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Urbanization, Inequality, and Poverty in the People's Republic of China

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Comments

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**Urbanization, Inequality, and Poverty
in the People's Republic of China**

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Abstract

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Contents

1. INTRODUCTION

Between 1978 and 2012, the economy of the People's Republic of China (PRC) witnessed radical structural changes and a rapid growth rate: the share of industrial gross domestic product (GDP) increased from 44.34% to 56.8%, and the share of the urban population jumped from 17.92% to 49.96% (NBSC 2013). Urbanization is considered to be an engine of economic growth in developing countries. Driven by policies of economic reforms and opening up, the structural changes ushered in an era of sustained and rapid economic growth for the PRC. As a consequence, rural and urban poverty declined dramatically. According to the PRC's official statistics, the headcount ratio of rural poverty dropped from 30.7% in 1978 to less than 1% in 2008. Using the $1.25 poverty line (adjusted by purchasing power parity) of the World Bank, which was higher than the PRC's rural poverty threshold, the achievement of poverty reduction is impressive (World Bank 2001). At the same time, the PRC's economic growth was accompanied by rapid increases in income inequality. In particular, the urban–rural gap has mostly been widening, constituting the most important component of inequality in the PRC (Kanbur and Zhang 2004; Wan 2005). From 1978 to 2010, the urban–rural income and consumption ratios both maintained an upward trend, the latter being more notable than the former. Specifically, the urban–rural income ratio increased from 2.57 in 1978 to a peak value of 3.33 in 2007, and the consumption ratio increased from 2.90 in 1978 to the maximum value of 3.83 in 2003.

To understand these important observations, one needs to inquire into the role played by urbanization in economic growth, poverty reduction, and the evolution of inequality in the PRC. This paper summarizes research findings on the relationship between urbanization, interregional and urban–rural inequality, and poverty. Section 2 analyzes the relationship between urbanization, economic growth, and the evolution of inequality in the PRC, where the trends and spatial dimensions of poverty, inequality, and residential segregation within urban areas are covered, section 3 focuses on the urban labor market and urban poverty, where the role of the informal sector and rural–urban migration in reducing urban poverty are empirically tested using household data. Section 4 portrays the multifaceted nature of poverty in the process of urbanization, including consumption poverty, chronic poverty, transient poverty, vulnerability to poverty, and housing poverty; and section 5 analyzes the effect of some anti-poverty and inequality policies in the context of urbanization, such as employment-related programs, minimum living standards, and minimum wages.

The empirical test in this paper relies on two main data sources. First, macroeconomic data were obtained from various publications of the National Bureau of Statistics (NBSC). Second, the well-cited Chinese Household Income Project Survey (CHIPS) provides household data for 1995, 2002, and 2007, and is a subset of the nationwide household surveys conducted by the NBSC. CHIPS data cover about 10,000 rural and urban households in more than 10 provinces in the PRC. Information collected includes household characteristics, income, expenditures, job status, and entrepreneurial activities.

2. URBANIZATION, GROWTH, AND INEQUALITY

2.1 Urban–Rural and Interregional Inequality

Over the past 3 decades, although the PRC has made significant achievements in promoting GDP growth and reducing rural poverty, its performance in reducing

inequality, especially between urban and rural areas, has been disappointing. Figure 1 depicts the urban–rural ratio of per capita consumption and per capita income from 1978 to 2010. It can be seen that the urban–rural gap in the consumption level was more pronounced than in the income level; furthermore, the urban–rural income ratio and consumption ratio experienced two clear decreasing trends in the early 1980s and the mid-1990s, as well as a slight downward trend in the first few years of the 21st century. The gap in both income and consumption between urban and rural residents showed an increasing trend, the income ratio rising from 2.57 in 1978 to a maximum value of 3.33 in 2007 and the consumption ratio rising from 2.90 in 1978 to a maximum value of 3.83 in 2003. This indicates that after the reforms and opening up in 1978, the PRC's urban–rural gap in income and consumption expanded overall.

Figure 1: Rural–Urban Income and Consumption Ratio, 1978–2010
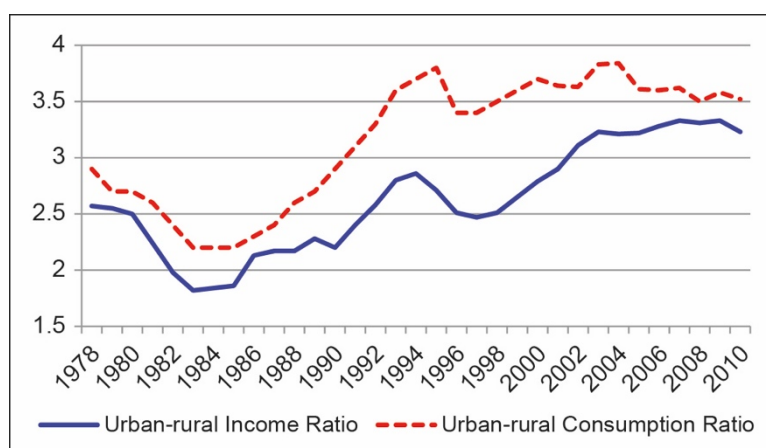
Source: *China Statistical Yearbook*, various years.

The urban–rural income and consumption ratio cannot provide a comprehensive description of inequality in the PRC. Table 1 shows the Gini index published by the World Bank. These Gini coefficients are based on three different data sources. From 1981 to 2002, all Gini coefficients exhibited a clear upward trend, but after 2002, all Gini coefficients began to show a downward trend. Therefore, inequality in the PRC begins to show a decreasing trend at the beginning of the 21st century, irrespective of the index used to depict inequality. This trend is believed to be partly associated with a basket of policies favoring peasants and agricultural production, including rural tax reforms and agricultural subsidies.

Table 1: Gini Index in the PRC, 1981–2005

	1981	1984	1987	1990	1993	1996	1999	2002	2005
Source 1	29.1	27.7	31.7	32.7	38	34.9	38.9	53.6	39.8
Source 2	29.11	27.69	29.85	32.43	35.5	35.7	39.23	42.59	42.48
Source 3	NA	NA	30.1	34.84	41.96	39.8	41.64	46.3	39.78

NA = not available.

Notes: Source 1 refers to a new, relatively consistent Gini index created from all of the eight data sources available to Branko Milanovic, who provided these measures. Source 2 refers to the World Bank-based dataset that covers the period 1978–2011 and includes 124 countries. Source 3 is the World Income Distribution dataset that covers the period 1980–2010 and includes 152 countries.

Source: World Bank. All the Ginis, 1950–2012 (updated in Autumn 2014). http://go.worldbank.org/9VCQW66LA0

2.2 Poverty in Urban Areas

There is a rich literature explaining the determinants of rural poverty in the PRC (Fan, Zhang, and Zhang 2000; Jalan and Ravallion 1998, 2000; Montalvo and Ravallion 2009; Ravallion and Chen 2004; Rozelle, Zhang, and Huang 2000), so this paper will focus mainly on urban poverty in the PRC. Given the PRC's gradual approach to reforms, its territory and population size, and very uneven development, serious and significant market fragmentation exist both across provinces and between urban and rural areas. Thus, it is important to consider differences in the price levels between rural and urban areas. Also, in order to compare household income across years, it is necessary to deflate household income with the consumer price index (CPI), using separate urban and rural CPIs with the base year of 2005. To be able to describe poverty in the PRC, we need to convert international poverty lines into local currency. To begin with, when we measure the poverty rate by the commonly used $1.25 per day threshold, purchasing power parity (PPP) rates reported by the World Bank's World Development Indicators [1] typically result in a rural poverty rate beyond what is commonly perceived as the actual poverty rates in rural PRC. Thus, we use purchasing power parities derived from PovcalNet data. These were 4.02 for urban areas and 2.95 for rural areas in 2005, compared to the official PPP rates of 4.09.

We measure poverty by the headcount ratio, using international poverty lines. Table 2 presents the profile of urban poverty in the PRC. Several observations are immediately evident from Table 2. From 1995 to 2007, urban households experienced phenomenal poverty reduction. In 1995, less than 4% of urban households remained below $1.25 a day, and the proportion of poor urban households under $1.25 a day dropped substantially to only 0.14% in 2007. More impressively, the share of urban households that remained below $2 a day dropped sharply from more than 16% to nearly 1%.

Table 2: Poor Households in Urban PRC (%)

Per capita daily income (2005 PPP)	1995	2002	2007
$1.25	3.03	1.87	0.14
$2	16.46	7.26	1.16

PPP = purchasing power parity, PRC = People's Republic of China.

Source: Author's calculation based on Chinese Household Income Project Survey (CHIPS) data.

