



Initiative for Policy Dialogue Working Paper Series

May 2009

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Poverty

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THE CHANGING NATURE OF URBAN POVERTY IN CHINA

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Introduction

Poverty in China has famously declined since the beginning of the reform period in the late 1970s. Most of the decline occurred in rural areas, where the great bulk of poverty was located in the past. In this paper, we explore some of the unknown or poorly understood dimensions of urban poverty in China and its evolution over time, from the early state of the reform and transition period until the beginning of the present century. Urban absolute poverty was, by most accounts, insignificant in size before the reform period began in the late 1970s, and generally ignored both then and afterwards, when it started to increase. Only recently has research in China and abroad begun to focus on the urban poor.

In the pre-reform era, urban residence was restricted, food rationed and rural-urban migration thus difficult or impossible to undertake. Employment at state-set wages was guaranteed in urban areas. Under these conditions, while urban living standards were meager and Spartan, there was little absolute poverty, with the exception of those unable to work. As Athar Hussain (2005) puts it, “There were poor people in urban areas and the living standard was generally low. However, poverty relief was confined to the small section of the urban population characterized by ‘three no’s’: no ability to work, no savings or other income source, and no relatives to depend on.” In the

1990s, however, urban poverty was increasingly perceived to be a problem. Hussain points to several changes that gave rise to this perception: the number of urban poor was growing; income inequality increased, making the urban poor stand out more clearly; and the new urban poor, unlike in the past, were often able to work but were no longer guaranteed a job.

Even when urban poverty began to attract attention, it was treated separately from rural poverty. A different poverty line was used, reflecting not only rural-urban differences in cost of living but also different expectations of living standards. The issues raised by the idea of a single poverty line for all of China are similar to those raised by a single global poverty line, such as the World Bank's PPP\$1 per day line. One such issue is the necessarily "relative" character of even "absolute" poverty lines. While these are usually based on physiological requirements, such as minimum caloric intake, they also encompass the idea that the individual should be able to participate fully in society. What is required to meet this standard varies among countries and cultures and increases as living standards improve with economic development. Thus, national poverty lines are correlated with per capita GDP. If a global poverty line is tightly defined by minimum physiological standards, it risks neglecting entirely the social aspects of poverty that can isolate and oppress people, even when they are fed and sheltered at physiologically adequate levels. While it would be a signal accomplishment if everyone in the world had adequate nourishment, shelter and health care, this would not by itself mean the end of absolute poverty.¹

This problem is particularly relevant to China because of the longtime administered separation of urban from rural society. While income levels and expectations might have been quite different in the two sectors even without this wall separating them, the existence of the wall essentially

eliminated the equalizing force of migration and enabled the state to create a monotonic urban environment without serious poverty and with a living standard far above the rural. Urban residents enjoyed full employment, job security and a full array of social benefits, none of which was available to their rural cousins.² What was regarded as “poor” in urban society would have amounted to doing quite well in much of the countryside, whereas real rural poverty was unimaginable in the cities. Thus the estimates of Chinese poverty in terms of the World Bank’s PPP\$1 per day line excluded significant urban poverty until recently because virtually nobody in urban China had less income than that.³

What has happened to urban poverty in China? There are different and conflicting “stylized facts” about China’s urban poverty. One belief is that it emerged only in the 1990s as a result of state-owned enterprise (SOE) restructuring, inflation, and the disappearance of guaranteed full employment. This implies that urban poverty increased from the 1970s until the early years of the new century. A contrary view is that urban poverty was quite high in the 1970s and fell, like rural poverty, as a result of rapid economic growth and/or recent changes in government policy emphasizing the establishment of new social benefit programs and a more effective safety net. In this paper, we review some literature on this question, and then use national household survey data to throw further light on China’s urban poverty.

Our analysis is based upon the three round China Household Income Project (CHIP) surveys of household income carried out by an international team under the aegis of the Institute of Economics, Chinese Academy of Social Science.⁴ The CHIP studies defined household disposable income to include direct subsidies, income-in-kind, and the rental value of owned housing, in keeping with

standard international practice. Income thus defined has exceeded income as officially defined and has changed differently, as well, especially in urban areas where formerly large subsidies faded away while rental value of owned housing burgeoned with the housing reform (Khan & Riskin, 2001, 2005). After summarizing available estimates of the size and trends of urban poverty, we use an urban poverty line fashioned by Khan (Khan & Riskin 2001; Khan 2004) to examine the changing characteristics of China's urban poor, and then explore whether recent declines in urban poverty are the fruits of the direct benefits and safety net programs that China has been establishing.

Poverty Measures and Trends

Urban poverty trends depend upon chosen urban poverty lines, and of these there is some variety in China, which lacks an official urban poverty line. As layoffs from state enterprises and unemployment increased in the 1990s, however, many towns and cities constructed diagnostic poverty lines as aids to policy making.⁵ These have been aggregated to provide a national urban poverty line or, in one case, two separate lines for inland and coastal provinces, respectively. A single national urban line, calculated by the National Bureau of Statistics (NBS) for the years 1991 to 2000, is shown in Table 11.1. This line is two to three times as high as the rural poverty line.

Table 10.1. "Diagnostic" Urban Poverty Lines of the NBS (yuan)

Year	A	B
1991	752	
1992	837	
1993	993	
1994	1,300	
1995	1,547	
1996	1,671	1,850
1997		1,890
1998		1,880
1999		1,860
2000		1,875

Note: The two columns differ in the prices used for costing basic necessities.

Source: Asian Development Bank (2004).

There is also, of course, the World Bank's PPP\$1/day and \$2/day lines, whose purpose is really to facilitate international comparisons but which have been applied to urban China. The poverty rates generated by these lines are shown in Table 11.3 for most years between 1990 and 1999. The \$1/day line is so low as to essentially eliminate urban poverty, but the \$2/day line results in poverty rates significantly above zero. However, the World Bank has abandoned its use of GDP PPP conversion rates for measuring poverty on the grounds that the market basket consumed by the poor is a much narrower one, heavily dominated by food and other basic necessities.⁶ The Bank has issued some preliminary results of its project to construct and apply special poverty conversion rates. Table 11.2 shows national headcount poverty rates (i.e., including both urban and rural populations) for selected years using the new \$1PPP line, as adjusted for poverty measurement purposes, as well as the old PPP line:

Table 11.2. Headcount poverty rates at two new World Bank poverty lines (%)

Poverty line	1981	1990	2004	2007
New \$1 PPP poverty line	71-77		13-17	
World Bank "cost of basic needs" poverty line (= old \$1 PPP line)*	64	33	10	7

Source: World Bank, 2008: Appendix

*The World Bank "cost of basic needs" poverty line coincides with its old \$1/day PPP line (by chance, not construction) and remains the basis for the Bank's poverty assessments in China.⁷

The new PPP\$1/day poverty line raises the headcount poverty rate over that generated by the old one in both early and late years. Because the rise is higher for 1981 than for 2004, the decline in poverty generated by the new line is actually greater: some 59 percent of the population was lifted above the new PPP poverty line, compared with 54 percent using the old one. However, the application of a recently derived PPP exchange rate to the China of 25 years ago, when prices were quite different, is a questionable procedure.

Ravallion and Chen (2007) calculated an urban equivalent of the very low official rural poverty line which also eliminates urban poverty, but this line has not been seriously entertained for application to urban China. However, they also developed a new urban poverty line in collaboration with the NBS. The new line is based upon province-specific food bundles valued at median province prices. The food bundles, in turn, are taken from the actual food consumption of the urban population lying between the lowest 15th and 25th percentiles nationally. They are scaled up or down to reach 2,100 calories per person per day with a further constraint imposed that foodgrains provide 75 percent of calories. Non-food consumption is then added, based on actual non-food spending of households whose total expenditures equaled the food poverty line. This yielded an urban poverty line of 1,200

yuan (2002 prices), some 41% higher than the rural poverty line (a differential equal to the estimated difference in cost of living between town and country), worked out in a similar manner. Quite austere, this line exceeds the average food expenditure of the poorest urban decile by only 6.4 percent in 2002.⁸ It is more than a third lower than the diagnostic urban poverty line used by the NBS and reported in Table 11.1 which, like “most studies on poverty in the PRC”, put the urban poverty line at 2-3 times the rural one (GHK and International Institute for Environment and Development 2004).⁹

A study of poverty based on data from the CHIP surveys in 1995 and 2002 (Khan 2004) found sharp reductions in urban poverty between those two dates. Khan’s urban poverty threshold is also based upon a food consumption level of 2,100 calories per day, but it is much higher than the Ravallion and Chen (RC) line.¹⁰ Athar Hussain (2002, see also Hussain 2005) in a study carried out for the Asian Development Bank, used methods similar to Khan in estimating urban poverty and found similar results. Hussain had access to the 1998 urban household survey of the NSB, with a sample of 17,000 households from all 31 provinces of China. His poverty line is also based on a 2,100 calorie daily diet. The relevant food bundle is chosen from the actual consumption pattern of the lowest quintile of the population, ranked by expenditure per capita (excluding expenditure on consumer durables) and then scaled up or down to meet the 2,100 calories requirement. The non-food component of the poverty line is then estimated by regression as predicted non-food expenditure of those whose expenditure on food just equals the food poverty line. The provincial urban poverty lines in 1998 generated by this method range from 1,616 *yuan* in Shanxi Province to 3,118 *yuan* in Beijing Municipality and the national mean is 2,310 *yuan*, quite close to the one derived by Khan (2,291 *yuan* in 1995, 2,534 *yuan* in 2002), and similar in the ratio of poverty

threshold to mean per capita income (Table 11.2).

A similar method was also used by Meng et al. (2005; 2007), and applied to a portion of the government's urban household income and expenditure survey samples for 1986 to 2000 for 29 of China's 31 provinces.¹¹ Their poverty lines are calculated for individual provinces to reflect differences in prices and tastes, and are estimated in a manner that allows for changes in the poverty food bundle and substitutions between food and non-food items, as relative prices and tastes change. They do not provide an average national poverty line, but their provincial lines in 2000 range from 1,730 yuan (Anhui Province) to 3,771 *yuan* (Shanghai).

There are thus various differences in the way different poverty lines have been constructed. A striking element of these differences is the variation in ratio of urban to rural poverty threshold. This ranges from a 41 percent differential in the case of the RC line, based upon estimated urban-rural cost of living differences, to a multiple of two or three (as in the case of the government's diagnostic poverty lines), much higher than can be explained by such differences. The well-known justification for such a wide gap is that so-called "absolute" poverty lines, although anchored to a biological standard (such as 2100 kilocalories per day), generally include a relative component: they express a minimum standard of living judged necessary in a given social setting not only to survive physically and reproduce, but also to participate in society. This norm changes as standards of living advance, just as it differs among countries of different levels of development. It is not unreasonable, in a country whose rural population was for many years walled off from the urban allowing large differences in real income to develop, for the absolute poverty lines greatly to diverge (Khan and Riskin (2001)).

One useful way of comparing poverty lines is to examine their respective ratios to average urban per capita income. This is done in Table 11.3, which illustrates the considerable range of austerity embodied by the various thresholds. The RC line is at the austere end of the spectrum, at only 15.6 percent of mean urban per capita income in 2002, compared to 30 percent for the government's diagnostic line in 2000.¹² It generates poverty rates that hover at or below 1 percent of the urban population over the entire period from 1981 to 2002, with the exception of a few years in the early and late 1980s and 1990-91 (Table 11.3). This includes the period from the mid-90s on when layoffs from re-structuring state enterprises created a widespread perception that urban poverty was becoming a serious problem. At the top of the spectrum are the Khan 1995 and Hussain 1998 lines, which come to 40 percent and 38 percent, respectively, of mean per capita income.

According to the RC headcount rates, there were a total of only 2.5 million urban poor among the 400 odd million urban residents in 2000, a poverty rate of 0.63 percent. In contrast, China's Ministry of Civil Affairs, which is responsible for urban poverty relief, stated that in September 2000 there were approximately 14 million urban residents with incomes below the local poverty lines, which would have amounted to a poverty rate of 3.1 percent. In 2007, some 22 million people were said to be eligible for minimum livelihood supplements, or about 3.9 percent of the urban population (Xinhua 2007). An earlier Xinhua report quoted unnamed economists as claiming that urban poverty was between six and eight percent (Xinhua 2004). While still modest, these rates do not suggest that urban poverty was nonexistent in China.

