

## **Migration and Urban Poverty and Inequality in China**

Albert Park  
Department of Economics  
University of Michigan

Dewen Wang  
Institute of Population and Labor Economics  
Chinese Academy of Social Sciences

Fang Cai  
Institute of Population and Labor Economics  
Chinese Academy of Social Sciences

*Second draft, December 2006*

### ***Abstract***

Massive domestic migration in China has attracted a lot of public concern about the living status of migrants in urban areas. Using data from recent surveys of migrants and local residents in 12 cities in 2004 and 2005, this paper examines how inclusion of migrants influences measurements of urban poverty and inequality, and also compares how other indicators of well-being differ for migrants and local residents. Contrary to previous studies that report that income poverty of migrant households is 1.5 times that of local resident households, we find relatively small differences in the poverty rates of migrants and local residents. Although the hourly wages of migrants are much lower than those of local residents, migrant households have lower dependency ratios and migrants have higher labor force participation rates and work longer hours. Including migrants does increase somewhat measures of urban income inequality. Significant differences between migrants and local residents are found for non-income welfare indicators such as housing conditions and access to social insurance programs.

**Key Words:** migration, urban, poverty, inequality, social protection, China

## 1. Introduction

The issues of unemployment and poverty in urban China have aroused a lot of research interest in recent years. Prior to the 1990s, the urban poverty issue was trivial because state provision of jobs and housing, pension, and health insurance benefits were guaranteed for nearly all urban residents. In 1990, the number of the urban poor was estimated to be only 1.3 million, or 0.4 percent of the urban population (World Bank, 1992). During the 1990s, labor markets in urban China witnessed two important changes. First, widespread downsizing and closure of state-owned enterprises led to the layoffs of millions of urban workers, many of whom were not covered by government social assistance programs (Giles, Park, and Cai, 2005). Second, rural to urban migration increased dramatically, especially to large, coastal cities. The 2000 census found that over 12 percent of urban employed workers nationwide were migrants.

Recently, new estimates have been made of the extent of urban poverty in China. Estimated poverty rates have varied depending on the datasets used and the assumptions made in determining the poverty lines for different years.<sup>1</sup> A common shortcoming of nearly all of these studies is that they use data from surveys that

---

<sup>1</sup> Khan (1998) reports that urban poverty incidence increased by 12 percent from 1988 to 1995 by using the China Household Income and Poverty Survey (CHIPS) data conducted by the Institute of Economics, CASS. The Asian Development Bank (2002) estimated that urban poverty incidence was 4.7 percent in 1998, but varied significantly among provinces. Based on the updated CHIPS data, Li (2001) calculated that the number of the urban poor was 23 million in 1999 with an incidence of 5.1 percent, and the poverty depth became more severe. The study group of the National Bureau of Statistics (NBS) estimated that the range of urban poverty incidence was from 4.4 percent to 5.8 percent with no clear trend in increase or decrease between 1991 and 1995 (Ren and Chen, 1996). New estimates of the National Bureau of Statistics (NBS) show that there was a slight reduction of urban poverty from 4.4 percent in 1995 to 3.4 percent in 2000 with the NBS poverty diagnostic line, which is about three times that of rural official poverty line (Hussain, 2001, 2003). If the benefit line of the Minimum Living Standard Scheme (MLSS) is chosen as the criteria of poverty measurement, urban poverty incidence was about 4.1-4.3 percent between 2002 and 2004.

exclude migrant households from the sampling frame, most notably the National Bureau of Statistics' annual urban household surveys. Large cities in many developing countries have large migrant populations that are poor, frequently living in slums and relying on the informal sector for employment. The United Nations Human Settlements Program (2003) predicted that over the next 30 years one in every three people worldwide would live in urban slums characterized by poor public health, inadequate public services, and widespread violence and insecurity if the growth of the world's urban population continues the trend of the 1990s and no new government interventions are implemented. Thus, exclusion of migrants from urban poverty and inequality measurement could lead to substantial bias.

A couple of recent studies have provided survey-based estimates of the poverty rate of both migrants and local residents. A recent report on urban poverty by the ADB uses data from a one-time urban survey conducted by NBS in 26 provincial capital cities and 5 other cities (Dalian, Ningbo, Xiamen, Qingdao and Shenzhen) in 1999 to analyze the poverty situation of migrants and local residents (ADB, 2004; Hussain 2003). The sample of migrant households numbered 3600. The report estimates income poverty headcount rates of 10.3 percent for local residents and 15.2 percent for migrants. A recent study using data from the China Income Distribution Survey (CIDS) conducted in 2002 in cities in 6 provinces estimates income poverty headcount rates of 3 percent for local residents and 10 percent for migrants using urban dibao lines, and 6 percent for local residents and 16 percent for migrants using a higher poverty line (Du, Gregory, and Meng, 2006). However, in both the NBS and

CIDS surveys, incomes of local residents are based on self-recorded diaries while the incomes of migrants are based on one-time surveys that are known to produce lower income estimates. In addition, the local resident sample used by the ADB also excluded zero-income households and the CIDS surveyed only rural migrants, excluding urban migrants who are likely to have higher incomes. For all of these reasons, both studies are likely to overstate the poverty rate of migrants relative to local residents.

In this paper, we analyze data from household surveys in 12 cities in 2004 and 2005 that use a common survey questionnaire and survey methodology for both migrants (including rural migrants and urban migrants) and local residents. Contrary to previous studies that report that income poverty of migrant households is 1.5 times that of local resident households, we find relatively small differences in the poverty rates of migrants and local residents. We also find that urban migrants tend to have a higher poverty rate and income inequality compared with rural migrants. Although the hourly wages of rural migrants are much lower than those of local residents, rural migrant households have lower dependency ratios and rural migrants have higher labor force participation rates and work longer hours. Including migrants does increase somewhat measures of urban income inequality. Significant differences between migrants and local residents are found for non-income welfare indicators such as housing conditions and access to social insurance programs.

The rest of this paper is organized as follows. Section 2 describes the survey data; section 3 presents measures of poverty incidences for migrants and local

residents; section 4 describes the characteristics of poor households; section 5 examines income inequality; section 6 examines non-income welfare measures, and section 7 concludes.

## **2. Data**

In 2001 and 2005, the Institute of Population and Labor Economics (IPLE) of the Chinese Academy of Social Sciences (CASS) conducted the China Urban Labor Survey (CULS) in 5 large cities<sup>2</sup> (all provincial capitals) in different parts of the country: Shanghai, Wuhan, Shenyang, Fuzhou, and Xian. The surveys were conducted in collaboration with faculty at the University of Michigan and Michigan State University, and the second wave was supported by the World Bank. The CULS surveyed migrant and local resident households in each city. The second wave of the CULS in 2005 also surveyed migrants in 7 additional cities, where local resident households had been surveyed in the previous year by IPLE as part of the China Urban Social Protection survey (CUSP). The additional cities included 5 small cities located near the 5 large cities surveyed by the CULS, as well as two other cities: Daqing, a city in Heilongjiang Province rich in oil resources, and Shenzhen, a city in Guangdong Province near Hong Kong, famous for its open labor market, large number of migrants, and private enterprise development.

The five large cities and five small cities are located in different regions of the

---

<sup>2</sup> In this paper, we define capital cities as large cities and prefectural cities as small cities for simplification. According to this definition, there are 286 cities that include both prefectural cities and capital cities in 2005. Their population amounts 130.8 million, accounting for 64.6 percent of total urban population. The number of population in 30 capital cities is 211.3 million, accounting for 58.2 percent of population in 286 cities.

country. Shanghai and Wuxi (Jiangsu Province) are located in the Yangtze River Delta near the coast; Wuhan and Yichuan are in Hubei Province in central China; Shenyang and Benxi are in Liaoning Province in the northeast; Fuzhou and Zhuhai are in Fujian and Guangdong provinces in the southeast; and Xian and Baoji are in Shaanxi Province in the northwest.

Table 1 summarizes some basic information on the 12 cities. The total population ranges from 6.6 to 13.5 million in the 5 large cities, and from 0.6 to 1.7 million in the 5 small cities. The average size of the total population in the 5 large cities is 8.5 million, or 7.4 times that in the 5 small cities. There is substantial variation in the level of economic development across cities, with coastal cities having significantly higher GDP per capita and per capita income. Among large cities, Shanghai is much richer than the other cities, and Fuzhou also enjoys relatively high income per capita; among the small cities, Zhuhai and Wuxi are much richer than the other cities.

In each city, representative samples of local residents and migrants were each selected in a 2-stage procedure. Using recent data on the local resident population of each neighborhood, a fixed number of neighborhoods were selected in each city using proportion probability sampling (PPS).<sup>3</sup> In each selected neighborhood, a sampling frame (list of households) was constructed in consultation with the staff of the neighborhood office. Most neighborhood committees had complete, updated lists of

---

<sup>3</sup> In many cities, information was unavailable about the number of migrants living in each neighborhood. In such cases, neighborhoods were first selected based on local resident populations, and weights are used to correct for differences in the relative sizes of migrant and local resident populations using data on migrant population collected during the survey.

local residents, and information on migrants who had registered as temporary residents. Neighborhood committee staff also were often aware of unregistered migrants living in the neighborhood, especially those operating small businesses. Using the constructed sampling frame for each neighborhood, a fixed number of households were randomly sampled in each neighborhood. In large cities, about 500 local resident households and 500 migrant households were sampled, and in the other cities the sample sizes were 400 or 500 of each type of household. In all, the survey collected data on 6324 local resident households and 5521 migrant households.

For each household, information on each adult household member was collected on age, gender, education, marital status, party membership, type of hukou, health status, employment situation (labor force participation, unemployment status, brief work history, and current job characteristics: industry, occupation, wage, labor contract, wage arrears), access to social insurance (pensions, medical insurance, unemployment insurance, injury insurance), and education and training. The survey also collected household-level information on consumption expenditures, income transfers, social assistance, and housing conditions.

For the goals of this paper, the strengths of the CULS are that it surveys migrants (including rural migrants and urban migrants) and local residents in an identical fashion, it collects very detailed information on various outcomes of interest, and it collects enough observations per city to calculate city-level aggregates. There are also several limitations of the data. First, for the 7 medium-sized cities, migrants

were surveyed in 2005 while local residents were surveyed in 2004<sup>4</sup>. Provincial CPIs are used to inflate the 2004 values to 2005 real values. Second, by sampling migrants through neighborhood committees, it is likely that migrants living in collective forms of housing, such as dormitories provided by work units, are undersampled since such individuals typically do not register with local neighborhood committees. However, because migrants living in dormitories typically are employed and not living with dependents, they may be less likely to be poor.

### **3. Income poverty**

#### **3.1. Poverty line**

Unlike for rural poverty, in China there is no official government poverty line to measure urban poverty and there are no official estimates of the number of urban poor. However, as part of the government's minimum living standard (*dibao*) program, each city designates an income threshold, or *dibao* line, to determine whether households are eligible to receive government subsidies. We view these lines to be policy-relevant lines established by the Chinese government. In practice, richer cities tend to have higher *dibao* lines, either because they can afford them or because the lines reflect relative rather than absolute poverty. To create a uniform poverty line suitable for our purposes, we calculate a national mean *dibao* line by taking the population-weighted average of all *dibao* lines in China after first adjusting for spatial

---

<sup>4</sup> In 2005, the real growths of average disposable income are 17.8 percent in Wuxi, 7.9 percent in Yichan, 17.0 percent in Benxi, 7.9 percent in Zhuhai, 10.0 percent in Baoji, 10.9 in Daqing, and 7.0 in Shenzhen. The information is from local government reports. We use the above information to inflate urban household income so as to incorporate annual change in per capita income and provide a consistent estimation.



price differences using indices calculated by Brandt and Holz (2005). As seen in Table 2, this line is equal to 1982 yuan per capita in 2003. It turns out that among our 12 cities, in only two cities is the national mean *dibao* line lower than the actual *dibao* line (in Yichan and Baoji).

We also consider 4 other poverty lines. The first is the official rural low income line adjusted to take account of urban-rural price differences in each province. The low income line is much higher than the austere official poverty line of 637 yuan per capita, but at 1112 yuan per capita in 2003 remains significantly lower than the mean *dibao* line. The other three lines are the \$1/day, \$2/day, and \$3/day poverty lines. The \$1/day line is used by the World Bank for international poverty comparisons, and at 1124 yuan per capita is very close in magnitude to the adjusted low income line. The multiples of the \$1/day line are used to examine how the results change at higher lines. Both the \$2/day and \$3/day are higher than the mean *dibao* line.

Table 2 also presents other poverty lines, including ones used in other studies, for purposes of comparison. The national mean *dibao* line is very close to the poverty line used by NBS in 2000 and to three times the rural official poverty line. In sections 4 and 5, we use the national mean *dibao* line to examine in greater detail the determinants of poverty.

### **3.2. Poverty Incidence**

Table 3 reports the estimates of poverty incidence across cities when using the different poverty lines. Not surprisingly, estimated poverty rates vary with the chosen

poverty line. In large cities, the urban poverty headcount rate ranges from 1.3 percent using the low income line to 9.8 percent using the \$3/day line; in small cities the headcount rates for the same lines are 2.6 percent and 12.4 percent.

Our main focus is comparing the poverty rates of migrants and local residents, and seeing how inclusion of migrants affects overall measures of poverty and inequality. Using the national mean dibao line, on average the poverty rate of migrants is slightly lower than that of local residents in both large and small cities. For large cities the migrant poverty headcount rate is 2.5 percent compared to 3.2 percent for urban households; in small cities the poverty headcount rate was 6.2 percent for migrants compared to 5.6 percent for local residents. These differences mask considerable heterogeneity across cities. In 3 of the 5 large cities and in 3 of 5 small cities, the poverty rate of migrants is actually higher than that of local residents. In the other 2 sample cities, Shenzhen and Daqing, the poverty rates of migrants are also higher than those of local residents. Overall, there does not appear to be a systematic difference between the poverty rates of migrants and local residents.

These conclusions also hold at other poverty lines. The migrant poverty rate is equal or less than that of urban residents for all poverty lines except for the low income line for large cities and for the low income and \$1/day line for small cities. Overall, the poverty rates of migrants and local residents are quite similar on average and vary considerably across cities.

It is interesting that the poverty rate of rural migrants is lower than that of urban migrants. In large cities, the poverty rate of rural migrants is 2.1 percent

compared to 5.1 percent of urban migrants, but the poverty rate is 6.8 percent for rural migrants and 3.6 percent for urban migrants in small cities. The overall estimate is 3.9 percent for rural migrants and 6.3 percent for urban migrants.

How does the inclusion of migrants affect the measured poverty rate in urban areas? Define  $P$  to be the urban poverty headcount rate,  $P_M$  and  $P_L$  to be the poverty headcount rates for migrants and local residents, respectively, and  $R_M$  to be the share of migrants in the total urban population. Then, the change in the measured poverty rate associated with the inclusion migrants is the difference between  $P$  and  $P_L$ , which can be expressed as follows:

$$\Delta P = P - P_L = (P_M - P_L)R_M \quad (1)$$

The impact of migration on the urban poverty rate depends on the difference in the poverty incidences of migrants and local residents and the share of migrants in the population<sup>5</sup>.

Table 4 presents the migrant population shares of each of the 12 cities using two data sources: the 2000 population census and the CULS neighborhood surveys. The latter are used to construct the weighted poverty rate estimates in Table 3. The migrant population share of the total population in the 12 cities is 26 percent according to the census data and 16 percent according to the CULS neighborhood surveys. There are large differences across cities and significant discrepancies in the

---

<sup>5</sup> It is quite easy to develop the formula to the inclusion of both rural migrants and urban migrants. Define  $P$ ,  $P_L$ ,  $P_R$ ,  $P_U$  to be the poverty headcount rates of all households, local households, rural migrant households and urban migrant households, respectively; and  $R_R$ ,  $R_U$  to be the shares of rural migrants and urban migrants in the total urban population, respectively, then changes in urban poverty rate associated with the inclusion of rural migrants and urban migrants are  $P - P_L = (P_R - P_L)R_R + (P_U - P_L)R_U$ .

estimates from the two sources for individual cities. Given the relatively small differences in estimated poverty rates for migrants and local residents reported in Table 3 and a migrant population share of 16 percent, it is not surprising that including migrants has a very limited impact on the overall urban poverty estimates. This is true even when we use the census population shares to construct the sample weights (results not reported). Comparing the poverty rate estimates for the total population and the local resident population in Table 3, we find that although point estimates differ for individual cities, for the group of five large cities or group of five small cities, the influence of migrants on the poverty rate is for the most part negligible. Using the national mean *dibao* line, there is no change in the urban poverty estimates for either large or small cities. Using the low income line and \$1/day line, there is no change in poverty estimates for large cities, and an increase in the poverty rate from 2.6 to 3.0 percent in small cities. Using the highest poverty line, the \$3/day line, the urban poverty rate decreases from 9.8 percent to 9.7 percent in large cities and from 12.4 percent to 12.0 percent in small cities.

One might be concerned that ignoring the close connection between migrants and their families back home may obscure assessments of their true level of welfare. Specifically, migrants in urban areas could be remitting much of their income to non-coresident family members back home, and so have much less disposable income than we are estimating. There are two ways to address this problem. First, we could focus on consumption-based estimates of the poverty rate. However, because migrants must pay significantly more income to rent housing than local residents,

using consumption measures actually increases the status of migrants relative to local residents. A second approach is to examine income per capita, net of private remittances. However, when we do so, the results change little (see Appendix Table 1). On average, net of private remittances accounts for 7.5 percent of migrant household income, therefore, it does not change too much the estimated results.

### 3.3. Depth of Poverty

Sen (1992) pointed out that the depth of poverty is highly sensitive to the income distribution of the poor. Foster, Greer and Thorbecke (1984) put forward the following normalized formula to calculate poverty indices:

$$FGT(\alpha) = \frac{1}{N} \sum_{y < z} \left( \frac{z-y}{z} \right)^\alpha$$

Here,  $z$  is the poverty line,  $y$  is the income of the poor,  $z - y$  is the poverty gap,  $\frac{z-y}{z}$  is the normalized poverty gap, and  $\alpha$  is a parameter that captures aversion to the degree of poverty.  $FGT(0)$  is the headcount ratio;  $FGT(1)$  is the average normalized poverty gap; and  $FGT(2)$  is the average squared normalized poverty gap.

Table 5 presents the poverty gaps using the national mean *dibao* line as the poverty line. In the 5 large cities, the average normalized poverty gap for local residents, migrants, and all residents are 1.5 percent, 1.3 percent and 1.4 percent, while they are 2.7 percent, 4.6 percent and 3.1 percent in the 5 small cities. The average squared normalized poverty gaps for local residents, migrants, and all residents are all 1.0 percent in the 5 large cities, while they are 2.0 percent, 4.1 percent and 2.4 percent in the 5 small cities. Overall, for large cities inclusion of migrants

has little impact on measures of the depth of poverty, similar to the results for poverty incidence. However, for the small cities, the depth of poverty of migrants is significantly higher than that of local residents, so that including migrants increases the poverty gap from 2.7 to 3.1 (14.8 percent), and increases the squared poverty gap from 2.0 percent to 2.4 percent (20.0 percent). This is not surprising in light of the earlier evidence that at low poverty lines, in small cities the incidence of poverty was noticeably higher than that of local residents.

#### **4. Who Are the Urban Poor?**

It may be surprising to some readers that migration does not significantly increase urban poverty. A large part of the explanation can be seen by comparing the characteristics of the migrant population with those of local residents, and considering how these differences result from China's unique institutional environment.

In Table 6, for migrants and local residents, we summarize the means of key employment variables, including labor force participation, unemployment, hourly wages, and hours worked. The labor force participation rate of adult migrants is 89 percent in large cities and 84 percent in small cities, compared to 56 and 50 percent for adult local residents. Similarly, the unemployment rate of migrants is 1.6 and 4.5 percent in large and small cities, compared to 8.5 and 8.8 percent for local residents.<sup>6</sup> Finally, migrants on average work 283 hours per month in large cities and 250 hours per month in small cities, compared to 184 and 183 hours per week for local residents.

Thus, in large cities, even though mean hourly earnings of migrants is only about a

---

<sup>6</sup> The 2000 census data finds that for all of China, the unemployment rate of migrants was 3.6 percent, while that of local residents was 9.1 percent.

third of that of local residents, the share of adult migrants who work is 75 percent greater than the share of adult local residents who work, and migrants typically work more than 50 percent more hours than local residents. In small cities, the hourly wage differences are much less pronounced but the differences in the other employment variables are similar. Another important difference between migrant and local resident households is that the dependency ratio (household size divided by number of able workers) is only 1.5 for migrants and 2.1 for local residents (Table 7).

These patterns are consistent with a great deal of self-selection characterizing the migration process. First, rural out-migrants tend to have better human capital than the labor that remains in rural areas (Wang, et. al., 2004). Second, in China, all rural households have access to land and are socially connected to their home villages, so that if migrants are unable to find decent-paying jobs, they are likely to return to their family farms. Third, many migrants leave dependents in their home villages, especially if their earnings in the city are insufficient to pay for housing, education, or other costs of living in the city. This means that low-wage earners are less likely to live with dependents, reducing the likelihood of poverty measured on a per capita basis. If a single migrant lives in a work-place dormitory, she only needs to earn 166 yuan per month to avoid being poor using the national mean *dibao* line as the poverty line.

Which households are more likely to be poor? Table 7 summarizes the mean characteristics of non-poor and poor households for both local resident and migrant households. The characteristics correlated with poverty appear to be similar for both

local residents and migrants. First, there is no big difference in the distributions of household size between poor and non-poor households. Second, the dependency ratio is significantly higher among the poor. Third, the poor tend to be less educated. For local residents, the poor are much less likely to have a college education, while for migrants the poor are much more likely to have primary school education only. Finally, the work status of the poor is very different than that of the non-poor. Most strikingly, about one fourth of the poor have unemployed workers in their families, compared to just 4.9 percent of non-poor local residents and 1.3 percent of non-poor migrants. The poor are also much more likely to be out of the labor force.

Next, we analyze the determinants of poverty in a multivariate framework by estimating probit models of poverty status for local residents and migrant households separately. Table 8 presents the marginal probabilities that households are found to be poor, once again using the national mean *dibao* line as the poverty line. Age, education, and employment variables are for the household head. The findings for the most part confirm the descriptive results presented in Table 7. For migrant households, if the household head has a middle school education rather than less education the probability of being poor falls by 1.1 percent, if the household head is working the probability of being poor falls by 3.2 percent, and if the household head has an urban hukou the probability of being poor falls by 0.9 percent. Poverty of local resident households is not as responsive to these factors, but is more responsive to household size. Increasing household size by one person reduces the probability of being poor by 0.1 percent. The results also suggest that for both migrants and



local residents, being poor is associated with lack of access to social insurance programs.

## **5. Urban Income Inequality**

In this section, we examine how migrants affect the overall distribution of income in cities. The simplest way to examine income distributions is to simply plot the empirical distributions. Figure 1 does so for urban and migrant households, separately for large and small cities. We see that compared to local residents, the income distribution for migrant households is more tightly concentrated (narrower tails) around a lower mean in the 5 large cities, and is somewhat similar in shape in the 5 small cities except for at the bottom distribution, where it appears that migrants are more likely to be very poor but less likely to have incomes in the range just above the poorest levels. Compared to urban migrants, the income distribution of rural migrants has a similar pattern as we compare the income distribution between local residents and migrants.

We can also use Lorenz curves to compare income distributions. As shown in Figure 2, the income Lorenz curves of local resident and migrant households intersect for the 5 large cities, but most of the income Lorenz curve of local residents is below that of migrant households, suggesting that income inequality of local residents is greater than that of migrant households. In contrast, the income Lorenz curve of local residents is above Lorenz curve for migrant households for the 5 small cities, so that income inequality of local residents appears to be smaller than that of migrant

households. Compared with rural migrants, the income Lorenz curves of urban migrants are below them in both large cities and small cities. In general, it also appears that income inequality is greater in the small cities than in the large cities.

Table 9 summarizes income inequality of local residents, migrants, and total populations using two commonly used inequality measures--the Gini coefficient and the Theil index. The Gini is more sensitive to changes in the middle of the distribution while the Theil index is more sensitive to changes in the tails of the distribution. Comparing the Gini (Theil) measures of local resident and migrant households, we find that the former is greater than the latter in 3 of 5 large cities, in 2 of 5 (1 of 5) small cities, and also in Daqing and Shenzhen. For the 5 large cities combined, the Gini coefficient for local residents is 0.388, larger than the Gini for migrants (0.376). For the 5 small cities, in contrast, the Gini coefficient for local residents (0.404) is lower than that for migrants (0.481). Using the Theil index, inequality is greater for migrants both in large cities and in small cities. Finally, comparing the inequality measures for the total population with that for local residents only, we find that using either the Gini or Theil measures, inequality is greater with the inclusion of migrants. For the large cities, the increase is very slight, while for small cities, the increases are significant (the Gini increases from 0.402 to 0.418 and the Theil index increases from 0.282 to 0.337).

The Theil index is one of the generalized entropy (GE) indices, which have the attractive property that they are easily decomposed. Theoretically, a *GE* index can be additively decomposed into two components: within-group inequality and

between-group inequality. It is straightforward to derive the following expression for the change in inequality caused by including migrants in the sample:

$$\Delta GE = GE - GE_L = (GE_M - GE_L) * S_M + GE\_B. \quad (2)$$

Here,  $GE_M$  and  $GE_L$  are the subgroup income inequality measures for migrant and local resident households,  $S_M$  is the income share of migrants, and  $GE\_B$  is between-group inequality. The impact of migration on the urban income distribution depends on the difference of income inequality among migrants and among local residents, the overall income share of migrant households, and the difference in mean incomes of migrants and local residents<sup>8</sup>.

One can see from the first argument in (2) that the similarity in inequality of migrant incomes and local resident incomes leads to little change in overall inequality in large cities when migrants are included, but the greater inequality of migrant incomes in small cities leads to greater inequality in small cities when migrants are included in the sample. Between-group inequality does not appear to contribute significantly to changes in inequality in large cities, even though the mean income per capita of local residents is 27.6 percent greater than that of migrants. In small cities, the mean income per capita of migrants is 19.8 percent greater than that of local residents.

---

<sup>7</sup> Assume  $GE\_W$  and  $GE\_B$  represent within-group and between-group inequality,  $S_M$  is the income share of migrants, and  $GE_M$  and  $GE_L$  are the subgroup income inequality measures for migrants and local residents. We can decompose urban income inequality as follows:  $GE = S_M GE_M + (1 - S_M) GE_L + GE\_B$ . If  $\Delta GE$  is the change in the urban income inequality when migrant households are included in the sample, deriving (2) is straightforward.

<sup>8</sup> We can also develop the above formula to the inclusion of rural migrants and urban migrants separately. In fact, higher income inequality of urban migrants makes a certain contribution to the overall urban income inequality. We do not report this discussion in this paper for the simplicity.

## **6. Non-income welfare differences**

In this section, we consider differences between local residents and migrants with respect to non-income welfare measures. In recent years, there has been much concern that migrants are discriminated against with respect to access to decent quality housing, access to social insurance and social assistance programs, and access to basic public services such as education (Cai and Wang, 2005). Table 10 describes the housing conditions and access to social insurance programs based on the CULS data. The average area of housing are per capita for migrants was 10.7 square meters, compared to 18.4 square meters for local residents, and migrant housing had much lower rates of provision of drinking water, sewage, and heating. Table 10 also makes clear that migrants have almost no chance of obtaining valuable pension, unemployment insurance, or health insurance benefits, partly because most work in the private sector where such benefits often are not provided, and partly because of discriminatory policies of local governments. In contrast, most local residents have pension programs and have health insurance. Finally, other research using the CULS data finds that migrants must pay significantly higher school fees for their children if they do not have local hukous, migrants have almost no access to social insurance programs (World Bank, forthcoming). Overall, it appears that inequality between migrants (especially rural migrants) and local residents in non-income dimensions of welfare are much higher than is reflected in a simple comparison of income per capita levels or income-based poverty measures.

## **7. Conclusion**

The main finding of this paper is that based on analysis of recent survey data from 12 Chinese cities in 2004 and 2005, we find that accounting for migrants does not significantly alter income-based estimates of urban poverty and inequality in China. This is not to say that migrants face no problems living and working in cities. Quite to the contrary, studies using the same data find that migrants earn lower wages than local residents after controlling for observable characteristics, they are much less well off than local residents in terms of a number of important non-income welfare indicators.

The lack of significant income poverty among migrants reflects China's unique institutions, which have enabled migration to be a selective process. Most migrants living in urban areas work long hours and have relatively few dependents living with them in the cities. It is not obvious, however, whether such selectivity will persist as migration continues to increase in the future. According to the prediction of the United Nations, 53.2 percent of China's total population will choose to live in cities and townships by 2020. Migrants surveyed by the CULS reported that the vast majority (more than 70 percent) desired to stay in cities, with less than 20 percent of them wanting to return home (Table 11). The survey also found that about one third of migrants definitely expect to live in cities permanently, half report a likelihood of living in cities in the future, and only 15.5 percent expecting not to live in cities (Table 11). The mean duration that surveyed migrants had lived in the city exceeded 9 years in 2005, compared to about 7 years in the first wave of the CULS in 2001.

This suggests that the nature of migration in China is quickly shifting from temporary, individual migration to permanent, family-based migration. This could lead to higher rates of unemployment and larger dependency ratios among migrant households in the future, as migration choices become increasingly irreversible.

The survey data suggest that poverty among migrants is not a severe problem in urban areas. However, there exist significant differences between migrants (especially rural migrants) and local residents in access to housing, social insurance programs, social assistance, and public services. As migration becomes increasingly permanent, it will be a great challenge to enable migrant households to become equal members of urban communities.

## References

- Asian Development Bank (ADB), 2002. *Urban Poverty in the PRC, Final Report*.
- Asian Development Bank (ADB), 2004. *Poverty Profile of the People's Republic of China*.
- Brandt, L and C. Holtz, 2005. Spatial price differences in China: estimates and implications, Economics Working Paper Archive EconWPA in its series Development and CompSystems with number 0504010.
- Cai, Fang and Dewen Wang, 2005. Impacts of domestic migration on economic growth and urban development in China. Paper Presented at the Conference *Migration and Development Within and Across Borders: Concepts, Methods and Policy Considerations in International and Internal Migration*, International Organization for Migration (IOM), New York, November 17-19.
- Cai, Fang, John Giles and Albert Park, 2005.
- Du, Yang, Robert Gregory and Xin Meng, 2006. The impact of the guest-worker system on poverty and the well-being of migrant workers in urban China, in Ross Garnaut and Ligang Song (eds). *The Turning Point in China's Economic Development*, Asia Pacific Press at the Australian National University, Canberra ACT 0200.
- Foster, J.E., J.Greer and Eric Thorbecke, 1984. A class of decomposable poverty measures, *Econometrica*, Vol.52, pp.761-66.
- Hussain, A., 2001. *Poverty Profile and Social Security in China*, draft report, London School of Economics.
- Hussain, A., 2003. *Urban Poverty in China: Measurement, Patterns and Policies*. International Labour Office, Geneva, January.
- Giles, John, Albert Park and Fang Cai, 2006. How has economic restructuring affected China's urban workers?," *China Quarterly*, 2006, no.185, pp. 61-95.
- Khan, Azizur Rahman, 1998. *Poverty in China in the Period of Globalization: New Evidence on Trends and Patterns*. Issues in Development Discussion Paper No. 22, Development Policies Department, International Labour Office, Geneva.
- Li, Shi, 2001. "Increasing urban poverty at the end of the 1990s and its causes," <http://www.cass.net.cn/jingjisuo/yjhw/01.asp?id=194>.
- Ren, Caifang and Xiaojie Chen, 1996. "Size, status and trend of poverty in urban China," *Research and Reference Materials*, No.65.
- Sen, Amartya, 1992. *Inequality Reexamined*, Oxford: Clarendon Press, New York: Russell Sage Foundation, and Cambridge, MA: Harvard University Press.
- United Nations Human Settlements Program, 2003. *The Challenge of Slums: Global Report on Human Settlements*, London: Earthscan Publications and UN-Habitat.
- Wang, Dewen, Yaowu Wu and Fang Cai, 2004. "Migration, unemployment and urban labor market segregation in China's economic transition," *The World Economy*, No.4.
- World Bank, 1992. *China: Strategies for Reducing Poverty in the 1990s*, Washington D. C.

**Table 1. Basic Information on Surveyed Cities**

Cities	Number of Surveyed Households				Number of Surveyed Individuals				Total Population (10000)	Per Capital GDP (Yuan)	Per Capital Income (Yuan)
	Local		Urban		Local		Urban				
	Residents	Migrants	Migrants	Migrants	Residents	Migrants	Migrants	Migrants			
5 Large Cities	2500	2514	473	2041	7485	5618	938	4680	4234	29397	11263
Shanghai	500	500	140	360	1440	1034	291	743	1352	55307	16683
Wuhan	500	503	69	434	1621	1253	144	1109	786	24963	9564
Shengyang	494	494	121	373	1379	982	205	777	694	27388	8924
Fuzhou	497	506	56	450	1545	1173	115	1058	660	23400	11516
Xian	509	511	87	424	1500	1176	183	993	742	15925	9628
5 Small Cities	2323	1999	385	1614	7179	4848	805	4043	574	24670	9763
Wuxi	500	402	116	286	1496	994	223	771	216	43307	11647
Yichan	400	404	95	309	1208	973	203	770	122	17240	7033
Benxi	523	400	55	345	1604	999	119	880	96	14030	6347
Zhuhai	500	390	100	290	1662	987	214	773	79	32682	16602
Baoji	400	403	19	384	1209	895	46	849	60	16089	7049
Other 2 Cities	1501	1008	483	525	2393	2356	1123	1233	255	65983	17468
Daqing	500	399	145	254	1391	1011	357	654	115	85578	11029
Shenzhen	1001	609	338	271	1002	1345	766	579	140	46388	23906
Total	6324	5521	1341	4180	17057	12822	2866	9956	5063	40016	12822

Note: (1) Figures of total population, per capita GDP and per capita disposable income in each city are from their 2005 statistical yearbooks. (2) Per capita GDP and per capita disposable income are the arithmetic average values in the rows of five large cities, five small cities and total.



**Table 2 China Urban Poverty Lines**

	Urban Poverty Lines (in 2003 yuan)
<b><u>Poverty Lines Used in the Analysis</u></b>	
National Mean Dibao Line	1982
Adjusted Rural Low Income Line	1112
World Bank \$1/day	1124
World Bank \$2/day	2247
World Bank \$3/day	3371
<b><u>Other Poverty Lines</u></b>	
NBS Poverty Line (2000) <sup>1</sup>	1948
DRC Poverty Line (1997) <sup>1</sup>	1691
MOCA Poverty Line (1999) <sup>1</sup>	1825
Khan (1995) <sup>1</sup>	1790
Rural Poverty Line (2003)	637
Twice the Rural Poverty Line (2003)	1274
Triple the Rural Poverty Line (2003)	1911

<sup>1</sup>Reported in ADB (2004).

**Table 3 Poverty Incidences of Urban and Migrant Households**

City	Urban Households	Migrant Households	Rural Migrant Households	Urban Migrant Households	All Households
National Mean Dibao Line					
Shanghai	0.6	0.7	0.7	0.7	0.6
Wuhan	5.2	4.5	4.7	3.7	5.1
Shengyan	4.7	5.9	4.4	12.4	4.8
Fuzhou	1.3	2.8	2.9	1.6	1.4
Xian	5.4	2.3	1.3	14.3	4.7
Wuxi	1.9	4.0	4.7	1.0	2.1
Yichan	12.9	17.3	19.4	6.3	13.1
Benxi	2.6	11.5	12.0	8.5	2.7
Zhuhai	8.4	6.2	6.8	4.4	7.4
Baoji	5.0	3.3	3.6	0.0	4.9
Daqing	8.6	17.4	16.6	20.8	10.0
Shenzhen	4.4	6.3	4.9	7.5	5.2
5 Large Cities	3.2	2.5	2.1	5.1	3.2
5 Small Cities	5.6	6.2	6.8	3.6	5.7
<b>Full Sample</b>	<b>3.8</b>	<b>4.4</b>	<b>3.9</b>	<b>6.3</b>	<b>3.9</b>
Adjusted Rural Low Income Line					
Shanghai	0.4	0.7	0.7	0.7	0.4
Wuhan	1.8	1.3	1.5	0.7	1.8
Shengyan	1.5	5.1	4.2	9.1	1.6
Fuzhou	0.3	2.4	2.5	1.6	0.5
Xian	2.9	1.3	1.1	3.2	2.5
Wuxi	1.2	3.4	3.9	1.0	1.5
Yichan	4.9	7.5	7.9	5.6	5.0
Benxi	1.2	5.3	4.8	8.0	1.2
Zhuhai	5.0	6.2	6.7	4.4	5.5
Baoji	1.7	0.2	0.2	0.0	1.7
Daqing	5.2	10.0	7.5	20.1	5.9
Shenzhen	4.0	5.7	3.7	7.5	4.7
5 Large Cities	1.3	1.4	1.3	1.8	1.3
5 Small Cities	2.6	5.3	5.8	3.6	3
<b>Full Sample</b>	<b>1.7</b>	<b>3.2</b>	<b>2.7</b>	<b>4.9</b>	<b>1.9</b>
World Bank 1 \$/Day Line					
Shanghai	0.4	0.7	0.7	0.7	0.4
Wuhan	2.0	1.3	1.5	0.7	1.9
Shengyan	1.5	5.1	4.2	9.1	1.6
Fuzhou	0.3	2.4	2.5	1.6	0.5
Xian	2.9	1.3	1.1	3.2	2.5
Wuxi	1.2	3.4	3.9	1.0	1.5
Yichan	4.9	7.5	7.9	5.6	5.0
Benxi	1.2	5.3	4.8	8.0	1.2
Zhuhai	5.0	6.2	6.7	4.4	5.5
Baoji	1.7	0.2	0.2	0.0	1.7
Daqing	5.4	10.0	7.5	20.1	6.1
Shenzhen	4.0	5.7	3.7	7.5	4.7
5 Large Cities	1.4	1.4	1.3	1.8	1.4
5 Small Cities	2.6	5.3	5.8	3.6	3
<b>Full Sample</b>	<b>1.8</b>	<b>3.2</b>	<b>2.7</b>	<b>4.9</b>	<b>2.0</b>

**Table 3 Poverty Incidences of Urban and Migrant Households (Continued)**

City	Urban Households	Migrant Households	Rural Migrant Households	Urban Migrant Households	All Households
World Bank 2 \$/Day Line					
Shanghai	0.6	0.7	0.7	0.7	0.6
Wuhan	6.7	7.8	8.6	3.7	6.7
Shengyan	4.9	6.4	5.0	12.4	5.0
Fuzhou	1.5	2.8	2.9	1.6	1.6
Xian	6.4	2.5	1.5	14.3	5.5
Wuxi	1.9	4.0	4.7	1.0	2.1
Yichan	15.5	22.9	25.1	11.5	15.9
Benxi	3.2	11.9	12.5	8.5	3.3
Zhuhai	9.5	6.4	6.9	4.4	8.1
Baoji	6.7	5.1	4.9	8.5	6.7
Daqing	9.2	17.6	16.7	20.8	10.5
Shenzhen	4.5	6.5	4.9	7.9	5.3
5 Large Cities	3.8	3.3	3.0	5.1	3.8
5 Small Cities	6.6	6.6	7.3	3.9	6.6
<b>Full Sample</b>	4.4	5.0	4.6	6.5	4.5
World Bank 3 \$/Day Line					
Shanghai	1.4	3.8	4.0	3.5	1.5
Wuhan	18.9	19.7	20.5	15.9	18.9
Shengyan	9.7	12.2	11.7	14.8	9.8
Fuzhou	5.6	8.4	8.9	1.6	5.8
Xian	15.8	8.1	7.6	14.3	14.0
Wuxi	4.0	6.6	7.9	1.3	4.4
Yichan	29.1	38.6	42.7	17.6	29.5
Benxi	7.1	33.8	31.2	47.5	7.4
Zhuhai	13.5	9.2	10.6	4.4	11.6
Baoji	15.1	23.2	22.5	31.7	15.4
Daqing	12.9	30.6	30.7	30.4	15.6
Shenzhen	5.7	7.4	6.7	8.1	6.4
5 Large Cities	9.8	9.6	9.7	9.3	9.7
5 Small Cities	12.4	10.5	12.0	4.6	12.0
<b>Full Sample</b>	10.1	10.1	10.6	8.6	10.1

**Table 4 Share of Migrant Population in Total Urban Population**

City	2000 census (%)	CULS neighborhood surveys (%)
Shanghai	20.4	9.4
Wuhan	7.7	9.9
Shenyang	10.8	4.2
Fuzhou	33.6	8.6
Xian	12.4	28.9
Wuxi	17.0	16.4
Yichan	20.7	14.9
Benxi	16.0	5.5
Zhuhai	2.0	1.5
Baoji	54.1	53.3
Daqing	4.1	3.5
Shenzhen	82.6	48.7
Total	26.0	15.9

**Table 5 Depth of Poverty**

City	Urban Households	Migrant Households	Rural Migrant Households	Urban Migrant Households	All Households
Average Normalized Poverty Gap (*100)					
Shanghai	0.4	0.7	0.7	0.6	0.5
Wuhan	2.2	2.0	2.0	2.0	2.2
Shengyan	1.8	5.2	4.2	9.3	1.9
Fuzhou	0.4	2.5	2.6	1.5	0.5
Xian	2.8	0.8	0.5	3.5	2.3
Wuxi	1.3	3.1	3.7	0.9	1.5
Yichan	5.6	8.2	8.7	5.4	5.7
Benxi	1.0	5.6	5.2	8.2	1.1
Zhuhai	5.3	5.1	5.4	3.8	5.2
Baoji	1.8	0.8	0.9	0.0	1.7
Daqing	4.9	10.1	7.7	19.4	5.7
Shenzhen	3.9	5.5	3.6	7.1	4.5
5 Large Cities	1.5	1.3	1.1	2.0	1.4
5 Small Cities	2.7	4.6	5.0	3.1	3.1
Full Sample	1.8	3.0	2.4	4.8	2.0
Average Squared Normalized Poverty Gap (*100)					
Shanghai	0.4	0.6	0.7	0.5	0.4
Wuhan	1.3	1.5	1.5	1.3	1.3
Shengyan	1.1	5.0	4.1	9.1	1.2
Fuzhou	0.3	2.4	2.5	1.3	0.5
Xian	2.1	0.4	0.2	2.4	1.7
Wuxi	1.1	2.9	3.4	0.9	1.3
Yichan	3.9	6.8	7.1	5.0	4.0
Benxi	0.6	5.1	4.6	8.1	0.6
Zhuhai	4.3	4.4	4.7	3.4	4.3
Baoji	1.1	1.9	2.0	0.0	1.2
Daqing	3.6	9.2	6.8	18.5	4.4
Shenzhen	3.7	5.1	3.3	6.7	4.3
5 Large Cities	1.0	1.0	0.9	1.6	1.0
5 Small Cities	2.0	4.1	4.4	2.9	2.4
Full Sample	1.3	2.6	2.1	4.4	1.5

**Table 6 Labor Participation Rate, Unemployment Rate,  
Working Hours and Hourly Wages**

	Local residents	Migrants	Rural Migrants	Urban Migrants
<b>Labor Participation Rate</b>				
5 Large Cities	56.1	89.3	89.6	87.9
5 Small Cities	50.1	84.0	84.7	81.3
<b>Unemployment Rate</b>				
5 Large Cities	8.5	1.6	1.3	3.0
5 Small Cities	8.8	4.5	5.1	2.4
<b>Hourly Wages</b>				
5 Large Cities	14.7	4.6	4.1	7.1
5 Small Cities	8.3	7.6	6.1	13.1
<b>Working Hours</b>				
5 Large Cities	182.7	282.9	287.7	258.3
5 Small Cities	184.0	250.0	253.2	238.8

**Table7 Characteristics of Non-Poor and Poor Households**

	Urban Households			Migrant Households			Rural Migrant Households		
	Non Poor	Poor	All	Non Poor	Poor	All	Non Poor	Poor	All
Dependency Ratio	2.1	2.9	2.1	1.5	2.0	1.5	1.5	2.0	1.5
<b>Education</b>									
Primary School and below	3.4	4.8	3.5	17.1	27.6	17.5	20.2	36.4	20.8
Middle School	26.6	41.9	27.2	48.5	45.1	48.4	53.6	50.0	53.5
High School	34.6	37.0	34.7	21.6	15.6	21.3	19.3	9.8	19.0
College and above	35.4	16.2	34.6	12.8	11.7	12.8	6.9	3.7	6.8
<b>Working Status</b>									
Employed	61.8	21.2	60.1	85.6	36.0	83.6	86.9	37.1	85.2
Unemployed	4.9	25.7	5.7	1.3	25.4	2.3	1.1	27.3	2.0
Non-Working	33.3	53.1	34.1	13.1	38.6	14.1	12.0	35.6	12.8

**Table 8 Probit Model of Household Poverty Status  
(Marginal Probabilities)**

	Local resident households	Migrant households	Rural migrant households	Urban migrant households
Head sex (male=1)	0.003 (2.31)*	0.017 (5.85)**	0.008 (2.78)**	0.022 (4.60)**
0-15 (hh head)	-0.004 (1.01)	-0.008 (1.08)	-0.004 (0.37)	
16-29 (hh head)	-0.005 (1.68)	-0.001 (0.23)	-0.002 (0.85)	0.002 (0.54)
40-49 (hh head)	0.004 (1.99)*	0.004 (1.39)	0.004 (1.47)	0.007 (1.19)
50-59 (hh head)	-0.006 (3.71)**	0.000 (0.13)	-0.004 (1.27)	0.011 (1.44)
60 and above (hh head)	-0.012 (7.24)**	0.020 (1.80)	0.049 (2.40)*	-0.000 (0.05)
Middle School (hh head)	-0.000 (0.12)	-0.011 (4.57)**	-0.010 (4.56)**	0.011 (1.06)
High School (hh head)	-0.003 (1.39)	-0.002 (0.58)	-0.008 (2.18)*	0.033 (1.85)
College and above (hh head)	-0.005 (1.93)	-0.004 (0.92)	-0.004 (0.83)	0.020 (1.39)
Working (hh head)	-0.008 (3.39)**	-0.032 (7.20)**	-0.036 (6.26)**	-0.042 (2.54)*
Nonworking (hh head)	-0.006 (2.34)*	-0.001 (0.19)	-0.019 (3.20)**	0.005 (1.02)
Hukou (hh head)	0.008 (0.94)	-0.009 (3.69)**	-0.000 (0.01)	-0.004 (0.70)
High School Ratio	0.000 (0.75)	-0.000 (2.90)**	-0.000 (0.98)	-0.000 (1.94)
Employed Labours Ratio	-0.000 (9.32)**	-0.000 (6.96)**	-0.000 (7.00)**	-0.000 (4.13)**
No. of Unemployed Labours	0.004 (1.67)	0.026 (4.17)**	0.003 (0.52)	0.027 (2.71)**
Households with pension	-0.011 (4.29)**	-0.011 (4.14)**	-0.009 (3.82)**	-0.009 (2.41)*
Households with unem insurance	0.003 (1.77)	-0.010 (2.96)**	-0.007 (2.01)*	-0.008 (1.38)
Households with health insurance	-0.008 (3.85)**	0.026 (3.34)**	0.112 (4.67)**	0.001 (0.30)

Household Size	-0.001 (1.08)	-0.004 (3.76)**	-0.004 (3.87)**	-0.003 (2.15)*
Wuhan	0.024 (5.09)**	0.071 (4.70)**	0.034 (3.08)**	0.107 (2.94)**
Shengyang	0.028 (4.52)**	0.077 (3.58)**	0.023 (1.72)	0.265 (3.55)**
Fuzhou	0.015 (1.91)	0.055 (2.63)**	0.028 (1.90)	0.084 (0.90)
Xian	0.040 (5.76)**	0.019 (2.43)*	0.001 (0.11)	0.148 (3.61)**
Daqing	0.165 (2.88)**	0.146 (5.65)**	0.086 (4.12)**	0.200 (3.45)**
Wuxi	0.078 (2.14)*	0.067 (3.93)**	0.038 (2.86)**	0.014 (0.64)
Yichan	0.250 (3.47)**	0.253 (5.78)**	0.156 (4.42)**	0.090 (1.26)
Benxi	0.051 (1.62)	0.072 (1.50)	0.031 (0.96)	0.039 (0.31)
Zhuhai	0.118 (2.47)*	0.071 (4.64)**	0.034 (2.99)**	0.113 (3.05)**
Baoji	0.140 (2.58)**	0.096 (1.81)	0.055 (1.44)	
Shengzhen	0.022 (1.14)	0.032 (3.31)**	0.010 (1.35)	0.040 (3.02)**
Observations	6298	5453	4152	1276

Note: Absolute value of z statistics in parentheses; \* significant at 5%; \*\* significant at 1%



**Table 9 Income Inequality by City**

City	Migrant		Rural Migrant	Urban Migrant	All Households
	Urban Households	Households	Households	Households	
<b>Gini Coefficient</b>					
Shanghai	0.314	0.373	0.351	0.398	0.320
Wuhan	0.368	0.351	0.340	0.358	0.368
Shengyan	0.364	0.397	0.336	0.453	0.366
Fuzhou	0.342	0.319	0.318	0.293	0.344
Xian	0.361	0.329	0.302	0.514	0.354
Wuxi	0.359	0.541	0.352	0.687	0.387
Yichan	0.412	0.497	0.460	0.529	0.417
Benxi	0.287	0.392	0.365	0.489	0.289
Zhuhai	0.447	0.425	0.412	0.414	0.448
Baoji	0.344	0.299	0.294	0.289	0.344
Daqing	0.390	0.379	0.358	0.421	0.407
Shenzhen	0.497	0.454	0.384	0.467	0.490
5 Large Cities	0.388	0.376	0.347	0.439	0.389
5 Small Cities	0.404	0.481	0.403	0.572	0.418
Full Sample	0.409	0.447	0.379	0.502	0.414
<b>Theil Index</b>					
Shanghai	0.163	0.246	0.209	0.291	0.169
Wuhan	0.233	0.198	0.182	0.219	0.232
Shengyan	0.228	0.267	0.202	0.272	0.229
Fuzhou	0.193	0.160	0.158	0.156	0.195
Xian	0.210	0.201	0.150	0.525	0.208
Wuxi	0.233	0.857	0.189	1.153	0.328
Yichan	0.271	0.568	0.480	0.624	0.284
Benxi	0.149	0.249	0.219	0.362	0.151
Zhuhai	0.315	0.374	0.349	0.363	0.348
Baoji	0.186	0.150	0.147	0.147	0.187
Daqing	0.352	0.173	0.168	0.154	0.358
Shenzhen	0.482	0.360	0.242	0.373	0.460
5 Large Cities	0.249	0.253	0.204	0.351	0.252
5 Small Cities	0.282	0.596	0.309	0.890	0.337
Full Sample	0.301	0.404	0.250	0.506	0.313

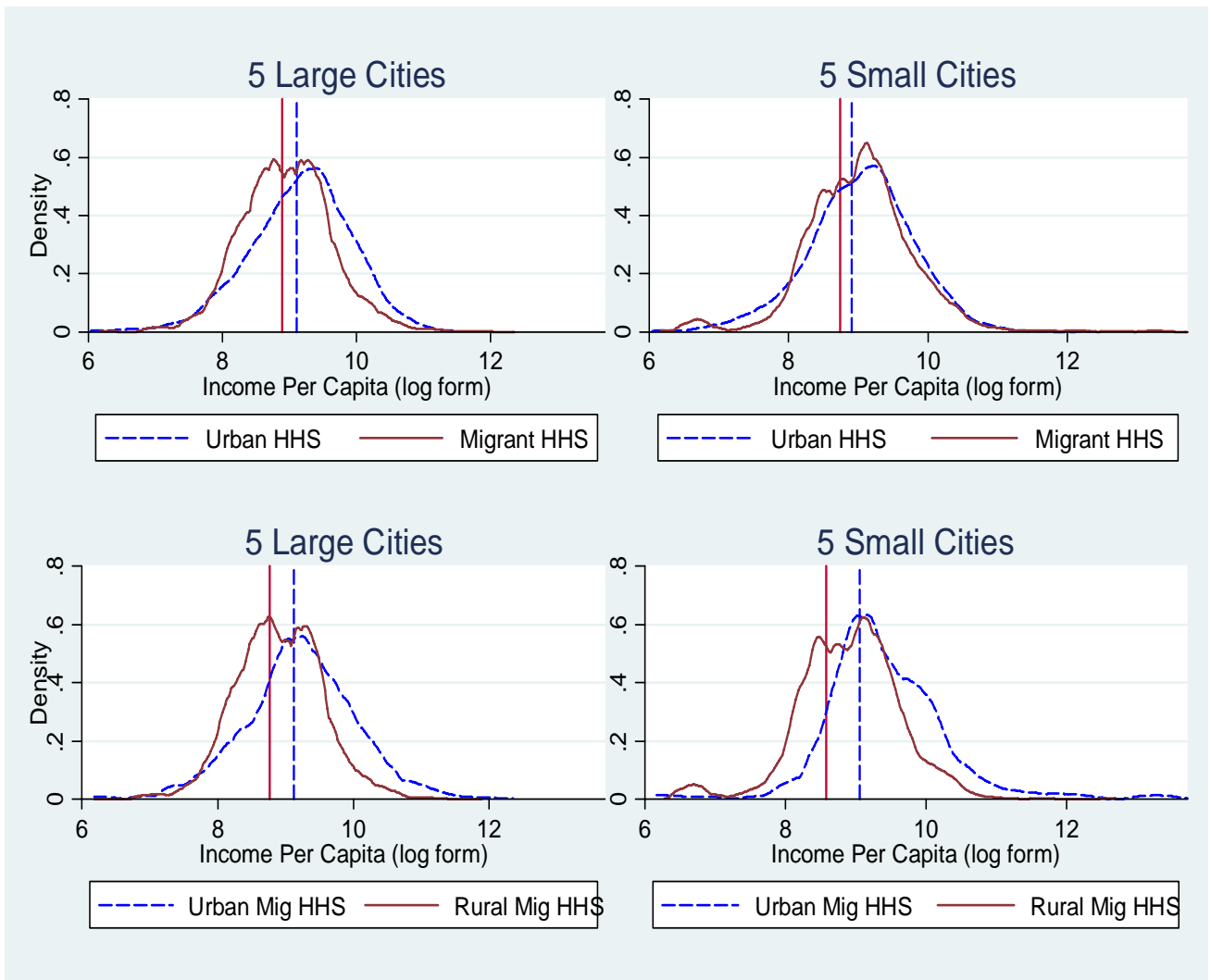
**Table 10 Comparison of Housing Conditions and Social Insurance Coverage of Local Resident and Migrant Workers**

	Local resident workers	Migrant workers	Rural migrant workers	Urban migrant workers
<b>Housing Conditions ( 5 Large Cities)</b>				
Construction Area Per Capita (Sq meter)	18.4	10.7	9.9	15.2
Proportion of Having Drink Water (%)	98.8	78.1	75.1	94.1
Proportion of Having Toilet (%)	88.2	45.5	40.4	73.2
Proportion of Having Gas (%)	61.7	31.8	27.4	54.8
<b>Pension</b>				
5 Large Cities	61.0	5.7	2.7	20.9
5 Small Cities	65.5	16.2	10.8	34.7
Full Sample	61.7	8.3	4.6	25.1
<b>Unemployment Insurance</b>				
5 Large Cities	17.6	1.8	1.3	4.1
5 Small Cities	25.0	12.4	8.7	25.3
Full Sample	18.8	4.4	3.0	10.6
<b>Basic Medical Insurance</b>				
5 Large Cities	50.7	3.9	1.8	14.4
5 Small Cities	61.0	15.8	11.1	31.8
Full Sample	52.3	6.8	4.0	19.8

**Table 11 Migrants' Response to Mobile Intention and Possibilities to Live in Cities**

City	Plan to Move			Possibilities to Live in Cities				
	Stay at City	Go Home	To Other Places	Total	Completely	Certainly	Impossibly	Total
Shanghai	71.0	22.8	6.2	100.0	38.5	46.77	14.72	100
Wuhan	67.3	25.9	6.9	100.0	24.8	59.11	16.09	100
Shengyan	75.9	13.9	10.2	100.0	43.45	43.61	12.94	100
Fuzhou	69.3	24.5	6.3	100.0	29.21	46.87	23.93	100
Xian	75.2	15.2	9.7	100.0	40.89	40.83	18.29	100
Daqing	78.5	10.9	10.7	100.0	49.82	44.07	6.11	100
Wuxi	83.5	13.2	3.3	100.0	32.52	52.88	14.6	100
Yichan	65.8	24.4	9.8	100.0	21.36	59.84	18.79	100
Benxi	85.2	12.4	2.4	100.0	59.29	30.24	10.48	100
Zhuhai	76.3	17.8	5.9	100.0	28.48	57.81	13.71	100
Baoji	68.7	17.6	13.7	100.0	25.25	57.79	16.96	100
Shenzhen	70.0	23.3	6.7	100.0	25.4	60.46	14.14	100
5 Large Cities	72.3	19.6	8.1	100.0	36.96	46.26	16.78	100
5 Small Cities	77.7	16.8	5.5	100.0	29.49	56.28	14.23	100
Full Sample	73.1	19.5	7.4	100.0	33.82	50.68	15.5	100

**Figure 1 Income Distribution of Urban and Migrant Households by City Type**



**Figure 2 Income Lorenz Curves of Urban and Migrant Households by City Type**



**Appendix Table 1 Poverty Incidences of Urban and Migrant Households Excluding Remittances**

City	Urban Households	Migrant Households	Rural Migrant Households	Urban Migrant Households	All Households
National Mean Dibao Line					
Shanghai	1.0	1.0	1.1	0.7	1.0
Wuhan	5.5	4.8	5.1	3.7	5.4
Shengyan	4.7	7.5	5.7	15.2	4.8
Fuzhou	1.7	4.2	4.4	1.6	1.8
Xian	6.0	3.6	2.6	14.9	5.4
Wuxi	2.4	4.2	4.8	1.7	2.7
Yichan	14.0	23.0	24.5	15.3	14.5
Benxi	4.5	13.3	13.6	11.6	4.6
Zhuhai	10.0	6.2	6.8	4.4	8.3
Baoji	7.5	5.5	5.5	5.2	7.5
Daqing	12.4	21.6	21.8	20.8	13.8
Shenzhen	5.9	7.1	5.7	8.3	6.4
5 Large Cities	3.6	3.3	3.0	5.4	3.5
5 Small Cities	6.9	6.6	7.2	4.2	6.8
Full Sample	4.4	5.3	4.8	6.8	4.5
Adjusted Rural Low Income Line					
Shanghai	0.6	0.9	1.0	0.7	0.6
Wuhan	2.1	1.6	1.8	0.7	2.1
Shengyan	1.5	5.2	4.3	9.3	1.6
Fuzhou	0.5	3.0	3.1	1.6	0.7
Xian	3.5	1.3	1.1	3.9	3.0
Wuxi	1.8	3.7	4.2	1.7	2.0
Yichan	5.3	9.5	9.7	8.3	5.5
Benxi	2.8	6.6	5.8	10.8	2.8
Zhuhai	6.3	6.2	6.7	4.4	6.3
Baoji	2.5	1.2	1.3	0.0	2.4
Daqing	9.6	10.1	7.5	20.1	9.6
Shenzhen	5.6	6.0	3.8	7.9	5.7
5 Large Cities	1.6	1.5	1.4	1.9	1.6
5 Small Cities	3.4	5.6	6.0	3.9	3.8
Full Sample	2.2	3.4	2.9	5.2	2.4
World Bank 1 \$/Day Line					
Shanghai	0.6	0.9	1.0	0.7	0.6
Wuhan	2.3	1.6	1.8	0.7	2.2
Shengyan	1.5	5.2	4.3	9.3	1.6
Fuzhou	0.5	3.0	3.1	1.6	0.7
Xian	3.5	1.3	1.1	3.9	3.0
Wuxi	1.8	3.7	4.2	1.7	2.0
Yichan	5.3	9.5	9.7	8.3	5.5
Benxi	2.8	6.6	5.8	10.8	2.8
Zhuhai	6.3	6.2	6.7	4.4	6.3
Baoji	2.5	1.2	1.3	0.0	2.4
Daqing	9.8	10.1	7.5	20.1	9.9
Shenzhen	5.6	6.0	3.8	7.9	5.7
5 Large Cities	1.6	1.5	1.4	1.9	1.6
5 Small Cities	3.4	5.6	6.0	3.9	3.8
Full Sample	2.3	3.4	2.9	5.2	2.4

**Appendix Table 1 Poverty Incidences of Urban and Migrant Households Excluding Remittances (Continued)**

City	Urban Households	Migrant Households	Rural Migrant Households	Urban Migrant Households	All Households
<b>World Bank 2 \$/Day Line</b>					
Shanghai	1.0	1.6	2.0	0.7	1.0
Wuhan	6.8	8.6	9.6	3.7	6.9
Shengyan	4.9	8.4	6.8	15.2	5.0
Fuzhou	1.9	4.3	4.5	1.6	2.1
Xian	7.4	3.8	2.9	14.9	6.6
Wuxi	2.4	4.4	5.0	1.7	2.7
Yichan	17.6	25.1	27.0	15.3	17.9
Benxi	5.9	14.3	14.8	11.6	6.0
Zhuhai	10.9	6.4	6.9	4.4	8.8
Baoji	9.3	9.5	9.2	13.6	9.3
Daqing	14.1	22.0	22.3	21.0	15.3
Shenzhen	5.9	7.9	7.5	8.3	6.7
5 Large Cities	4.2	4.5	4.3	5.4	4.2
5 Small Cities	8.2	6.9	7.6	4.2	8.0
Full Sample	5.1	6.2	6.0	6.8	5.2
<b>World Bank 3 \$/Day Line</b>					
Shanghai	1.7	6.0	7.0	3.5	2.0
Wuhan	19.0	24.3	25.2	19.8	19.4
Shengyan	10.3	13.9	12.9	18.3	10.4
Fuzhou	6.3	10.6	11.3	1.6	6.6
Xian	17.7	11.9	11.6	14.9	16.4
Wuxi	4.7	7.7	9.1	2.0	5.1
Yichan	31.2	41.6	45.5	21.3	31.7
Benxi	12.6	37.8	35.2	51.2	12.9
Zhuhai	16.1	10.5	11.7	6.4	13.6
Baoji	18.8	30.0	29.6	35.4	19.1
Daqing	19.0	31.6	31.9	30.4	20.9
Shenzhen	7.8	8.4	8.4	8.5	8.1
5 Large Cities	10.3	13.0	13.4	10.5	10.6
5 Small Cities	14.8	12.0	13.4	6.4	14.3
Full Sample	11.2	12.6	13.5	9.6	11.3