2.3 Inequality in Urban Areas

The average wage of urban workers in the PRC increased from CNY615 in 1978 to CNY47,593 in 2012 (NBSC 2013). Accompanying this unprecedented growth was a considerable increase in income inequality. Figure 2 depicts the trends of the provincial Gini and Theil indices in urban areas in the past 2 decades. It shows that inequality in urban PRC has an increasing trend over time. The Gini index has the same pattern as that of the Theil index. Thus, it can be concluded that the increasing inequality in urban areas from the early 1990s is a stylized fact in the PRC. The urbanization process plays an important role in enlarging inequality in the PRC. For example, using the sample of the 2005 population census in the PRC, Chen, Liu, and Lu (2014) examined the relationship between income inequality and city size and found that overall income inequality is higher for larger cities. In addition, they identified the potential channels through which city size can affect inequality and found that education, migration, and

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[1] Based on the findings of the 2005 International Comparison Program (ICP).

the degree of ownership restructuring together can explain most of the correlation between city size and inequality. Rising housing prices during the process of urbanization and marketization can also help explain the increasing inequality in urban areas of the PRC. One important issue is asset inequality. For example, urbanization improves the demand for housing. As a result, it improves the asset inequality of urban citizens. Accompanying this process, the privatization of public houses also plays an important role in enlarging asset inequality. Using CHIPS 1995 and 2002 data, Li, Wei, and Ding (2005) mapped the asset inequality of urban households and found that the privatization of public housing in urban PRC enlarged the rural–urban asset inequality, and that the inequality of financial assets will play a more important role in driving the inequality of gross assets in the PRC. Similarly, using a unique set of repeated cross-sectional data, Meng, Shen, and Xue (2013) examined the causes of this increase in urban workers' earnings inequality and found that the major changes occurred in the 1990s when the labor market moved from a centrally planned system to a market-oriented system.

Figure 2: Inequality in Urban PRC, 1991–2010
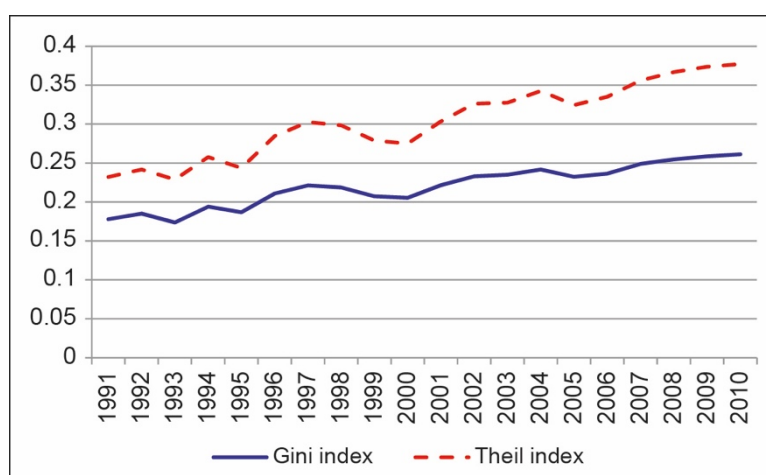
PRC = People's Republic of China.

Sources: Author's calculation using household grouped data from the Statistical Yearbook of the National Bureau of Statistics of China, various issues.

2.4 Spatial Dimensions of Urban Poverty

Given the PRC's territory and population size and very uneven development, poor households are not equally distributed across urban areas. Employing CHIPS 1995 and CHIPS 2002, we have mapped the regional distribution of poverty in the urban PRC, where household welfare is measured by consumption expenditure, and both $1.25 and $2 poverty lines are adopted. Table 3 shows that consumption poverty in urban PRC is mainly concentrated in the central areas, followed by western areas and then eastern areas.

In addition, we employed the PRC General Social Survey (CGSS) 2006 data to further map urban poverty in the PRC. Table 4 presents the results, where we can find that, most of the urban households under $1.25 and $2 poverty lines are distributed in the central and western PRC, and the poverty rate in the eastern PRC is the lowest. So, the regional distribution pattern revealed in Table 4 is nearly the same as that shown in Table 3.

Table 3: Expenditure Cutoffs for Defining Urban Poverty, 1995 and 2002 (%)

	Per capita daily consumption	Subtotal	East	Central	West
1995	$1.25	6.18	1.10	3.71	1.36
	$2.00	25.24	4.54	13.37	7.32
2002	$1.25	3.17	0.51	1.95	0.72
	$2.00	14.07	2.44	7.85	3.79

Source: Calculated from the Chinese Household Income Project Survey (CHIPS) 1995 and 2002 urban samples.

Table 4: Distribution of Income Poverty using CGSS 2006 Data (%)

Per capita daily income	East	Central	West
$1.25	1.02	2.54	1.81
$2.00	3.79	9.24	4.40

CGSS = Chinese General Social Survey.

Source: Calculated from the CGSS 2006 urban sample.

2.5 Impact of Urbanization on Poverty and Inequality

Before examining the effects of the PRC's urbanization on poverty and inequality, we need to resolve the problem of data issues. The NBSC does not report provincial measures of poverty and inequality, such as the Gini or Theil indices. In order to resolve this problem, we first tried to calculate the provincial index of poverty and inequality based on present statistics.[2] These are headcount ratios measured by the $1.25 and $2.00 poverty lines (2005 PPP), the Gini index, and the Theil index. These values were estimated from grouped household income data published by national and provincial bureaus of statistics in the PRC. With these provincial-level data at hand, we can empirically test the relationship between urbanization and poverty and inequality in the PRC.

Figure 3: Urbanization and Rural Poverty
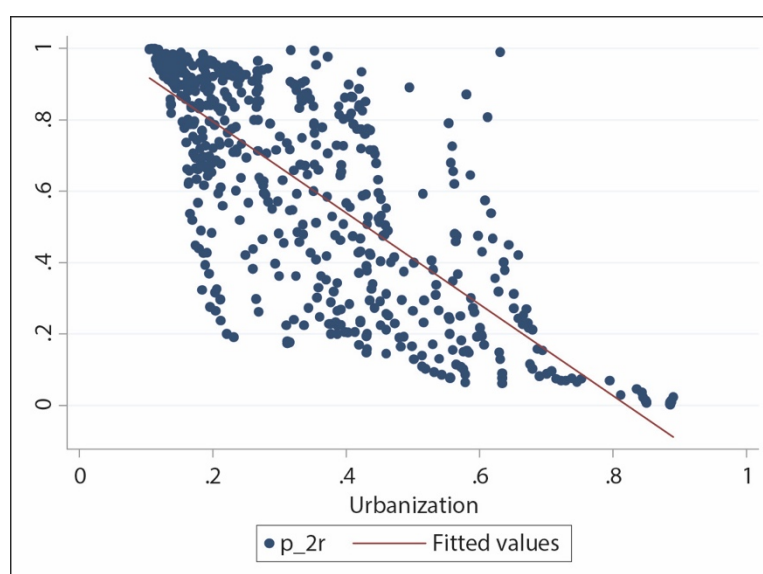
Source: Prepared by the author.

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[2] The method of calculating the provincial poverty and inequality index is introduced in the Appendix.

Figure 3 describes the relationship between urbanization and the headcount ratio in rural PRC measured by the $2 poverty line. From Figure 3, we can see that rural poverty is negatively correlated with urbanization on the provincial level, suggesting that urbanization has an effect of reducing rural poverty.

Figure 4 depicts the relationship between urbanization and the rural–urban gap, showing a negative relationship between them, which suggests that urbanization also has an effect of reducing rural–urban income gaps. This result is consistent with Figure 3, which shows that urbanization can reduce rural poverty.

Figure 4: Urbanization and the Rural–Urban Income Gap
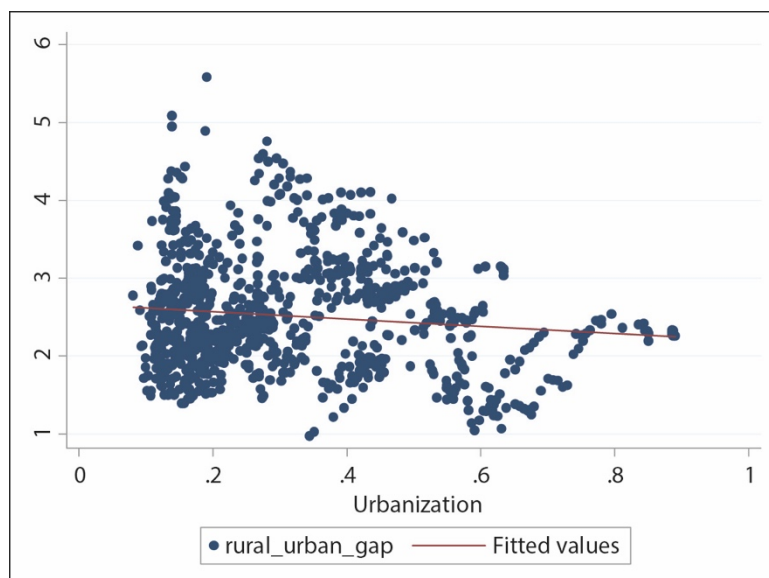
Source: Prepared by the author.

Figures 5 and 6 describe the relationship between urbanization and the Gini index and the Theil index at the provincial level, indicating a similar conclusion as that from Figure 4. These results can be explained by the structural change in urban sectors during the process of urbanization. A large proportion of surplus rural labor migrates to urban PRC and works there with higher wage incomes. As a result, the migrants suffer less poverty than those staying back in their hometowns, and this decreases inequality in the PRC, especially rural–urban inequality.

Figure 7 describes the relationship between urbanization and urban poverty, where again we find a negative relationship between them, indicating that higher urbanization is correlated with lower urban poverty.

However, Figures 3–7 only provide a very preliminary description of the effect of urbanization on poverty and inequality. The negative correlation does not necessarily suggest that urbanization can reduce poverty and inequality in general. In order to get robust conclusions, we ran some regressions to see if these conclusions still hold when some other variables are controlled. All variables in the regressions are defined in Table A2 in the Appendix, and the regression results of the fixed effect and random effect models are presented in Tables A3 and A4, respectively. From these regression results, we can generate the following conclusions: First, urbanization can help reduce rural poverty. Second, urbanization can reduce the rural–urban gap, and the provincial Gini index and Theil index. Third, we find that urbanization increases urban poverty rather than reducing it. This can be explained by two facts. First, the structural changes, especially in the late 1990s, created a lot of jobless growth, while the government's

social protection system lagged behind the transition of the economy. Consequently, the poverty of urban households worsened rather than decreased in some periods. Second, a large number of migrating peasants entered the urban labor market and competed for job opportunities with urban citizens, which decreased the welfare of some urban workers and, as a result, increased urban poverty. Employing the urban sample from the population census of 2005, Liu and Zhao (2009) investigated the effect of rural–urban migration on the employment rate and wages of urban workers and found that, other things being equal, a 10% increase in rural–urban labor migration resulted in a 0.3% decrease in the employment rate for urban workers and a 0.65% decrease in the wages of urban workers.

Figure 5: Urbanization and the Gini Index
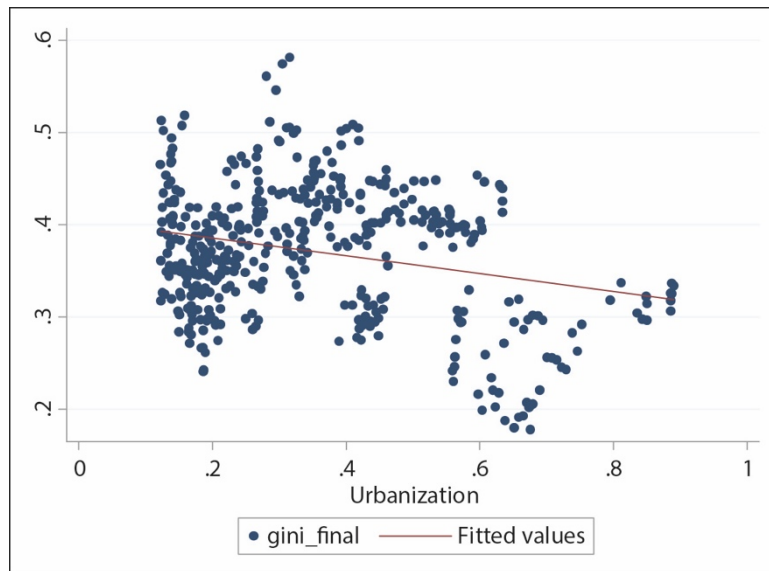
Source: Prepared by the author.

Figure 6: Urbanization and the Theil Index
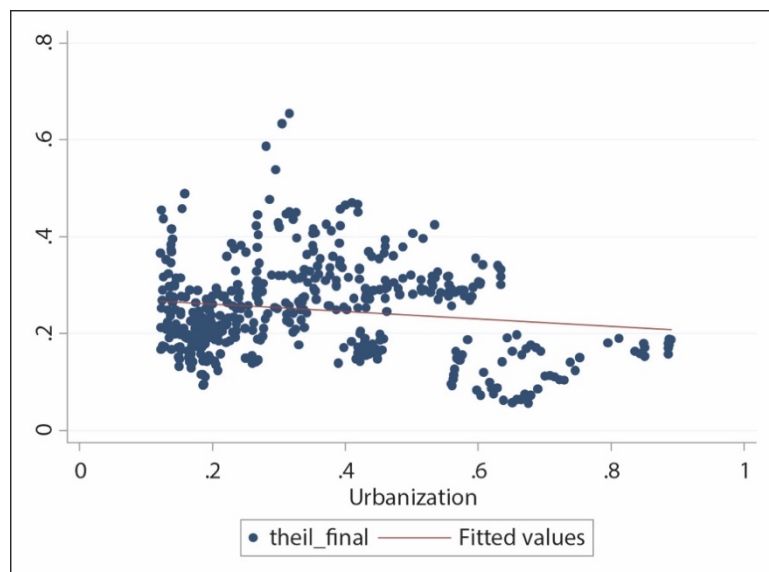
Source: Prepared by the author.

Figure 7: Urbanization and Urban Poverty
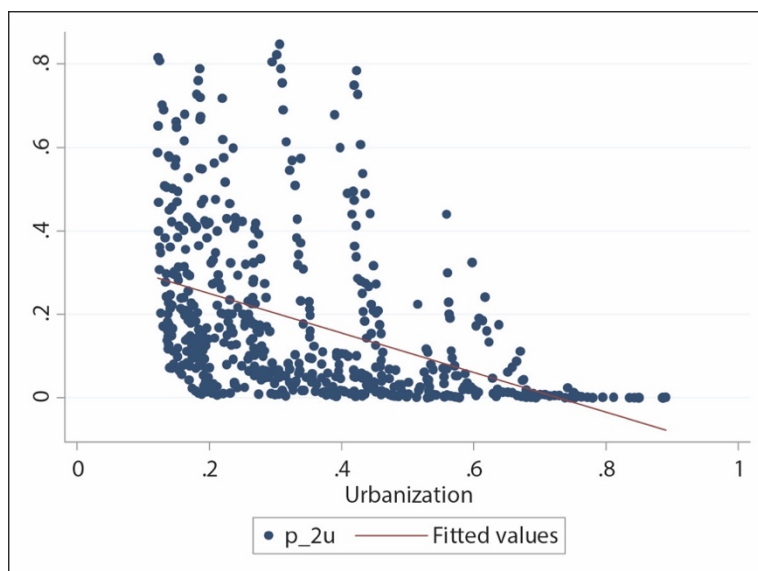
Source: Prepared by the author.

2.6 Segregation Issues in Terms of the Location of Poor Households within Cities

Ghetto housing in urban areas is believed to be harmful in reducing poverty and inequality, and is an obstacle to the building of a harmonious society; residential segregation is highly correlated with ghetto housing in developed and developing economies (Collins and Margo 2000; Wilson 1987; Haynie 2002; Haynie and Osgood 2005; Warr 2002). With rapid urbanization in the PRC, residential segregation has become a serious issue. Only micro data with residential locations can be used to measure residential segregation. Unfortunately, we do not have such data. So, we next provide only some evidence of spatial clustering that reflects the residential segregation problem in urban PRC. Using the CHIPS 2002 data, Table 7 presents the residential distribution of poor households in urban PRC. Three conclusions can be generalized from this table. First, moving from the center of the city to the suburbs, the headcount ratio shows an increasing trend, with a few exceptions. Second, this pattern does not change whether poverty is measured by the $1.25 poverty line or the $2.00 poverty line. Third, the distribution pattern also does not change if poverty is measured by daily consumption, rather than daily income, although the absolute level of the headcount ratio is much higher when consumption is employed to measure poverty. The pattern indicated in Table 7 suggests that there is very clear residential clustering in urban PRC.

Table 7: Residential Clustering of Poor Urban Households

	Income Poverty (%)		Consumption Poverty (%)	
	Pov_$1.25	Pov_$2	Pov_$1.25	Pov_$2
Center of the city	1.34	5.74	3.32	15.03
In city	1.24	6.80	3.75	16.69
In near suburbs	2.07	7.40	4.73	16.72
In outer suburbs	0.78	6.98	16.28	28.68

Source: Calculated by the author using the sample of urban households from the Chinese Household Income Project Survey 2002.

During the urbanization process in the PRC, a huge number of peasants migrated to urban labor markets, but they could not join the social protection system meant for urban citizens. So, in urban PRC, residential clustering and segregation not only exists between urban citizens but also between urban citizens and migrating peasants. Using a 2006–2007 urban household survey in Shanghai and Shenzhen, Chen, Lu, and Chen (2013) found evidence that residential segregation between migrating peasants and urban households already exists in these two cities, where migrating peasants have worse living conditions, a lower evaluation of their residential quarters, and lower trust in their neighborhoods. Similarly, using the samples in Shanghai from the 2010 population census in the PRC, Chen and Hao (2014) found that more migrating peasants live outside the downtown area. They further examined the level of residential segregation in 2010 in Shanghai and found that residential segregation between locals and migrating peasants is already serious in Shanghai and has accelerated in recent years.

3. URBAN LABOR MARKET AND POVERTY

3.1 Urban Informal Sector Employment and Poverty

According to Harris and Todaro (1970), the urban labor market in developing economies is generally segmented into an informal market and a formal market. Specifically, the formal labor market provides high wage jobs with better working conditions, and workers have more opportunities to be promoted. On the contrary, the informal labor market only provides low wage jobs with worse working conditions, and workers have very few opportunities to be promoted. So, having opportunities to be employed by the formal labor market is very crucial for workers' wages and related welfare and, as a result, it is an important determinant of urban poverty. Most economists agree that the urban labor market in the PRC is a segmented one (Cai 2000; Wang and Zuo 1999; Yang and Chen 2000; Yan 2006).

In order to investigate the role of the informal sector in urban poverty, we first need a classification of the formal and informal sectors. In the present literature, Yan (2006) classifies most of the public sector and state-owned enterprises (SOEs) as the formal sector, and small and medium-sized enterprises as the informal sector. Following this definition, and taking into account the available information in CHIPS 2002, we classify the following units as comprising the formal sector: first, workers in the party and government bodies; second, workers in government or collective institutions; third, workers in solely SOEs; fourth, workers in state-controlled enterprises; and fifth, workers in any other unit with more than 100 employees. Workers who do not belong to any one of these five categories are in the informal sector. Using this definition and the urban household samples from CHIPS 2002,[3] we find that the number of household members being employed in the informal sector is positively correlated with income and consumption poverty, and the ratio of household members in the informal sector is also positively correlated with poverty. We can thus conclude that more household members being employed in the informal sector significantly improves the probability of falling into poverty for an urban household.

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[3] The headcount ratio in 2007 was low, so we only employ CHIPS 2002 rather than CHIPS 2007 to examine the role of the informal sector in poverty and poverty reduction in urban areas of the PRC.

In order to get more robust results, we employed probit models to investigate if being employed by the informal sector increases the probability of falling into poverty for an urban household. In the regression models, the dependent variable is whether an urban household is poor, measured by per capita income or consumption level, using the $1.25 and $2.00 poverty lines. We measured the effect of employment by the informal sector by two variables. The first one is *no_informal*, indicating the gross number of household members working in the informal sector and the second one is *ratio_informal*, indicating the share of household members employed in the informal sector. The variables *age*, *age_square*, *male*, *edu_year*, *partymembe*r, and *minority* indicate characteristics of the household head—age, squared term of age, gender, years of schooling, whether a member of the Communist Party (CCP), and whether a minority, respectively. The variable *depend_ratio* measures the dependent ratio of a household. *east* and *central* are regional dummies representing eastern and central PRC.

Table A5 in the appendix presents the regression results of the probit models. The following conclusions can be deduced: First, *no_informal* and *ratio_informal* are significant in all models, suggesting that more household members being employed in the informal sector significantly improves the probability of falling into poverty for an urban household. Second, most of characteristics of the household head are significant. Age of household head in the equation of $2 poverty has a reversed U-shape relationship with the probability of falling into poverty. Schooling years has a significant effect on reducing poverty. Being a party member of the CCP can also reduce poverty. A higher dependent ratio results in more poverty. These results all coincide with those from the present literature.

3.2 Rural to Urban Migration and Urban Poverty

In 2012, there were 260 million migrating peasants working in urban labor markets (NBSC 2013). The present literature on rural poverty generally finds that migrating into urban labor markets can help rural households escape from poverty. On the one hand, the empirical test in section 2.1 indicates that being employed by the informal sector improves the probability of falling into poverty for urban households. On the other hand, the present literature does not provide evidence that migrating into urban areas can help migrating peasants escape from poverty. We next employed household samples in CHIPS 2007 to investigate the determinants of poverty of migrating peasants.

Migrating peasants cannot join the urban social protection system and have no equal access to public goods in the urban PRC. In most cases, parents and children of migrating peasants do not migrate together with them to urban areas. When measuring their poverty, we do not use per capita income, but use individual income to quantify migrating peasants' welfare level—that is, here we measure individual poverty rather than household poverty.

In the questionnaire of CHIPS 2007 for migrating peasants, there is an interesting question: if a migrating peasant did not leave his or her hometown, how much does he or she earn in a month? This information can be used to measure their poverty at home and compare it with their monthly income after migrating to urban areas. This way, we can gauge the effect of migration on poverty reduction and understand the relationship between rural–urban migration and urban poverty. Table 8 presents the headcount ratio of migrating households. Using monthly wage after migrating into urban areas to measure poverty, and adopting the $1.25 poverty line, we found that only 0.081% of migrants fall into poverty, and adopting the $2 poverty line, only 0.42% of migrants are

poor, which indicates that most migrant workers are not poor at all. However, if we use monthly wage at home to measure poverty, the headcount ratio will increase very sharply to more than 8% or about 14%, respectively. This comparison suggests that rural–urban migration can help migrating peasants escape poverty.

Table 8: Headcount Ratio of Migrating Peasants, 2007

	$1.25 (%)	$2.00 (%)
Monthly wage at home	8.04	13.85
Monthly wage after migrating into urban areas	0.081	0.42

Source: Calculated from migrant samples in the Chinese Household Income Project Survey 2007.

According to Harris and Todaro (1970), the informal labor market in developing economies is very crucial for migrating peasants as it provides them some jobs in the early stage, although the wages are not very high and social protection is not very good. The present literature finds that most migrating workers are employed in the informal sector (Wang and Zuo 1999; Yang and Chen 2000; Yan 2006; Meng and Zhang 2001). During urbanization, the informal sector plays an important role in providing jobs for migrating peasants. Table 9 presents a statistical description of the migrating peasants in the formal and informal sectors.[4]

Table 9: Characteristics of Migrating Peasants in the Informal and Formal Sectors

	Informal Sector	Formal Sector
No. of observations	3,639	2,506
Age	31.06	30.53
female	42.07%	35.43%
Health_soso	44.71%	43.38%
Health_bad	15.11%	11.89%
Health_verybad	1.70%	0.92%
Edu_year	8.24	8.84
Experience	3.88	3.37
Work_hour	65.58	55.61
Month_wage	1,655.26	1,485.02
Home_wage	690.72	724.45
Hourwage	6.18	6.65

Source: Calculated from migrant samples in the Chinese Household Income Project Survey 2007.

Table 9 indicates that more than half of migrating peasants are in the informal sector. This suggests that although wages are lower in the informal sector, they can provide jobs to migrating peasants with very low education or bad health conditions and provide more job opportunities for male peasants. The existence of the informal sector, therefore, is very crucial for migrating peasants, although it has a significant effect on increasing the probability of falling into poverty for urban citizens.

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[4] The questionnaire for migrating peasants and urban citizens are different, so the definition of a formal sector for migrating peasants is slightly different from that for urban citizens in that for migrating peasants, if the gross number of employees of a company or organization is higher than 50, it is regarded as a formal sector, while for urban citizens, if the gross number of employees of a company or organization is higher than 100, it is regarded as a formal sector.

4. MULTIFACETED NATURE OF POVERTY AND URBANIZATION

4.1 Consumption Poverty

Households having a daily income higher than $2 may consume less than $2 a day because of illness, lack of social protection, debt crisis, or other negative shocks. In this case, their welfare level is still under the poverty line. Thus, income poverty may conceal or underestimate the true situation. Employing the CHIPS 2002–2007, Table 10 presents the headcount ratios measured by daily income and daily consumption, where $1.25 and $2.00 poverty lines are adopted. We can see that headcount ratios measured by consumption level are much higher than those measured by income level. This pattern applies to both rural and urban areas in the PRC.

Table 10: Consumption vs. Income Poverty

			CHIPS 2002 (%)	CHIPS 2007 (%)
Income	$1.25	Urban	1.87	0.14
		Rural	21.71	2.81
	$2.00	Urban	5.39	1.02
		Rural	26.33	8.25
Consumption	$1.25	Urban	2.91	3.30
		Rural	58.82	11.30
	$2.00	Urban	12.99	9.52
		Rural	81.79	34.37

Source: Calculated from the rural and urban samples in the Chinese Household Income Project Survey 2002 and 2007.

In the present urban PRC, consumption poverty is more serious in the case of migrating peasants because, while they work in urban areas, they cannot join the social protection system for urban citizens. As a result, they may have a daily income higher than $2, but have daily consumption levels under $2. Using the migrating peasants sample in CHIPS 2007, Table 10 presents their income structure and consumption structure.

Table 11 shows that in 2007, the household average net income for migrating peasants was CNY26,270, where CNY17,397 came from wage income, accounting for nearly 70% of the total net income. In the total net income, CNY15,987 was consumed, where consumption on food, clothes, and residence comprised the main component of total consumption expenditure, and the share of expenditures on durable goods, medicine and medical services was relatively low.

According to Table 11, we can calculate the gross savings rate of migrating peasants at 39.14%. Table 12 presents the gross savings rate of urban households and rural households. This comparison shows that the gross savings rate of migrant peasants is the highest. Although the gross savings rate of urban households is higher than that of rural households, it is still much lower than that of migrating peasants.

**Table 11: Net Income, Consumption, and Their Composition
for Migrating Peasants**
(CNY)

Net income	**26,270.28**
Wage income	17,397.12
Net income from household business	8,407.2
Property income	279.84
Transfer income	186.12
Consumption expenditure	**15,987.07**
Food	6,262.44
Clothes	1,739.88
Living expenditure	3,153.84
Durable goods	820.44
Consumer goods and service	702.19
Medicine and health care	699.55
Traffic expenditure	667.60
Communications expenditure	890.97
Entertainment and cultural expenditure	245.89
Education expenditure	557.27
Insurance expenditure	79.90
Other consumption expenditure	167.10
Remittance back to hometown	2,458.68
Deposit	1,118.74

Note: All expenditures were calculated from monthly into annual values. There are 5,000 urban household samples in the Chinese Household Income Project Survey 2007.
Source: Prepared by the author.

**Table 12: Savings Rate of Migrating Peasants, Urban Residents,
and Rural Residents, 2007**

	Migrating Peasants (%)	Urban Residents (%)	Rural Residents (%)
Gross savings rate	39.14%	27.48%	22.14%

Note: Gross savings rates of urban residents and rural residents have been calculated by the statistics from the China Statistical Yearbook (2008).

Contrary to a high savings rate, migrating peasants have very low expenditure on durable goods. Table 13 presents the ownership of durable goods for migrating peasants, urban households, and rural households in 2007. From Table 13, we can see that the ownership of televisions, washing machines, motorcycles, and refrigerators for migrating peasants is much lower than that for rural households and urban households. There are some exceptions in that migrating peasants have greater ownership of cameras, personal computers, air conditioners, and mobile phones than rural households, which can be explained by the fact that the former use these durable goods more often in urban areas than their counterparts in rural areas.

Table 13: Number of Durable Goods per 100 Households

	Migrating Peasants	Urban Residents	Rural Residents
Televisions	58.89	137.8	106.5
Motorcycles	6.85	24.8	48.5
Washing machines	18.83	96.8	45.9
Refrigerators	17.80	95.0	26.1
Cameras	7.01	45.1	4.3
Personal computers	9.66	53.8	3.7
Air conditioners	15.21	95.1	8.5
Cell phones	118.44	165.2	77.8
Audio	10.85	30.2	–
Cars	1.38	6.1	–
Water heaters	11.65	79.5	–

Source: China Statistical Yearbook (2008).

In the present literature, Chen, Lu, and Zhong (2014) proposed three channels through which the *Hukou* system (household registration system) constraints cause lower levels of consumption among migrating peasants in comparison with urban residents: precautionary saving motivation, lower permanent income, and lower incentive to consume durable goods. Employing CHIPS 2007 data, they provided empirical evidence indicating that these hypotheses cannot be rejected. Table 13 suggests that migrating peasants spend much less on durable goods than urban households and much less than rural households. This result can help explain the high and increasing savings rate in the PRC in the past decades.

4.2 Other Dimensions of Poverty

For Sen (1981), poverty is not low well-being, but the inability to pursue well-being because of the lack of economic means. Similarly, Blackwood and Lynch (1994) assert that poverty does not end abruptly once an additional dollar of income raises a family's (or individual's) income beyond a discretely defined poverty line. It is more accurate to conceive of poverty as a continuous function of varying gradation. As a multdimensional index, poverty can also be reflected by illness, illiteracy, or having no access to clean water or sanitation.

Li and Knight (2002) examined the nature of poverty in the urban areas of the PRC. By combining income and consumption criteria, they distinguished between three types of poverty—chronic, transient, and voluntary.[5] Chronic poverty refers to income levels and consumption levels being lower than the poverty line, transient poverty refers to income levels being lower than the poverty line and consumption levels being higher than the poverty line, and voluntary poverty refers to income levels being higher than the poverty line and consumption levels being lower than the poverty line. Employing 1999 cross-section household survey data covering six provinces of the PRC, Li and Knight (2002) found that a large proportion of the poor are in voluntary poverty.

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[5] Using panel data, another study also proposed similar terms with different means to describe the welfare of poor households. For example, a household being poor in most of the observation periods is persistently poor, while a household falling into poverty in a few of the observation periods is transiently poor.

Another dimension of poverty that needs to be addressed during urbanization of the PRC is housing poverty. For example, until 1978, the average living space per person in urban areas of the PRC was only 3.6 square meters (m^2) (in terms of housing construction space, 6.7 m^2), and 47.5% of urban households had living space less than 2 m^2 per person (Hou, Ying, and Zhang 1999). Over the last 2 decades, the PRC has experienced a drastic transformation of the housing system as well as rapid urbanization. A huge number of houses have been built during this period, accompanied by a rapid increase in housing prices, making home purchases increasingly unaffordable for low-income households and particularly for young workers (Chen, Hao, and Stephens 2010). Meanwhile, most migrating peasants are excluded from the formal housing market, and they are concentrated in so-called "urban villages" (Zheng et al. 2009). According to an official report, in 2011, the private rental market accommodated only 37% of migrating peasants, while the rest mainly lived in overcrowded dorms or shanty sheds at their workplaces (PFPC 2012). Using survey data covering 13 cities in six provincial-level administrative units in 1999, Sato (2006) provided evidence that a new type of housing poverty has been emerging among migrating peasants in the late 1990s. It is not easy to set a relevant measurement of housing poverty applicable to the urban areas of the PRC. If the proportion of rent actually paid in total household expenditure is used as a simple measurement of housing poverty, and the poverty line is set at the 30% level, Sato (2006) found that 28% of migrating peasants in Beijing are below the poverty line. No urban household in Beijing, by contrast, is under this poverty line. When the same housing poverty line is employed for 13 cities, 21% of the migrating peasants are in housing poverty, whereas no urban household living in rented housing is below the poverty line. Zhang and Chen (2014) provide further evidence from present-day Shanghai. Using a pool of household-level micro data from three waves of national population census (2000, 2005, and 2010), they traced the evolution of housing overcrowding conditions in Shanghai and found that the overall incidence of overcrowding in Shanghai did not improve from 2000 to 2010. They also found that migrating peasants are more likely to be subject to the risks of overcrowding than urban citizens.

5. ANTI-POVERTY (INEQUALITY) POLICIES (SHORT-RUN AND LONG-RUN POLICIES) IN THE CONTEXT OF URBANIZATION

5.1 Employment-Related Programs

Reforms in the urban sector, which started in the 1990s, brought not only many benefits to urban citizens but also some challenges. For example, economic reforms in 1995–1999 created 24 million laid-off workers, and registered unemployment jumped from 3.8 million in 1990 to 5.8 million in 1999, a more than 50% growth in 9 years (NBSC 2000). Being laid-off or unemployed is a negative shock, which brings uncertainty of the job and wages for a household, and, as a result, may increase poverty. Employing a cross-section household survey covering six provinces of the PRC in 1999, Appleton, Song, and Xia (2005) found that even after being re-employed, wages of the unemployed or laid-off workers still decreased significantly. Table 14 shows that the average annual wage of the laid-off workers is only about 27.6% of that of employed workers, and even slightly lower than that of unemployed. The laid-off workers are older than employed and unemployed workers and have fewer schooling years than employed workers. Adopting the $1.25 and $2.00 poverty lines, the headcount ratio of laid-off workers is surprisingly higher than that of employed workers.

Table 14: Headcount Ratio of Employed, Unemployed, and Laid-Off Workers

	Annual Income	Age	Years of Schooling	Poverty_$1.25 (%)	Poverty_$2 (%)
Working or employed	12,108.10	40.48	11.41	1.49	3.57
Laid-off (*xia gang*)	3,346.19	41.45	9.71	33.61	47.34
Unemployed (*shi ye*)	3,700.40	38.67	9.88	34.16	44.27

Source: Urban household sample from the Chinese Household Income Project Survey 2002.

In order to relieve the unrest caused by huge lay-offs, the central and local governments established the so-called "Service Center of Re-employment" (SCR) to provide help to the laid-off workers. There are some basic differences between laid-off workers and unemployed workers. First, unemployed workers terminate their employment relationship or terminate their contracts with employers, while laid-off works still have an employment relationship with their employers. Second, laid-off workers can still get a subsidy from their employers or from the SCR, and the SCR pays some insurance to them. Third, the SCR can provide job opportunities to the laid-off workers. For example, the SCR can allocate jobs created by local governments to laid-off workers by discriminating against migrating peasants. Some statistics reveal that not all laid-off workers can get subsidy from the SCR. For example, according to official statistics, in 1999, about 40% of laid-off workers did not get any subsidy or a lower subsidy than the amount specified by the central government (NBSC 2000). This suggests that the effect of subsidies for laid-off workers on reducing urban poverty is not very positive.

5.2 Minimum Wage and Poverty Reduction

A minimum wage is a very common policy adopted by developed economies to protect the welfare of low-wage workers and also is used by policymakers to reduce poverty. It is thought to be effective at reducing poverty as it can guarantee the wages of employed workers. However, if the minimum wage is higher than the market-clearing level, dis-employment will be boosted in the labor market. Thus, the net effect of a minimum wage on poverty reduction is not straightforward. Addison and Blackburn (1999) adopted an approach that links increases in both federal and state minimum wages to contemporaneous changes in poverty rates in the United States, and found that in the period 1983–1996, the minimum wage had a poverty-reducing effect among teenagers and older junior high school dropouts. However, using data drawn from the March current population survey, Sabia and Burkhauser (2010) found that state and federal minimum wage increases between 2003 and 2007 had no effect on state poverty rates, which suggests that raising the federal minimum wage continues to be an inadequate way to help the working poor. Similarly, using 2004 survey data from Ontario, Canada, Mascella, Teja, and Thompson (2009) found that, first, over 80% of low wage earners are not members of poor households and, second, over 75% of poor households do not have a member who is a low wage earner. They also presented simulation results that suggested that even without any negative employment effects, planned increases in Ontario's minimum wage will lead to virtually no reduction in the level of poverty.

The PRC government issued the "Regulation of Minimum Wages" on 30 December 2003, and put it into force from 1 March 2004. However, there is very little literature that investigates the role of the minimum wage in the PRC's urban labor market. Using the 1998–2007 industrial enterprises panel data, Ma, Zhang, and Zhu (2012) found that a 10% increase in minimum wages significantly decreased the number of workers by

0.6%. To fill this gap in the literature, this subsection makes use of provincial panel data to investigate the effect of the minimum wage on urban poverty.

We first plot the minimum wage and poverty ratio at the provincial level in Figure 8, where we find that there is a clear negative relationship between them, which suggests that the minimum wage has an effect of reducing urban poverty and this conclusion still holds when poverty is measured by different poverty lines.

Figure 8: Relationship between Minimum Wage and Urban Poverty
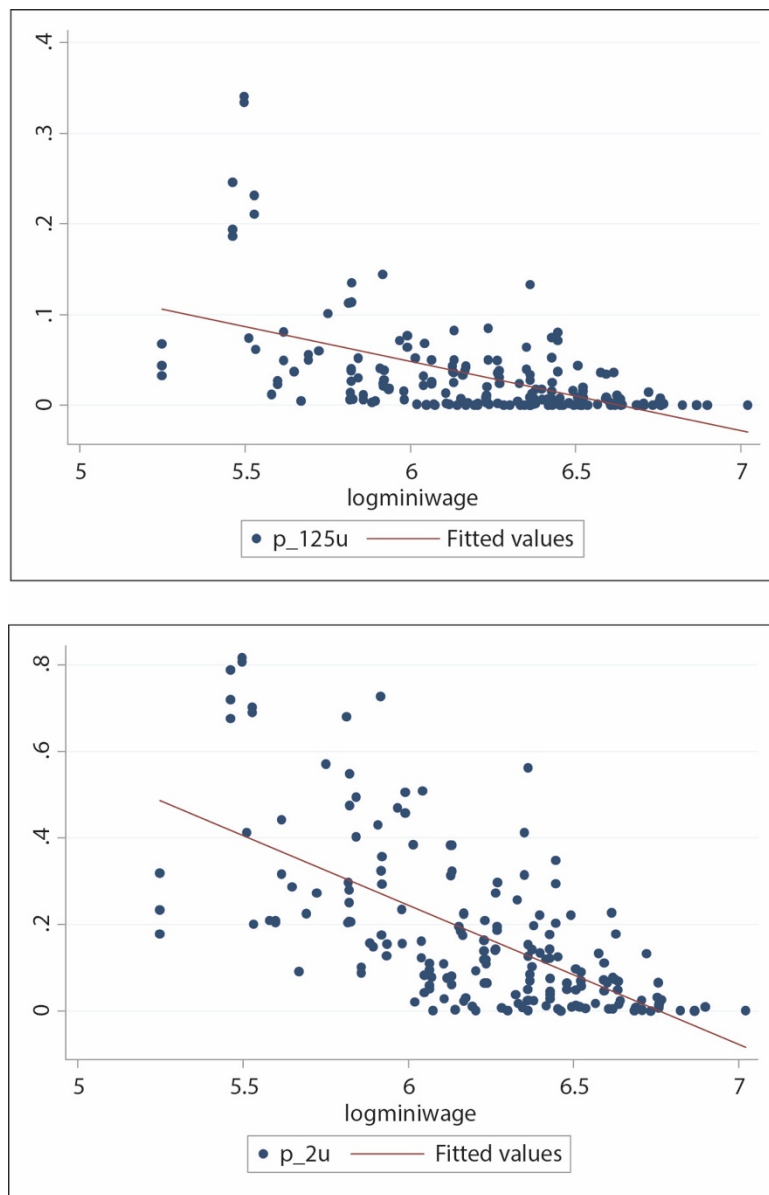
Source: Prepared by the author.

In the Appendix, Table A6 presents the regression results, where the dependent variable is urban poverty rate at the provincial level and the key independent variable is *logmini_wage* indicating the provincial level of minimum wage, which is collected from the websites of provincial governments. The other 10 independent variables are controlled in the regression models, where *urbanization* measures the share of urban population; *logavegdp* measures the per capita GDP in logarithm; *gdp1_ratio* and

gdp2_ratio measure the share of primary GDP and industrial GDP in total GDP respectively; *fdi_gdp*, *export_gdp*, and *import_gdp* measure the ratio of foreign direct investment, export and import to total GDP respectively; and *east*, *central*, and *timetrend* are regional dummies and time trend respectively. From the regression results, we can see that minimum wage is significantly negative in all the models, suggesting that increasing minimum wage has a significant effect on reducing urban poverty. This conclusion still holds even we further control the disposable income of urban citizens and some other variables.

5.3 Social Security

From the 1990s, the economic restructuring and reform of SOEs in the urban areas of the PRC has led to widespread lay-offs, unemployment, and income insecurity. As a result, urban poverty increased in the 1990s. Using a large repeated cross-section household survey from 1986 to 2000, Meng, Gregory, and Wang (2005) mapped the changes in income, inequality, and poverty over the 15-year period and investigated the determinants of poverty in urban areas, and found that the reduction in social welfare provision, deregulation of grain prices, and increases in income uncertainty in the 1990s increased urban poverty. In order to guarantee the basic needs of urban citizens, the central and local governments set up the system of social assistance, Minimum Living Guarantee (Di Bao), in 1999 and brought all urban citizens into this system in 2003. Due to the lack of data, very few studies provide evidence on what effect Di Bao has had on reducing urban poverty. Using a survey covering large parts of the urban areas in 2002, Gustafsson and Deng (2007) investigated the factors affecting receipt and how receipt affects urban poverty. Results from estimating probability models indicate that Di Bao receipt is strongly linked to joblessness among household members. However, they also found that the Di Bao payments are small and many of the urban poor are not receivers, and, as a result, much urban poverty still remains. This indicates that the effect of Di Bao on reducing urban poverty is limited.

In the urban PRC, another tool in the social security system is the unemployment subsidy or unemployment insurance. Unfortunately, its effect on urban poverty is weak. Official statistics suggest that in 1999, only 47% of the registered unemployed received an unemployment subsidy, and the level of subsidy was only CNY1,174, which is about 12% of an urban citizen's average wage income (NBSC 2000). Similarly, Li and Knight (2002) found that the employers of many of the unemployed did not pay unemployment insurance to them because of the financial squeeze during the 1990s and, as a result, the unemployed had no source of income during unemployment. Taken together, very little literature provides evidence that the effect of the social security system on anti-poverty in urban areas of the PRC is inspiring.

5.4 Asset Formation and Empowerment of the Poor

As a productive factor, assets play an important role in determining the daily life of households. On the one hand, they can generate asset income that is usually an important income source for rich households. On the other hand, it can be sold out to hedge against negative shocks, such as illness or unemployment. Moser (1998) illustrates that the urban poor are managers of complex asset portfolios, and asset management affects both household poverty and vulnerability to poverty. In economics and sociology, there are four kinds of productive capital: human capital, political capital, social capital, and financial capital or financial asset. Economists and sociologists already provide ample evidence indicating the roles of these kinds of capital in the daily life of poor and non-poor households. In the context of the PRC economy, financial

assets include houses, bonds, deposits, securities, and other valuable assets. The education level of workers or the household head is generally used as a proxy of human capital. Being a member of the CCP or a cadre is generally used as a proxy of political capital. The number of relatives and/or friends is often used to measure social capital.

In order to provide more direct evidence that asset formation is crucial for poor households in urban areas of the PRC, we further employed CHIPS 2002 data to investigate the role of financial assets in determining urban poverty. Figure 9 presents the relationship between the stock of financial assets and urban poverty, which is measured by the $2 poverty line in terms of income or consumption. From Figure 9, we can see a negative correlation between financial assets and the probability of falling into poverty, indicating that having more financial assets results in lower poverty.

Figure 9: Effect of Financial Assets on Urban Poverty
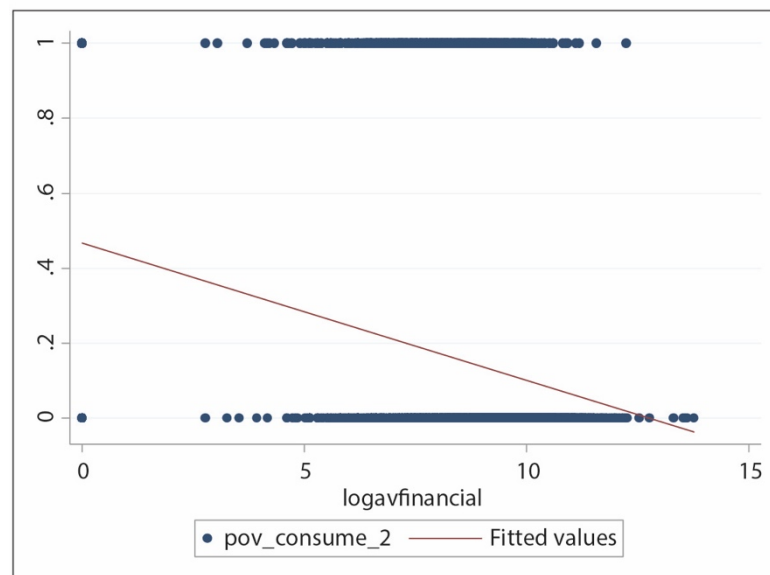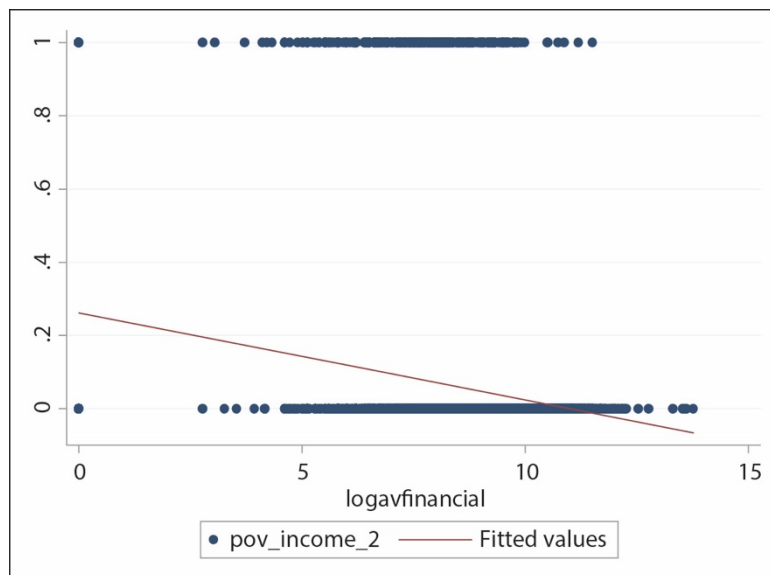
Source: Prepared by the author.

Table A7 in the Appendix presents the regression results of probit models, where the dependent variable is a dummy of whether a household's average income or consumption expenditure is lower than the poverty line. The key independent variable is *log (financial_K)* which measures the stock of financial assets of an urban household. The other independent variables are the same as those in Table A5 in the Appendix. From the regression results, we find that the financial asset is significantly negative in all models, suggesting that having more financial assets would decrease the probability of falling into poverty. Similarly, *edu_year* and *party_member* indexing human capital and political capital are significantly negative in all regression models, indicating that human capital and political capital can play an important role in reducing urban poverty in the PRC.

6. CONCLUSION AND POLICY IMPLICATIONS

In the past 3 decades, the economy of the PRC has witnessed radical structural changes, including urbanization, industrialization, and opening up, which created a miracle of economic growth. Until 2012, there were 260 million migrating peasants working in urban labor markets, which is one of the most important determinants of urbanization and economic development in the PRC. However, inequality also increased sharply during this process and urban poverty increased in the late 1990s, although rural poverty has shown an absolute decreasing trend since the early 1980s. Therefore, understanding the role of urbanization in enlarging inequality, in reducing rural poverty, and in increasing urban poverty in the late 1990s is an important mission of development economists. Relying on the present literature, official statistics, and household survey data in the PRC, this paper has summarized research findings on the relationship between urbanization, interregional and urban–rural inequality, and poverty, and provided further empirical evidence on the role of urbanization and government policies in urban poverty. Several important conclusions can be drawn from our discussion in this paper.

On the one hand, urbanization has a significant effect on reducing both the poverty of rural residents and the poverty of migrating peasants, and, consequently, has a positive effect on narrowing the rural–urban income/consumption gap. Urban labor markets play an important role in this effect. The development strategy of giving priority to heavy industries and urban-biased policies adopted by the government in the early stages created a huge welfare gap between rural and urban citizens. After the opening up and economic reforms in 1978, the development of urban sectors gradually created a demand for rural labor and, as a result, more rural surplus labor migrated to urban labor markets. Although rural migrants have very low skills and human capital, they can still find jobs in labor-intensive sectors or the informal sector, where they can earn much higher wages than in rural sectors. We also find that even being employed in the informal sector, migrating peasants can still earn much higher wages than staying in their hometowns. Many empirical tests also show that with more surplus labor migrating into more productive sectors in urban areas, the left-behind peasants can get more production resources, such as cultivated land and physical capital. As a result, those peasants remaining in the rural sectors can also make more money than before. As a result of these channels, the rural–urban income or consumption gaps and provincial inequality measured by the Gini index have begun showing a slight declining trend in the past decade.

On the other hand, this paper finds that urbanization is positively correlated with urban poverty. This can be explained by the competition between migrating peasants and urban workers in the labor market, and the failure of the government's anti-poverty policies in urban areas. Employing the urban sample from the population census of 2005, Liu and Zhao (2009) found that, other things being equal, a 10% increase in rural–urban labor migration results in a 0.3% decrease in the employment rate of urban workers and a 0.65% decrease in the wages of urban workers. In this paper, we also find that the existence of an informal sector has a negative effect on the poverty of urban citizens. Being employed by the informal sector significantly increases the probability of falling into poverty for urban citizens. This result seems to be contrary to the effect of being employed by the informal sector on migrants' poverty reduction. Here, should we keep in mind that although most migrating peasants are not in income poverty, but a large share of them are in consumption poverty, suggesting that they restrain their consumption when working in the urban PRC. Even though the development of the urban labor market has a negative effect on urban poverty reduction, we find that its effect is actually small. We believe that if the local or central government proposes suitable or efficient policies, there could be no negative effect. Unfortunately, we only find that the minimum wage has a positive effect on reducing urban poverty, while the effect of other policies, such as Di Bao and Minimum Living Standard, is limited.

Although the empirical evidence provided in this paper does not show a generally positive effect of urbanization on reducing both rural poverty and urban poverty, and inequality in the PRC, we cannot take for granted that urbanization and urban concentration are harmful to economic development. Rural–urban labor migration and urbanization have important effects not only on reducing rural poverty and rural–urban gaps, but also on providing low-cost labor to urban sectors and providing services to urban citizens. Migrants contribute substantially to taxes to urban governments, but share very few public goods in urban areas, so the urban local governments should take the welfare of migrants into account when making policies. If urban governments propose employment policies to protect the employment of urban workers, this will make unemployed migrants more vulnerable than their urban counterparts and may result in a higher crime rate. If urban governments do not pay attention to the residential segregation of migrants, there is a danger of fomenting criminal activities, which will pose a great challenge to city management. Therefore, a more inclusive policy package that is not discriminatory towards migrants during the urbanization process could be a win-win strategy.

These conclusions help us understand the role of urbanization, labor markets, and government policies in urban poverty, inequality, and rural poverty in the most populous economy in the world, and shed light on the policymaking in the PRC and in other developing economies to help find a way for a more balanced and harmonious model of economic growth.

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APPENDIX

Following the methodology described in the box, the headcount ratio, the Gini index, and the Theil index used in this paper were deduced from the two grouped household data from the provincial statistical yearbooks. The first set of data is on the share of households within different income intervals, and the second one is on the household size under different income intervals.[1]

On Shorrocks and Wan's (2008) "Ungrouping Income Distributions"

Assume a Lorenz curve with $(m + 1)$ coordinates (p_k^*, L_k^*), where p_k^* and L_k^* $(k = 1, 2, \ldots, m)$ refer respectively to the cumulative shares in the total population and in total income of income classes 1 to k. And $p_0^* = L_0^* = 0$. Once all observations are normalized by the overall mean of the distribution, the actual mean μ_k^* of class k becomes:

$$\mu_k^* = \frac{L_k^* - L_{k-1}^*}{p_k^* - p_{k-1}^*} \qquad k = 1 \text{ to } m \tag{1}$$

The goal is to obtain a synthetic sample of n equally weighted observations whose overall mean is 1. These n observations are partitioned into m non-overlapping and ordered groups, each having $m_k = n(p_k^* - p_{k-1}^*)$ observations. Call x_{ki} the ith observation in class k, the mean of this class based on the synthetic data is μ_k.

The algorithm proposed by Shorrocks and Wan (2008) includes two stages. The first step is to generate an initial sample with a unitary mean based on a parametric model fitted to the grouped data. See Ryu and Slottje (1999) for a survey of various parametrizations of the Lorenz curve. In the second stage, the algorithm adjusts the initial synthetic observations to ensure $\mu_k^* = \mu_k$.

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[1] Shorrocks and Wan (2008) chose to generate the initial sample on the basis of a lognormal distribution. For more details, see Shorrocks and Wan (2008).

Table A1: Inequality Measures in Urban PRC

	Gini index	Theil index	Observation
1981	0.3143	0.1709	6
1982	0.2978	0.1571	8
1983	0.2988	0.1543	7
1984	0.3087	0.1643	7
1985	0.2944	0.1560	7
1986	0.2864	0.1525	5
1987	0.3053	0.1703	6
1988	0.2856	0.1490	5
1989	0.2626	0.1288	4
1990	0.2313	0.1089	5
1991	0.1779	0.0542	5
1992	0.1850	0.0567	6
1993	0.1736	0.0553	8
1994	0.1939	0.0638	8
1995	0.1868	0.0569	8
1996	0.2108	0.0739	11
1997	0.2212	0.0814	9
1998	0.2186	0.0799	11
1999	0.2073	0.0714	15
2000	0.2053	0.0698	14
2001	0.2215	0.0820	18
2002	0.2330	0.0933	17
2003	0.2349	0.0927	18
2004	0.2418	0.1008	15
2005	0.2323	0.0921	19
2006	0.2364	0.0988	19
2007	0.2488	0.1072	20
2008	0.2548	0.1120	21
2009	0.2586	0.1150	21
2010	0.2612	0.1159	22

Table A2: Variable Definitions Using Provincial Panel Data

Variable	Definition
pov_r_1.25	Headcount ratio in rural areas measured by $1.25 poverty line
pov_r_2	Headcount ratio in rural areas measured by $2 poverty line
pov_u_1.25	Headcount ratio in urban areas measured by $1.25 poverty line
pov_u_2	Headcount ratio in urban areas measured by $2 poverty line
gini_all	Provincial level Gini index
theil_all	Provincial level Theil index
urban_rural_gap	Income ratio between urban and rural citizens
urbanization	Share of urban population
logavgdp	Per capita GDP (CNY, in log)
gdp1_ratio	Share of GDP of the primary industry
gdp2_ratio	Share of GDP of the secondary industry
fdi_gdp	Ratio of FDI to GDP
export_gdp	Ratio of export to GDP
import_agr	Ratio of import to GDP
timetrend	Time trend variable

Table A3: Effect of Urbanization on Poverty and Inequality
in the People's Republic of China
(Fixed Effect Model)

	Pov_r_2	Pov_u_2	Gini_all	Theil_all	Urban_rural_gap
urbanization	−0.339***	0.713***	−0.143***	−0.131***	−0.970***
	(0.0778)	(0.0669)	(0.0328)	(0.0480)	(0.2030)
logavgdp	−0.179***	−0.183***	0.0344***	0.0479***	0.228***
	(0.0100)	(0.0092)	(0.0044)	(0.0064)	(0.0262)
gdp1_ratio	−0.2400	0.608***	0.0136	0.0653	−2.234***
	(0.1510)	(0.1490)	(0.0684)	(0.1000)	(0.4240)
gdp2_ratio	−0.426***	0.0041	0.0761	0.201***	−0.0014
	(0.1090)	(0.1120)	(0.0487)	(0.0712)	(0.3300)
fdi_gdp	1.16e-05*	0.0000	7.91e-06***	6.90e-06*	8.53e-06*
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
export_gdp	0.0000	−2.11e-05***	−7.71e-06***	−9.25e-06**	−0.000127***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
import_gdp	−1.44e-05**	1.66e-05***	0.0000	0.0000	3.27e-05**
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
timetrend	0.000511*	−0.0004	−0.000302***	−0.0002	0.00493***
	(0.0003)	(0.0003)	(0.0001)	(0.0002)	(0.0008)
Observation	512	517	418	418	725
R^2	0.886	0.791	0.549	0.528	0.622

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

**Table A4: Effect of Urbanization on Poverty and Inequality
in the People's Republic of China**
(Random Effect Model)

	Pov_r_2	Pov_u_2	Gini_all	Theil_all	Urban_rural_gap
urbanization	−0.302***	0.671***	−0.187***	−0.179***	−1.613***
	−0.0674	−0.0577	−0.0303	−0.0446	−0.1990
logavgdp	−0.186***	−0.185***	0.0386***	0.0526***	0.273***
	−0.0088	−0.0083	−0.0041	−0.0060	−0.0261
gdp1_ratio	−0.327**	0.498***	0.0186	0.0664	−2.327***
	−0.1410	−0.1370	−0.0668	−0.0977	−0.4330
gdp2_ratio	−0.450***	0.0388	0.0389	0.152**	−0.5440
	−0.1060	−0.1020	−0.0484	−0.0707	−0.3370
fdi_gdp	0.0000	0.0000	8.70e-06***	7.67e-06**	1.06e-05**
	0.0000	0.0000	0.0000	0.0000	0.0000
export_gdp	0.0000	−2.14e-05***	−5.04e-06*	0.0000	−9.79e-05***
	0.0000	0.0000	0.0000	0.0000	0.0000
import_agr	−1.21e-05**	1.43e-05***	0.0000	0.0000	0.0000
	0.0000	0.0000	0.0000	0.0000	0.0000
timetrend	0.000602**	−0.0002	−0.000427***	−0.000335**	0.00269***
	−0.0003	−0.0002	−0.0001	−0.0002	−0.0008
east	0.106***	0.0595***	0.0519***	0.0735***	0.507***
	−0.0264	−0.0200	−0.0132	−0.0208	−0.0898
central	−0.302***	0.671***	−0.187***	−0.179***	−1.613***
	−0.0674	−0.0577	−0.0303	−0.0446	−0.1990
constant	1.310**	1.870***	0.900***	0.403	−3.971**
	−0.527	−0.495	−0.228	−0.333	−1.723
Observation	512	517	418	418	725

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

**Table A5: Employment in the Informal Sector and Income Poverty
in Urban People's Republic of China**
(Probit Model)

	Income Poverty		Consumption Poverty	
	$1.25	**$2**	**$1.25**	**$2**
no_informal			0.387***	0.307***
			(0.0742)	(0.0390)
ratio_informal	0.474***	0.460***		
	(0.112)	(0.0641)		
age	0.0871*	0.00791	0.0778**	0.0245
	(0.0495)	(0.0214)	(0.0382)	(0.0181)
age_square	−0.00116**	−0.000300	−0.00113***	−0.000533***
	(0.000531)	(0.000222)	(0.000393)	(0.000180)
male	0.101	0.281***	0.210**	0.295***
	(0.114)	(0.0656)	(0.106)	(0.0598)
edu_year	−0.0840***	−0.0989***	−0.0899***	−0.100***
	(0.0182)	(0.0102)	(0.0159)	(0.00897)
partymember	−0.488***	−0.440***	−0.596***	−0.477***
	(0.156)	(0.0747)	(0.144)	(0.0664)
minority	0.0454	−0.227	−0.00323	−0.219
	(0.235)	(0.155)	(0.220)	(0.144)
depend_ratio	2.058***	1.866***	2.142***	1.738***
	(0.314)	(0.166)	(0.263)	(0.133)
east	−0.324**	−0.415***	−0.346**	−0.348***
	(0.145)	(0.0783)	(0.135)	(0.0717)
central	0.0518	0.0451	0.0670	0.0841
	(0.121)	(0.0683)	(0.109)	(0.0623)
constant	−4.074***	−1.320**	−3.889***	−1.590***
	(1.174)	(0.535)	(0.960)	(0.472)
Observation	6,843	5,886	6,843	5,886
Pseudo R^2	0.2032	0.1886	0.2148	0.1788

Data source: Chinese Household Income Project Survey 2002 urban samples.

Table A6: Effect of Minimum Wage on Urban Poverty Reduction

	Random Effect Models		Fixed Effect Models	
	Pov_u_1.25	Pov_u_2	Pov_u_1.25	Pov_u_2
logmini_wage	−0.0403*	−0.0752	−0.0545**	−0.0963**
	(0.0215)	(0.0459)	(0.0222)	(0.0447)
urbanization	0.149**	0.652***	0.548***	1.446***
	(0.0703)	(0.164)	(0.133)	(0.269)
logavgdp	−0.0051	−0.0853***	0.0306	−0.0062
	(0.0146)	(0.0326)	(0.0219)	(0.0441)
gdp1_ratio	0.319**	1.125***	0.260*	0.885***
	(0.125)	(0.271)	(0.147)	(0.296)
gdp2_ratio	−0.0506	−0.142	−0.231**	−0.604***
	(0.0924)	(0.205)	(0.112)	(0.226)
fdi_gdp	1.92e-07	8.98e-08	4.56e-07	5.56e-07
	(6.84e-07)	(1.46e-06)	(7.01e-07)	(1.41e-06)
export_gdp	−1.29e-06	−9.88e-06	−6.45e-06	−1.58e-05
	(4.59e-06)	(1.04e-05)	(5.87e-06)	(1.18e-05)
import_agr	−2.73e-06	−6.44e-06	−1.93e-06	−3.51e-06
	(3.20e-06)	(6.92e-06)	(3.45e-06)	(6.95e-06)
east	0.0339	0.144*		
	(0.0325)	(0.0855)		
central	0.0320	0.141		
	(0.0347)	(0.0902)		
timetrend	−0.0012	−0.0052	−0.0095**	−0.0238**
	(0.0030)	(0.0065)	(0.0046)	(0.0094)
constant	2.598	11.26	19.00**	48.28***
	(5.779)	(12.65)	(9.113)	(18.37)
Observation	161	160	160	160
R^2			0.475	0.740

Table A7: Asset Formation and Poverty in Urban PRC
(Probit Model)

	Income Poverty		Consumption Poverty	
	$1.25	**$2**	**$1.25**	**$2**
ln(Financial_K)	−0.0963***	−0.107***	−0.0854***	−0.0924***
	(0.0130)	(0.00826)	(0.00948)	(0.00698)
age	0.0810**	0.0249	−0.0187	−0.0151
	(0.0388)	(0.0184)	(0.0195)	(0.0128)
age_square	−0.00114***	−0.000526***	3.23e-05	−5.94e-05
	(0.000401)	(0.000183)	(0.000191)	(0.000126)
male	0.166	0.271***	0.532***	0.455***
	(0.108)	(0.0610)	(0.0811)	(0.0459)
edu_year	−0.0851***	−0.0952***	−0.0811***	−0.0887***
	(0.0165)	(0.00925)	(0.0104)	(0.00673)
party_member	−0.543***	−0.426***	−0.273***	−0.219***
	(0.150)	(0.0682)	(0.0747)	(0.0452)
minority	0.136	−0.0988	−0.0559	0.0284
	(0.220)	(0.143)	(0.169)	(0.101)
depend_ratio	1.300***	1.173***	0.681***	0.680***
	(0.216)	(0.120)	(0.135)	(0.0857)
east	−0.257*	−0.258***	−0.0825	−0.338***
	(0.138)	(0.0735)	(0.0943)	(0.0549)
central	0.0447	0.0554	0.439***	0.293***
	(0.111)	(0.0634)	(0.0782)	(0.0475)
constant	−2.632***	−0.400	−0.395	0.873**
	(0.955)	(0.474)	(0.517)	(0.341)
Observation	6843	6843	6843	6843
Pseudo R^2	0.2377	0.2079	0.1729	0.1615

Source: Urban samples from the Chinese Household Income Project Survey 2002.