Table 11.3. Alternative Urban Poverty Lines and their Relation to Average Income

	Year	Ratio of Poverty Line to National Mean Urban Income (%)
NBS Diagnostic Line	2000	30
World Bank original PPP\$1 *	1995	17
World Bank original PPP\$2 *	1995	34
A.R. Khan '95	1995	40
A.R. Khan '02 (excluding migrants)	2002	26
A.R. Khan '02 (including migrants)	2002	28
A. Hussain '98 (income-based)	1998	38
Meng et al '05	2000	22-28**
Ravallion and Chen '07 (new poverty line)	2002	16

Note: "Mean urban income" is urban per capita disposable income as reported in the Statistical Yearbook of China, except in the case of the Khan estimates, where it is the China Household Income Project estimate of urban per capita disposable income as defined in Khan & Riskin (2001).

* See footnote 4, above. For derivation of ratios for the World Bank PPP\$1 and \$2 lines, see Khan (2004), p. 9, fn. 9. The new \$1 PPP line is about 40 percent higher than the old. However, the World Bank has abandoned using the PPP exchange rate derived for comparing GDPs to measure poverty. See text, above.

** Meng et al's poverty lines are province-specific, to take into account differences in cost of living and taste. The percentages given are ratios of the lowest and highest provincial lines to the national mean urban disposable income.

The minimum livelihood line, from which several of these rates derive and which governs benefits eligibility, varies from place to place in accordance with local budget constraints. Athar Hussain (2002, 2005) provides some examples of the poverty lines established by individual cities and towns as the basis for their minimum livelihood subsidy allocations as of late 2000. These range from 2,400-3,828 *yuan* in annual amount in the biggest cities and municipalities, to 1,320-1,680 *yuan* in provincial capital cities and 935-1,320 *yuan* in small, county level towns. Note that Chinese cities and towns, whose benefits programs were dependent on their budget resources and which were not inclined to be overly generous, had substantially higher minimum livelihood lines than the RC 1,200 *yuan* line except for the smallest group, the county towns. They range from 14.9 percent to 60.8 percent of the national average urban per capita income for 2000.¹³

The poverty headcount rate for 1998 generated by Hussain's line ranges from 4.73 percent of the urban population (14.7 million people) to 11.87 percent (37.1 million), depending upon whether the poverty line is interpreted as an income line or an expenditure line, respectively. Similarly, Khan's line generates urban poverty rates of 8.0 percent in 1995 and 2.2 percent in 2002. Meng et al's poverty rates range from 5.5 to 1.9 percent. Shown in Table 11.3, these three sets of numbers are more consistent with other information about developments in urban China than the very low urban poverty headcount rates generated by the more austere urban lines. A striking finding of Hussain's study is that the urban poverty rate is highly sensitive to the poverty line, meaning that a large share of the urban population has incomes located close to the poverty line. For instance, raising it by 25 percent more than doubles the income poverty rate, from 4.73 percent to 11.07 percent.

These headcount rates and others based upon official surveys of urban household income exclude migrants living in cities but lacking an urban *hukou* (household registration). Mostly from rural areas, such migrants have comprised an increasingly large proportion of China's urban population since the 1980s. Estimates based upon China's 2000 population census put the total number of migrants living in Chinese cities at 79 million in that year (Liang and Ma (2004). Standard household income surveys exclude these migrants from their sample frames, but some special surveys of migrants are available and are used by Hussain (2002, 2005) and Khan (2004). The latter study finds that, while the income of rural-urban migrants is on average double that of their native villages, it remains more than one-third less than that of full status urban residents. Moreover, it is distributed much more unevenly (Khan and Riskin 2005). These two facts alone imply a higher poverty rate among the migrants than among full status residents. Khan (2004) estimated that the poverty rate for migrants in 2002 was 14.4 percent, and the poverty rate for the

combined urban population of full status residents and migrants was 4.4 percent – twice that of the full status residents alone.

Table 11.4. Alternative Headcount Rate Estimates of Urban Income Poverty, 1981–2003 (%)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Old \$1/day	Old \$2/day	RC "New" poverty line	Khan	CPDR	Hussain	Meng et al
1981			6.01				
1982			2.16				
1983			1.56				
1984			1.27				
1985			1.08				
1986			3.23				2.6
1987			1.62				1.9
1988			2.07	6.7			2.8
1989			7.05				3.2
1990	1.0	20.7	2.58				2.1
1991			1.66				2.5
1992	0.8	13.2	1.13				3.4
1993	0.7	13.8	1.01				5.0
1994	0.9	13.5	1.19				5.2
1995	0.6	9.7	0.85	8.0			5.5
1996	0.5	9.3	0.61				4.7
1997	0.5	9.1	0.70				5.3
1998	1.0	9.0	1.16			4.7	4.4
1999	0.5	6.8	0.57				3.5
2000			0.63				3.7
2001			0.50				
2002			0.54	2.2			
2003					4.5		

Source: (1) and (2) Chen and Wang 2001; (3) Ravallion and Chen 2007, Table 3; (4) Khan and Riskin (2001), Khan (2004); (5) China Population and Development Country Report. See "China's rural poverty declines, urban poverty rises," *People's Daily Online*, September 8, 2004, at http://english.people.com.cn/200409/08/eng20040908_156256.html. This source stated that some 22.48 million urban residents had incomes below the "basic standard of living" in 2003, the majority women and children. This works out to about 4.46 percent of the urban population (excluding migrants) in 2003. (6) Hussain (2005). (7) Communication from Xin Meng containing data from which Fig. 2 in Meng et al. 2007 was calculated. This series is for one of the two methods used to calculate poverty rates in this paper.

Note: The World Bank's original "PPP\$1 a day" line is equal to \$1.08 in 1993 prices, and the \$2 line is accordingly \$2.16. No estimates of urban poverty using the Banks' new poverty-adjusted PPP line were available when this paper was completed.

Khan's findings have migrant poverty rates seven times as high as that of permanent residents, a

startling but not implausible result. Using both a different methodology and different data, Hussain (2002, 2005) found that the poverty rate among migrants in 1999 was 50 percent higher than among permanent residents. For migrants it was 15.2% and for permanent residents 10.3%. This result is not necessarily inconsistent with Khan's, given especially the difference in data sources.¹⁴ The difference in ratios of migrant to local permanent resident poverty rate is due more to the difference in estimates of the poverty rate among full status residents (10.3% compared to 2.2%) than to the difference in rate for migrants (15.2% vs. 14.4%).¹⁵

The variety of extant estimates of urban poverty, summarized in Table 11.3, indicates that there continues to be more than a modicum of uncertainty about the basic dimensions of Chinese poverty, and even about trends. Is either of the "stylized facts," described above, about urban poverty trends supported by the available data? The only relatively long series of estimates is that of Ravallion and Chen (2007), which covers the years 1981 to 2002, albeit from the vantage point of a very austere poverty definition. This series starts relatively high, at 6 percent in 1981 and then falls sharply, rising again in 1989. Thereafter it subsides to one percent or below for most remaining years. This pattern is consistent with the view that urban poverty was slight in pre-reform years, and it accords with a fairly draconian government austerity in 1981, engineered to reduce inflationary pressures and enable the state to regain control of investment (Riskin 1987, p. 345], which could explain the spike in 1981. It is also consistent with the extraordinary stagflation in 1989 that was one of the precipitating factors of the student demonstrations at Tiananmen. But it is inconsistent with the many indications, sampled above, of growing urban poverty associated especially with SOE reform beginning in the 1990s. And, of course, being based upon full status urban residents only, it cannot incorporate evidence of much higher poverty rates among rural-

urban migrants.

The series of poverty estimates generated by the World Bank PPP\$2 per day poverty line appears to tell a different story, one of urban poverty steadily declining from about 21 percent of the urban population in 1990 to less than 7 percent at the end of the decade. The only inference that can be drawn for pre-reform urban poverty from this series is that it must have been very high: Real per capita GDP in 1978 was only 42 percent as high as in 1990, so even with greater inequality of distribution in 1990, a poverty rate over 20 percent suggests even higher rates in 1978 and before. But this is a faulty inference from misleading numbers. The PPP\$2 line is being applied to a concept of per capita income that omits a substantial portion of that income, namely, the various subsidies and elements of income-in-kind that provided as much as 42 percent of urban residents' incomes in pre-reform days and made the difference between destitution and a low but secure and adequate standard of living. Thus, the CHIP studies, which attempted to estimate income comprehensively to include all of its components, generated a mean per capita urban income in 1988 that was 55 percent higher than the official estimate. Partly for the same reason that the early poverty rates are over-stated by the PPP\$2 line, the decline in urban poverty is similarly over-stated. But an additional reason is that the subsidy component of urban income declined over time, so that actual income (including subsidies) rose more slowly than officially reported income (which excludes them).

Meng et al's series runs from 1986 to 2002 and shows urban poverty rising from the 1980s to the 1990s, despite rapid urban income growth, peaking around 1997 and then falling again. The three Khan estimates for 1988, 1995 and 2002, respectively, are consistent with the pattern of Meng et

al's longer series, albeit with wider fluctuations. Such a pattern of rising and then falling urban poverty rates, we believe, fits well with other information about urban China during the period in question. The earlier rising trend is ascribable to growing urban income inequality, rising unemployment and rising prices of food and other necessities in a context of disappearing state subsidies and a largely non-existent safety net. The sharply falling poverty rate after 1997 came about as economic growth took on a far less disequalizing character (Khan 2004) raising the question whether the emergence of redistributive public policies, including a new safety net (the minimum livelihood guarantee program), commensurate with government rhetoric about making growth more equitable, might have contributed to the decline in urban poverty beginning in the late 1990s. We return to this question at the end of the paper.¹⁶

To put China's urban poverty in international perspective, even the poverty rates generated by the less austere poverty lines are low in comparison with those of other developing countries. For instance, India's urban poverty rate is said by the Planning Commission to have fallen from 33 percent in 1993/94 to 24 percent in 1999/2000.¹⁷ The average urban poverty rate for the World Bank's \$1.08/day (1993 PPP) poverty line among 87 low and middle income countries in 2002 was 24.55 percent (Ravallion et al. 2007), many times higher than the highest estimate for China.

Determinants and Characteristics of the Urban Poor

We now use the CHIP data—the same data sets as Khan (2004) and Khan and Riskin (2001, 2005)¹⁸—as well as the poverty line developed by Khan (2004), to examine the characteristics of the urban poor over the three surveyed years, as one way of ascertaining whether the nature of

urban poverty has changed. We do this by estimating a simple probit model for each of the three survey years:

$$P_i = X_i' \beta + \epsilon_i$$

where P_i is the probability that the per capita income of household i falls below the poverty line in the survey year, X is a vector of demographic and socioeconomic characteristics, some of the household head and others of the household as a whole, and ϵ_i is a standard error term. The income measure used is household per capita disposable income according to the CHIP definition. The objective is to examine how the likelihood of a household's members falling below the poverty line is influenced by these various characteristics.

Table 11.5 presents the results. The coefficients are marginal effects, namely the change in probability of being poor (based on the Khan definition) due to a one-unit change in an observable characteristic, or, for categorical variables, the change in probability of being poor relative to that probability in the omitted category. For instance, in 1988 households whose heads were aged 21-29 had a 3.2% higher probability of falling into poverty than those with heads aged 50-59 (the omitted group) and this disadvantage was higher at 6.4% in 1995 but disappeared in 2002. The standard errors in parentheses are corrected for the fact that per capita incomes within households are assumed equal.

Table 11.5. Probit Regression Results on Poverty Status

(Dependent variable is 1 if family is poor, 0 otherwise; marginal effects presented with robust standard errors in parentheses; + significant at 10%; * significant at 5%; ** significant at 1%)

Household head characteristics	1988	1995	2002
Age (50-59 yrs omitted)			
21-29	0.032** (0.012)	0.064** (0.024)	0.016 (0.017)
30-39	0.006 (0.005)	0.006 (0.011)	-0.004 (0.005)
40-49	-0.001 (0.004)	-0.018* (0.009)	-0.003 (0.005)
60+	-0.012** (0.003)	-0.027** (0.009)	0.013 (0.012)
Education (2-year college or higher omitted)			
primary school or less	0.042** (0.012)	0.096** (0.023)	0.117** (0.039)
Junior high school	0.020** (0.006)	0.043** (0.011)	0.059** (0.015)
Senior high school	0.010 (0.006)	0.023* (0.011)	0.033* (0.014)
Secondary technology school	0.015+ (0.008)	0.011 (0.011)	0.030 (0.019)
Employment status (employed omitted)			
Retired	0.006 (0.025)	0.045* (0.018)	-0.000 (0.014)
Unemployed	---	0.179** (0.064)	0.178* (0.089)
Employment sector (employed in central/provincial SOEs or public institutions omitted)			
Employed in local SOEs or public institutions	-0.007** (0.003)	0.044** (0.008)	0.016 (0.011)
Employed in collective enterprises	0.021** (0.006)	0.075** (0.018)	0.019 (0.016)
Employed in private sector	0.037 (0.034)	0.077 (0.051)	0.017+ (0.011)
Employment tenure nature (permanent worker omitted)			
Long- or short-term contract worker	0.027 (0.026)	0.007 (0.007)	0.009 (0.006)
Proprietor or self-employed	-0.001 (0.014)	0.099 (0.070)	0.011 (0.012)
Other	---	0.024 (0.033)	0.025 (0.024)
Ethnic minority	-0.003 (0.005)	0.014 (0.014)	-0.007 (0.006)
CCP member	-0.011** (0.003)	-0.013* (0.006)	-0.010* (0.004)
Household characteristics	1988	1995	2002
Household size	0.007** (0.002)	0.017** (0.004)	0.007** (0.002)
Number of children <18 years old (zero			

omitted)			
1	0.010*	0.032**	0.011*
	(0.004)	(0.007)	(0.005)
2	0.069**	0.208**	0.066*
	(0.015)	(0.035)	(0.029)
3+	0.261**	0.451**	0.256
	(0.055)	(0.141)	(0.232)
Number of elders >60 years old (zero omitted)			
1	0.002	0.014	-0.001
	(0.004)	(0.010)	(0.006)
2+	0.013	0.023	-0.003
	(0.010)	(0.019)	(0.007)
Region (eastern omitted)			
Central	0.074**	0.107**	0.020**
	(0.006)	(0.010)	(0.005)
Western	0.037**	0.078**	0.029**
	(0.010)	(0.012)	(0.007)
Observations	30,602	21,417	20,604
Pseudo R ²	0.30	0.21	0.20

Note: "--" denotes that the category is dropped because there are no observations in that category.

Most of the regression results are as expected and consistent with findings from a recent study using large samples (Meng et al. 2007). With regard to household head characteristics, age is a significant predictor of poverty in 1988 and 1995, with relative youthfulness (aged 21-29) increasing it and old age (60 years or above, relative to the reference group of 50-59) decreasing it. The latter finding is perhaps surprising. With male retirement at 60 and wages in the old state enterprises highly correlated with seniority, men (most household heads are men) of 50-59 years are in their prime earning years. Why should post-60 year olds have an even lower probability of being poor? Probably because the old pension system, still fully operative in 1988 and largely in 1995, provided a very generous income by international standards (replacing some 70 percent of maximum wage earned), and most retired people able to do so also held post-retirement jobs. Interestingly, in 2002 age of household head was no longer a significant predictor of poverty status.

In pre-reform days, the returns to education in China were extremely low. This has changed

dramatically. Recent studies, including those coming out of the CHIP survey for 2002, confirm that nowadays, education and especially higher education is an important path to higher income (Hannum and Park 2007). It is also, evidently, an increasingly potent protector against poverty. In 1988 and 1995, those living in a household headed by someone with a primary school education or less had 4.2% and 9.6% higher probability, respectively, of being poor than those whose head had two or more years of higher education. By 2002 this greater likelihood of being poor had increased to 11.7% and these results are significant at the 1% level. Households headed by someone with a junior high school education had the next highest probability of being poor, and the effect is stronger in 2002 than in previous years.

As for employment status of household head, unemployment has the biggest impact on the likelihood of being poor, increasing it (relative to being employed) by 18 percent in both 1995 and 2002.¹⁹ In 1988 the category of unemployed did not exist, as China had not yet abandoned the fiction that unemployment was non-existent under socialism. Those who were de facto unemployed were mostly workers laid off from state enterprises who still considered themselves employees of their *danwei* (work unit). Even in 1995, when open unemployment had become more serious and was more widely acknowledged, many laid off workers still received a subsistence stipend from their work unit and would not consider themselves formally unemployed. Nor did the government treat them as such in its statistics. Thus, the fact that only 4 percent of the poor had household heads who said they were unemployed in 1995 (as shown in the Appendix Table which describes demographic characteristics of the poor) may well reflect the persistent psychology of dependence in the urban work force rather than constituting an accurate measure of the unemployment-poverty nexus. And the fact that that number had risen to 23 percent in 2002 might

conversely reflect the change that had occurred in that psychology.

Nevertheless, despite the growth of urban unemployment in the 1990s and its strong association with the simultaneous increase in poverty, the working poor remained the dominant category of poor. Of those falling below the poverty line in 1988, 1995 and 2002, respectively, 93 percent, 81 percent and 61 percent had household heads who were employed, as shown in the Appendix Table.

Retirement status has a significant positive effect on probability of being poor only in 1995. By 2002, the sign on the coefficient, although no longer significant, had become negative, indicating that retirement status might have become protective against poverty as government funding of the new social security system increased.

The impact of sector of employment changes over time. In 1988, being employed in a local state enterprise actually reduces the probability of being poor relative to employment in a central or provincial SOE. In that year, the proportions of poor employed in central/provincial units and in local units were 52 and 21 percent, respectively (see Appendix Table). By 1995, these had reversed to 15 percent central/provincial and 61 percent local. This explains why employment in a local enterprise was now associated with 4.4% higher probability of being poor than in a central enterprise. But by 2002 it appears to have made no difference. Indeed, in the CHIP sample for that year, the proportions of the poor with household heads in these two sectors were about the same (33 and 32 percent, respectively). Collective enterprise employment conducted to higher likelihood of being poor in 1988 and 1995, but no longer in 2002. The share of poor heads of households employed in collective enterprises fell from 24% in 1988 and 19% in 1995 to only 12% in 2002. By

contrast, poor household heads employed in the private sector increased significantly to 22% by 2002 from less than 5% in the previous years. Consequently, employment in the private sector is associated with an increased 1.7% probability of being poor in 2002.

Regarding employment tenure, contract or temporary status increases the likelihood of being poor in all years, but these results are not statistically significant. Contingent work has always carried pay and benefits inferior to those of full status state employees in China, and this was a well-known source of conflict during the cultural revolution years. The only unexpected aspect to the finding, therefore, is its lack of statistical significance.

Belonging to an ethnic minority had no significant impact on probability of poverty in the CHIP sample, but having a household head who belonged to the Communist Party was significantly protective against poverty in all three years.

With respect to characteristics of the household as a whole, both size of household and number of children were highly significant in predicting poverty. An additional household member raised the probability of being poor by 0.7% in 1988, 1.7% in 1995, and 0.7% again in 2002.²⁰ Having one child increased the probability by between one and three percent for all three years, relative to having no children. And that increase grew substantially in all three years for additional children: a second child raised it by 7% in 1988 and 2002 and by 21% in 1995; a third child raised it by 26% in 1988 and 2002 and by 45% in 1995. Of course we must be careful about assuming causation. It is possible that poor urban residents were likely to have more children, rather than that people with more children became poor or that both kinds of interaction were involved. Interestingly, we found

no significant effect for number of household members older than 60.²¹

Table 11.6 shows the macro-regional distribution of poverty rates in the CHIP samples.²² Hussain (2005) argued that such a broad definition of region hides much variation within each region, and he adopted instead a six-region breakdown that contains more homogeneous regions. However, with only 11 provinces included in the CHIP urban sample, so fine a definition is not possible, so we use the common east-central-west breakdown. This indicates that the highest poverty rates are found in the central region, except in 2002, when western rates equal central ones.

Table 11.6. Overall and Regional Poverty Rates (%)

Region	1988	1995	2002
Eastern	1	2	2
Central	11	14	4
Western	4	8	4
All	6	8	3

Source: Authors' calculations using CHIP data.

The probit results for region are consistent with this regional distribution. Residing in the central region is highly conducive to being poor, relative to the eastern region, but such a negative impact decreased between 1995 and 2002. Western location is also a cause of increased probability of poverty, although this also declines in 2002. The implication of these trends is that, while overall urban poverty was falling over time, the share of it in the eastern region was increasing, and such indeed was the case, with the east's share rising from 6 percent in 1988 to 19 percent in 2002 as shown in the Appendix Table.

In sum, urban poverty in China was highly regional in nature, but has become less so over time. It

is perhaps less associated with age than in the 1980s, but more associated with educational deprivation, contingent labor, and unemployment. More or less unchanging factors associated with urban poverty are non-SOE employment,²³ family size, number of children below 18 years and being a non-Party member.

Urban Poverty and Changing State Policies

The findings of Khan (2004) and Meng et al (2007) that urban poverty fell sharply after the mid-1990s, raise the question of whether this result was connected to an evolution in state policies toward a more “pro-poor” policy stance.

The rhetoric of Chinese government pronouncements suggests just such a policy evolution, at least since the 16th National Party Conference in 2003, which introduced the new leadership of Hu Jintao and Wen Jiabao. Premier Wen’s Report to the National People’s Congress in early 2004 heralded a shift from “blind pursuit of GDP growth” to a more balanced set of objectives that would be more people-centered, sustainable and equitable in pursuit of the longer-term goal of a “modestly well-off” (*xiaokang*) society. Subsequent rhetoric continued and enhanced this theme. Even before 2003 there was evidence of concern of the national leadership about the implications for social stability of growing inequality, increasing insecurity, and unchecked corruption. At the time of the “Asian crisis” in 1997-98, for instance, the government decided to counter the negative effects of the crisis on aggregate demand in China with a large domestic investment program of 100 billion yuan that would focus upon infrastructure development. Moreover, it was decided specifically to concentrate this spending in the more backward regions of western and central China. This grew into the

Western Development Initiative that was formally introduced in 1999. Various subsidies to poorer regions and people also began to increase during this period (Wong 2007). And Meng et al (2007) suggest that the decline in poverty after 1998 may have been due to the minimum livelihood guarantee (*dibao*) program, which was fully implemented after 1999.

There is other evidence of policy changes consistent with official rhetoric, as well. Khan (2004) found that urban growth was less disequalizing than before 1995, in the sense that (a) more GDP growth was reaching households as personal income, and (b) the gini ratio of urban household per capita income fell for the 1995-2002 period. For those reasons, and unlike the period from 1988 to 1995, when China's poverty fell relatively slowly in comparison with its rapid rate of economic growth, the post-1995 period has been characterized by a much higher gross income elasticity of poverty reduction with respect to per capita income.²⁴ For urban China, this elasticity rose from 0.1 to 2.6. In other words, a given amount of income growth was accompanied by far greater reductions in poverty between 1995 and 2002 than was the case earlier. Riskin (2007) attributed the fall in income inequality to improved distribution of housing income (both rental subsidies and imputed rental value of owned housing), a reduction in regressiveness of net taxes, and better targeting of welfare payments to low income residents. Gao (2005) showed that social benefits provided over 80 percent of total income for the lowest decile of the urban population, ranked by pre-tax pre-transfer income, in 2002. And Wong (2007) reported that state subsidies to local social security schemes, local minimum livelihood stipend programs and living stipends to workers laid off from SOEs had all burgeoned to significant amounts of money by the early 2000's. All of this suggests that the recent rhetoric of China's leaders promising the adoption of a more equitable growth strategy might have been effectively translated into more equitable policies. It is therefore

of interest to examine the composition of income of the urban poor and of those near the poverty line, to see whether direct subsidies and other benefits have been flowing to them in more significant amounts than before.

Figure 10.1 presents the composition of the income of the urban poor, as well as the near-poor (defined as those with incomes between the poverty line and 150% of the poverty line) and from this an interesting change can be seen: Over time, for both groups the share of earnings in total income first rises very sharply (1988 to 1995) and then falls again (1995 to 2002), though not to its original level.

The share of earnings in income rose from 1988 to 2002 mainly because of the decline in subsidies as transition to a market economy gathered force. Total subsidies fell from 39 percent of income in 1988 to 6 percent and 4 percent for the poor and near poor, respectively, in 2002. For the urban population as a whole, they fell from 39 percent of income to about 2 percent. But there was an important difference between the situation of the lowest income groups and that of the urban population as a whole: A large component of total subsidies had been the implicit rental subsidies comprised by very low rents on housing rented from one's work unit or from the state. As these subsidies disappeared over time, housing reform enabled higher income groups to purchase their housing (usually at big discounts from market prices) and receive the imputed rental value of their now privately-owned housing. The fall in rent subsidies was matched by the rise in imputed rents. But for the poor, this did not happen. Rent subsidies declined far more than imputed rents rose. This is shown in Table 11.7. Note that the sum of housing subsidy and rental value of owned housing remains stable at around 20 percent of total income for the urban population as a whole.

However, for the poor, this share is cut in half, falling from 20 percent in 1988 to 10 percent in 2002, and for the near-poor the decline is even sharper.

Figure 11.1. Share of Various Sources in Total Per Capita Disposable Income Among the Poor and Near Poor

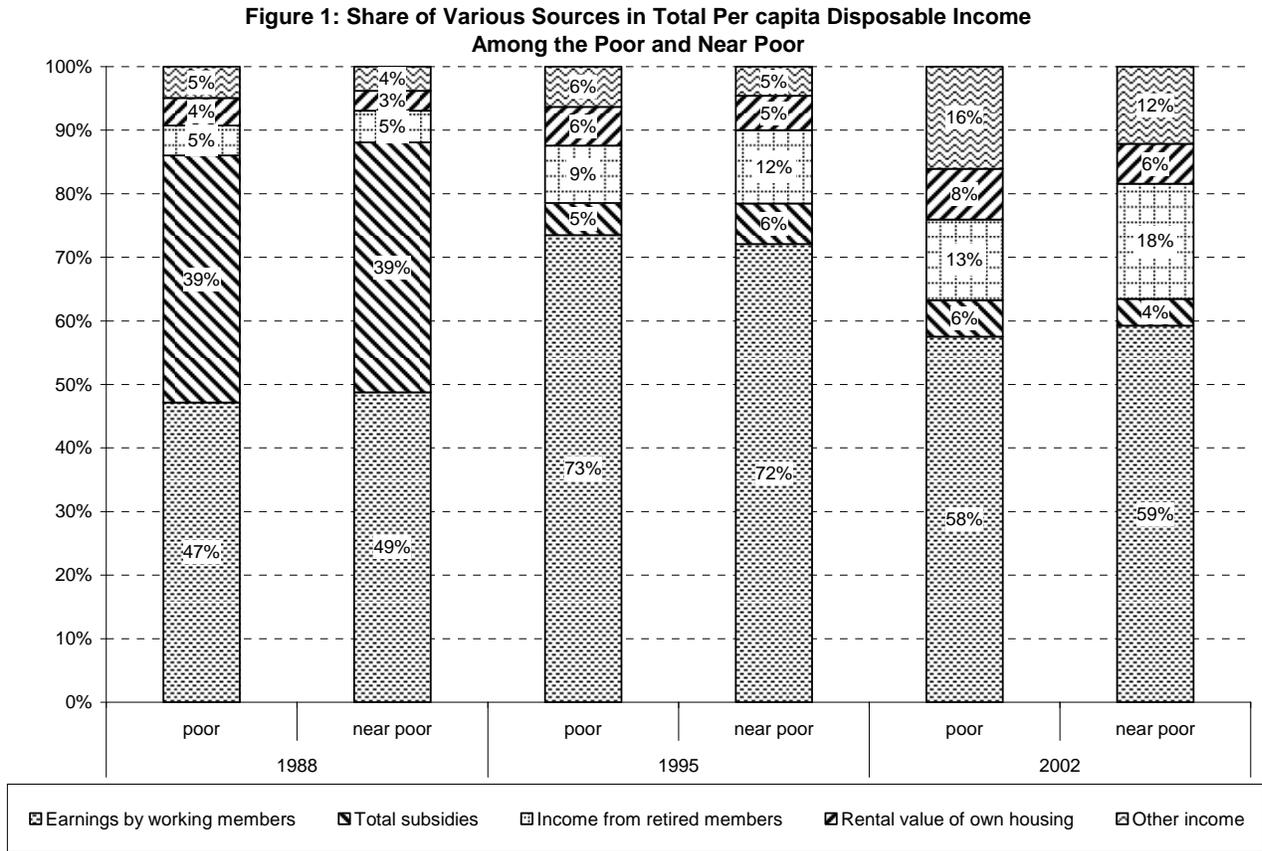


Table 11.7. Shares of Housing Subsidy and Rental Value of Owned Housing in Total Income of Poor, Near Poor and Urban Population (%)

	1988	1995	2002
Poor			
-Housing Subsidy	16	4	2
-Rental Value of Owned Housing	4	6	8
Near-Poor			
-Housing Subsidy	16	5	2
-Rental Value of Owned Housing	3	5	6
Urban Population as Whole			
-Housing Subsidy	18	10	2
-Rental Value of Owned Housing	4	11	18

There were two reasons for this growing relative deficit in “housing income” among the poor: first, their owned housing had less value than that of the non-poor; and second, fewer of the poor ended up with housing ownership in 2002. Of these two reasons, however, the first must have been considerably more important, since the relative deficit of the poor in home ownership was not large. Table 11.8 shows that home ownership increased from about 14 percent among all urban population in 1988 to over 79 percent in 2002, whereas for the poor it increased from 21 percent to 74 percent. Therefore, the lag in rental value of owned housing among the poor must be due mostly to low house values of the poor relative to those of the non-poor.

Table 11.8. Change in Home Ownership (% of families who own their homes in each group)

	1988	1995	2002
Poor	21	49	74
Near poor	14	42	77
Non poor	14	42	80
All	14	43	79

The other striking change shown in Figure 1 is a rise in the shares of income of retired persons and income from “other” sources over the period concerned, especially between 1995 and 2002. By 2002 these two components together comprised nearly 30 percent of the income of both the poor and the near poor, up from about 10 percent in 1988. For the poor, retirement income increased from 5 percent of total income in 1988 to 13 percent in 2002, and for the near poor it rose from 5 percent to 18 percent. This income was mainly from pensions, rather than post-retirement earnings (Table 11.9). The greater increase for the near poor suggests that one source of poverty may have been the inability of insolvent SOEs to fulfill their pension obligations to retired employees, a problem that may be in process of resolution as state infusions of funding into the new pension system have increased. On the other hand, the rise in retirement income of the poor/near poor mirrors its rise in the urban population as a whole from 6.8 percent of total income in 1988 to 14.8 percent in 2002, due to an aging workforce (Khan & Riskin 2005).

Table 11.9. Shares of Pension and of Post-Retirement Earnings in Income of Poor and Near Poor (%)

	1988	1995	2002
Poor Retirees			
-Pensions	4	9	12
-Earnings	0	0	1
Near-Poor Retirees			
-Pensions	4	11	16
-Earnings	1	1	2

“Other” income of the poor rises from 5 percent in 1988 to 16 percent in 2002, and that of the near poor grows from 4 percent to 12 percent. What is “other income”? It includes income from private enterprises, from property, and miscellaneous income that is mainly private transfers. Of these, the component that changed most notably was the first: income from private or individual enterprises,

as shown in Table 11.10.²⁵ By 2002 private/individual sector income comprised 11 percent of the income of the poor and 8 percent of that of the near-poor, both far higher than the 2.7 percent that it comprised for the urban population as a whole (Khan & Riskin 2005). There are two possible interpretations of the sharp rise in private sector income of the poor/near poor: one is that the spread of market-oriented activity presented an opportunity for low income residents frozen out of the formal economy by SOE reform to earn some income in the informal sector. The opposite side of this coin is that, with the disappearance of guaranteed employment and other welfare benefits, poor urbanites had nowhere else to turn for a living than to the informal sector. These are merely different ways of viewing the same facts. No doubt both are true, as the informal sector provided a resource to the poor but also represented for many a last resort.

Table 11.10. Share of Private/Individual Enterprise Income in Total Income (%)

	1988	1995	2002
Poor	1	3	11
Near poor	1	1	8

While this look at the composition of income of low income urban residents reveals some interesting changes, it does not in general support the view that greater welfare spending in the form of direct subsidies to the poor – except perhaps for pensions – played an important role in the decline in urban poverty rate between 1995 and 2002.²⁶ Table 11.11 examines direct subsidy payments to the poor and near poor other than housing subsidies and pension income. The table reveals that after the huge decline in such subsidies between 1988 and 1995 – they fell as a share of the income of the poor from 23 percent to 1 percent – there was a small recovery in 2002 to 4 percent. For the near poor the recovery was even smaller, making it difficult to argue that such

direct aid was responsible for their avoidance of poverty.²⁷

Table 11.11. Share of Income from Subsidies Other than Housing or Pensions in Total Income of the Poor and Near-Poor (%)

<i>Year</i>	<i>Poor</i>	<i>Near-Poor</i>
<i>1988</i>	23	23
<i>1995</i>	1	1
<i>2002</i>	4	2

In view of the abundant evidence, cited above, that state policy has begun to shift noticeably toward the promotion of a less inegalitarian approach to development, our inability to find much evidence of that in the household micro-data on urban poverty is striking. There are several possible explanations. The amounts of funding concerned, while growing rapidly, still amount to very modest sums on a per capita basis. Much state spending, e.g., investment in infrastructure in economically undeveloped regions, or to raise salaries of local government cadres, would not be targeted at the urban poor. There might be little overlap between those people our method identifies as poor and those who officially qualify for aid such as *dibao* (minimum livelihood program) payments. Much of the spending that has gone to fund new social insurance programs, such as the social security and unemployment insurance systems, goes to non-poor urban residents. Leakage inherent in China's decentralized fiscal system tends to cause money earmarked for poor people to be siphoned off at various intermediate levels before it reaches the intended beneficiaries. These and doubtless other reasons may explain the evidently limited penetration of urban poverty relief.²⁸

Summary and Conclusion

Urban poverty has only recently been put on the research and policy agenda in China and among scholars of Chinese poverty. In this paper we examine several different standards that have been used for defining and measuring it and the resulting estimates of poverty rate and trend. Estimates by Hussain (2002, 2005), Khan (2004), and Meng et al. (2007) seem most consistent with the recent economic history of urban China. These indicate an urban poverty rate between 2 and 8 percent for the period between the mid-1980s and 2002, depending on the exact year and the particular method used. These are very low rates in comparison with other large developing countries, but still well above the almost zero rates generated by the most austere poverty lines. Moreover, urban poverty followed a pattern of rising from the 1980s into the 1990s and then falling after about 1997. Rural-urban migrants are excluded from these analyses. Although their inclusion would raise the urban poverty rate, it is unclear what impact this would have on the trend of urban poverty.

An examination of the characteristics of the urban poor in 1988, 1995 and 2002 reached a number of conclusions. Regional location has been an important predictor of urban poverty, with higher poverty rates in central and western China than in the eastern coastal provinces. However, poverty rates have fallen in the central and western regions while remaining low and stable in the east, thus reducing the regional disparity. Employment in other than a state operated enterprise, living in a larger household, and having more children below 18 years of age all increase the probability of a household falling below the poverty line in all three years examined. A head of household who was very young (21-29 years) or relatively old (over 60) inclined a household toward poverty in 1988 and 1995 but not in 2002. Higher educational level was strongly protective against poverty and increasingly so through the three years. An unemployed head strongly inclined a household toward

poverty in 1995 and 2002, but the majority of the poor nevertheless lived in households whose heads worked. Having a head who was a member of the Communist Party slightly but significantly decreased the likelihood of a household being poor.

The decline in urban poverty from the late 1990s raises the question whether a change in government development strategy toward a more equitable one featuring increased income redistribution and strengthened social benefits programs for low income urbanites might have been an important cause of the decline. To test such a hypothesis, we examine the changing composition of the income of poor and near-poor urban residents. Like other urban Chinese, these have experienced a steep fall in most subsidies and benefits between 1988 and 2002. