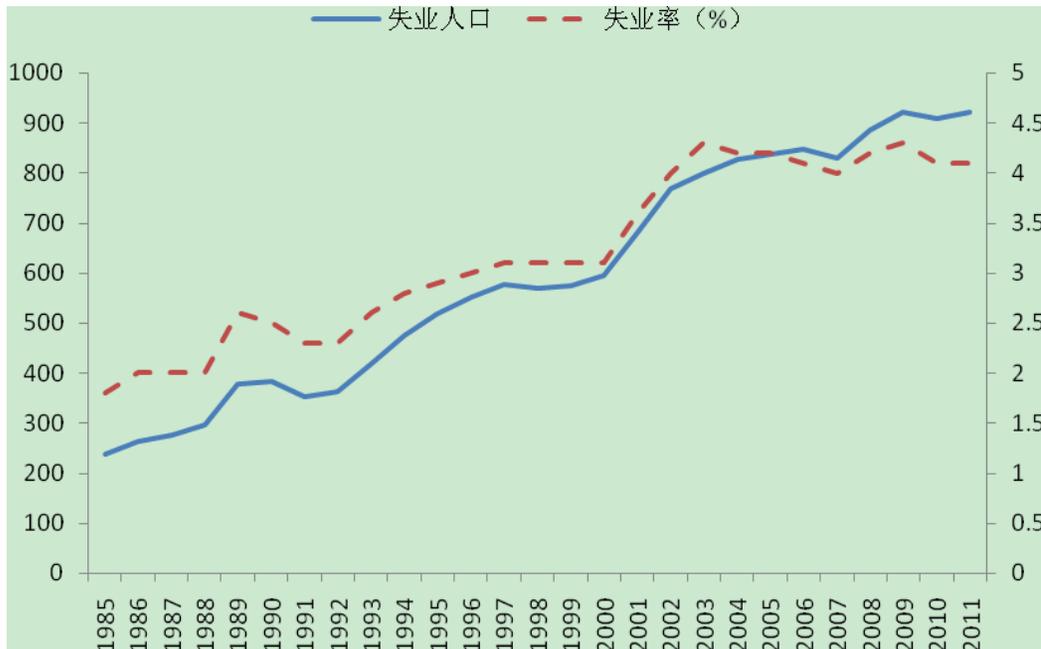


Figure 2 Registered Unemployed Populations (10,000s) in Urban China and Unemployment Rate (%)

Blue Line: Unemployed Populations Red Dotted Line: Unemployment Rate (%)

Data Source: *China Labor Statistical Yearbook 2011*

Urban poverty in China is differentiated by region. A survey conducted by the All China Federation of Trade Unions in 2002 points out that poor urban populations in the eastern region of China account for 21.9% of the total poor urban population nationwide, and the central and western regions account for 52.9% and 25.2% respectively^[4]. Furthermore, cities where poor populations concentrate vary as each city has its own attributes, for example, resource-poor cities,

old industrial base cities, cities in the underdeveloped central and western regions and medium- and small-sized cities primarily supported by traditional industries and small and medium-sized enterprises (SMEs).

There are four reasons behind the surge in poor urban registered populations: economic transition and restructuring; the reform process and the poorly-developed social security net; inequitable income distribution; and insufficient employment

demand. Although race, nationality and gender are not considered causes of urban poverty in China, disadvantaged groups are still excluded and discriminated against in many ways.

The government has adopted a mix of measures to target urban poverty. **Firstly, the most direct way to alleviate urban poverty is to implement employment incentive policies and assist laid-off employees in securing new jobs.** In 1993, a “Reemployment Program” was piloted in 30 cities; in 1998, the government supported laid-off workers with favorable policies such as easier access to credit, tax exemption, and a faster track for business registration and workplace location arrangement. For industrial restructuring, the tertiary and private sectors, and labor-intensive SMEs have been developed to expand their business area and scope of employment. Reemployment service centers were established to give reemployment training and guidance. Trans-regional and cross-border labor migration and output have been encouraged. **Secondly, improve the social security system.** In 1998, China developed a basic allowance for subsistence system for laid-off workers. In 1999, it introduced its *Unemployment Insurance Regulation*. The subsistence allowance system for urban residents was piloted in 1993, and in 1997, it was rolled out across China. In 1999, China issued the *Basic Allowance for Subsistence of Urban Residents*. For those who cannot support themselves despite being covered by

healthcare, unemployment insurance, and the pension and minimum wage system, the government would provide social relief and assistance. In 1998, The *Decision to Establish Urban Employee Basic Medical Insurance Scheme* was issued. In 1997, the *Decision of the State Council on Establishing a Consolidated Employee Pension System* was issued which reflected the government’s commitment to establish an employee old-age insurance system that integrates social pooling and personal accounts. Meanwhile, the government actively built public services and social assistance systems in such fields of healthcare, education, employment, housing, and disaster relief. **Thirdly, to address poverty, China has been utilizing fiscal, monetary and income distribution interventions.** The government has also adopted anti-poverty measures targeting problems facing rural migrant workers such as schooling of their children, owed wages and work contracts, etc. All of these measures have cushioned rising poverty in urban areas. In the following section, we will use urban registered populations (excluding rural migrant workers) to measure and analyze urban poverty.

3. Measurement of Urban Poverty in China

We used panel data between 1989 and 2009 from the *China Health and Nutrition Survey* conducted by the Carolina Population Center and China’s Center for Disease Control. The unit of analysis is the individual,

with a sample size of the effective urban registered population of 16,261. Samples are from nine provinces (regions), among which, Jiangsu and Shandong are eastern; Henan, Hunan and Hubei are central; and Guangxi and Guizhou are western regions.

We use the FGT metric to measure poverty. Measuring indicators include poverty headcount ratio (P_0), poverty gap index (P_1), squared poverty gap index (P_2), Sen Index, Sen-Shorrocks-Thon Index and Watts method. The Gini coefficient and Theil index are used to measure inequality. Those methods are based on the definitions in the *Handbook on Poverty and Inequality* by Jonathan Henry Haughton and Shahidur Khandker (2009)^[5].

This paper uses a self-defined poverty line. The poverty line can be interpreted in

two ways: one is a relative poverty line for urban populations defined the poverty as 25% of the median income per capita between 1993 and 2009. The other is an absolute poverty line which is determined on the basis of 25% of the median income per capita for urban households between 1989 and 2009 deflated by CPI-U.

Defining these two poverty lines is important to our analysis of poverty changes. The relative poverty line focuses on people whose income per capita is below 25% of the median between 1989 and 2009, while the absolute poverty line is fixed at 25% of the median income per capita in 2009 constant Yuan. Table 2 illustrates median income, the relative poverty line and the absolute poverty line of sample data by year.

Table 2 Urban Poverty Line in China

Year	Median Income (Yuan)	Relative Poverty Line (Yuan)	Absolute Poverty Line (Yuan)
1989	1180	295	1433
1991	1434	359	1525
1993	2072	518	1923
1997	4200	1050	3150
2000	5828	1457	3115
2004	7650	1913	3237
2006	9600	2400	3338
2009	14600	3650	3650

3.1 Relative Poverty

Table 3 shows the dynamic changes of relative poverty in nine provinces (regions) and municipalities between 1989 and 2009 using the FGT metric. In 1989, when income was fairly distributed, the relative poverty headcount was 1.8%. Relative poverty peaked at 13.6% in 2004 owing to a well-established urban employee and urban resident social security net.

The poverty gap index is defined as the average poverty gap in the population as a proportion of the poverty line. It is a measure of the depth of poverty. The squared poverty gap index is defined as the squared poverty gap in the population as a proportion of the poverty line. It is a measure of the intensity of poverty and it gives more weight to poor populations.

Table 3 Dynamic Changes of Relative Poverty in China

Year	Headcount Ratio(P_0)	PG Index(P_1)	Squared PG Index(P_2)
1989	1.8	4	28.6
1991	7.7	5.2	5.8
1993	8	6.6	17.8
1997	11.3	6.8	7.1
2000	12.6	7.9	7.8
2004	13.6	9.2	9.9
2006	10.1	6.2	5.3
2009	6.6	4.1	5.7
Changes (1989~2009)	4.8	0.2	-22.9



Figure 3 Trends of Urban Poverty Headcount Ratio (%) in China (1989-2009)

Figure 3 clearly indicates how relative poverty has changed in these two decades. The relative poverty headcount ratio shows an inverted U curve. After years of constant rise, the relative poverty headcount ratio started to drop after 2004, due to government anti-poverty measures targeting urban areas.

3.2 Absolute Poverty

Table 4 and Figure 4 show dynamic changes in poverty by measure of absolute poverty. According to the statistics, cities have reduced absolute poverty effectively with the headcount ratio dropping from 67.9% in 1989 to 6.6% in 2009. The year 1993 was a turning point for the urban absolute poverty headcount ratio.

In recent years, some studies show that

urban poverty is becoming more conspicuous. In this paper, we use *hukou* status to divide urban and rural areas, so rural migrant workers are counted as farmers for the purpose of this paper. Consequently, this paper does not support the argument that urban poverty is now more pronounced. The poverty of farmers who move to cities is the main reason why the problem of urban poverty has grown.

Table 4 Dynamic Changes of Absolute Poverty in Urban China (1989-2009)

Year	Headcount Ratio	PG Index	Squared PG Index
1989	67.9	21.7	11.2
1991	55.2	22.1	13.4
1993	45.3	19.5	13.4
1997	34.7	17.7	12.4
2000	22.9	13.2	10.2
2004	19.8	12.5	10.6
2006	13.2	7.8	6.2
2009	6.6	4.1	5.7
Changes (1989~2009)	-61.2	-17.5	-5.5

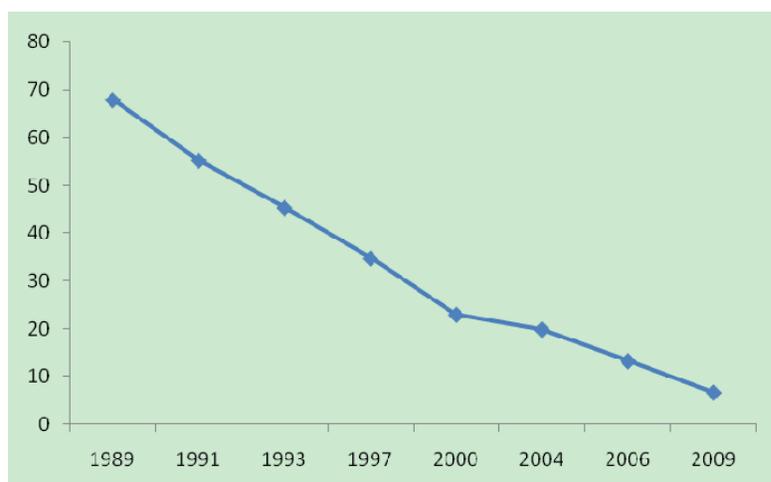


Figure 4 Absolute Poverty Headcount Ratio (%) in Urban China (1989-2009)

The Sen index was developed by Prof. Amartya Sen in 1976. This index combines size, depth and intra-group distribution of poor populations. Its equation is as follows:

$$P_s = P_0 \left(1 - (1 - G^p) \frac{\mu^p}{z} \right)$$

In the equation, P_0 is the poverty headcount ratio, μ^p is the mean income (or consumption) of poor populations, G^p is the Gini coefficient of poor populations. The SST

index is the modified Sen index, which includes the poverty headcount ratio, the PG ratio and the PG ratio's Gini coefficient. The Watts index is useful in its sensitivity towards distribution and compliance with the three basic axioms of poverty measurement. We cannot calculate how significant the three indices' intuitive interpretations are, but a breakdown of their components will help us understand poverty better. Table 5 reports measurement results of the three indices.

Table 5 Alternative Poverty Measuring Indexes

Year	Sen Index	SST Index	Watts Index
1989	0.364	0.339	0.282
1991	0.337	0.368	0.363
1993	0.301	0.337	0.301
1997	0.249	0.314	0.318
2000	0.172	0.243	0.244
2004	0.156	0.233	0.186
2006	0.102	0.15	0.128
2009	0.052	0.081	0.066
Changes (1989~2009)	-0.313	-0.258	-0.216

3.3 Inequality

According to our calculations, the Gini coefficient of income per capita for urban residents was widening between 1989 and 2006, and in 2009, it fell slightly (Figure 5). In 2006, the urban Gini coefficient peaked at 44.35. The rise of the Gini coefficient can partly explain the close relation between urban poverty and inequitable income distribution. Poverty reduction can be attributed to income growth, income distribution, and interaction between income

growth and income distribution. Between 1989 and 2009, the urban poverty headcount ratio dropped from 67.89% to 6.64%, a reduction of 61.25 percentage points. Positive externalities of income growth helped decrease the poverty headcount ratio by 67.16% while negative externalities of income distribution made the poverty headcount ratio increase by 28.53% and interaction between income growth and income distribution reduced the poverty headcount ratio by 22.62% (Table 6).

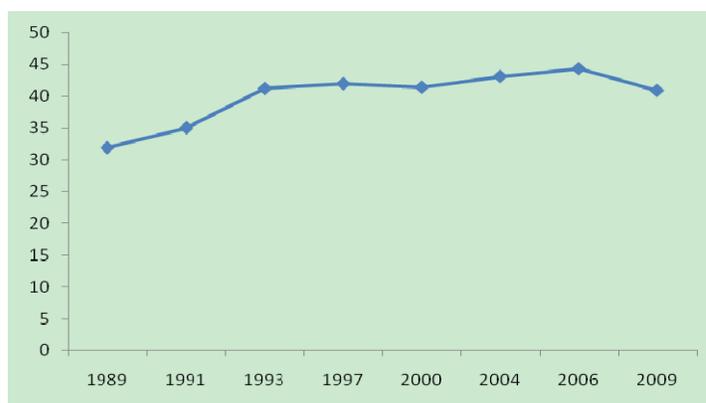


Figure 5 Changes of Gini Coefficient of Income Per Capita for Urban Households

Table 6 Contribution of Growth and Distribution to Headcount Ratio

	Headcount Ratio		Change	Growth	Distribution	Interaction
	1989	2009				
Cities	67.89	6.64	-61.25	-67.16	28.53	-22.62

The above analysis shows that income distribution between 1989 and 2009 was detrimental to poverty reduction. To probe into the impact of inequality on poverty reduction, we illustrate in Table 7 the

elasticity of inequality with respect to FGT poverty measurement. Table 7 shows the elasticity of the Gini coefficient with respect to the poverty headcount ratio (P_0), to the PG index (P_1), and to the squared PG index (P_2).

Tale 7 Poverty Elasticity of Inequality

Year	Headcount Ratio (P_0)	PG Index (P_1)	Squared PG Index (P_2)
1989	0.04	1.06	1.97
1991	0.07	1.19	5.42
1993	0.46	1.87	2.86
1997	0.83	2.2	3.43
2000	1.1	3	4.43
2004	1.14	4.01	3.72
2006	2.42	5.33	6.81
2009	4.24	6.58	5.69

Policy implications of the above breakdown show that between 1989 and 2009, when income growth was constant, if income distribution had been improved, the poverty headcount might have been reduced even further. This also tells us that in the years to come, income distribution can be an effective instrument for poverty reduction.

4. Suggestions for Urban Poverty Reduction

4.1 Build a strategic framework to reduce urban poverty.

As urbanization continues, urban poverty will become a significant problem that we cannot afford to ignore or avoid. The government should pay great attention to urban poverty and design a comprehensive strategic framework which includes an improved social security network for urban households and specific policy measures that monitor and target poor urban populations. A combination of development-oriented and assistance-based poverty reduction in rural areas can be applied in urban areas. Considering how difficult it is to tackle poverty, the Chinese government should enact legislation targeting poverty reduction.

4.2 Migrant populations cannot be ignored.

Migration poverty has become an increasingly important form of urban poverty^[6]. Poor rural migrant workers are not included in the empirical data of this paper,

but they are increasing in number, reaching 158.53 million in 2011. Many of them will inevitably become the lower middle class under *hukou* restrictions and suffer inequitable treatment. Relaxing *hukou* restrictions or disconnecting the *hukou* from urban welfare systems to coordinate urban and rural development and expand coverage of an urban social security net will be effective policy tools to alleviate poverty of rural migrant workers.

4.3 Establish and improve a pro-employment policy system and expand employment in informal sectors.

Employment is the most direct and most fundamental way to lift poor urban residents out of poverty. The government should encourage employment through multiple means, such as expanding the business area and scope of employment, strengthening the capacity of human capital and widening up the labor market. Since the international financial crisis of 2008, the role of SMEs and labor-intensive enterprises as major employers and especially informal employers has proven to be very constructive. Therefore, they deserve strong national fiscal and financial support.

4.4 Improving income distribution should be regarded as a vital way to reduce poverty and inequality.

The income gap between China's urban residents is reflected in the Gini coefficient of urban residents, which is now alarmingly above the international line of 0.4%. In 2010,

according to urban household income distribution across five equal groups, the highest income group earned 5.4 times more than the lowest income group. In line with the goal to “increase income of low income households, expand middle income groups, adjust income of high income households

and crack down on illegal sources of income”, the government should improve the structure and model of distribution, deepen institutional reform of income distribution, ease conflicts triggered by the widening income gap and eventually alleviate urban poverty.

References

1. Du Yang (2007), Urban Poverty in China: Trend, Policy and New Issues [R], China Development Research Foundation Report, Issue 34.
2. Hong Dayong (2003), On Urban Poverty Reduction in China Since Reform and Opening-up, *Journal of Renmin University of China*, 1: 9-16.
3. Jiang Guihuang, Song Yingchang (2011), Urban Poverty and Anti-poverty Policy in China [J], *Urban Modern Research*, 10: 8-10.
4. Jonathan Houghton, Shahidur R. Khandker (2009), *Handbook on Poverty and Inequality* [M], Washington DC, The World Bank. 67-80.
5. Planning and Finance Department of Ministry of Civil Affairs of the People’s Republic of China, *Report of PRC on The Social Services Development in 2011* [EB/OL], 21 June 2012.
6. Wang Xiaolin (2012), *The Measurement of Poverty: Theories and Methods* [M], Beijing: Social Sciences Academic Press, 2012:91.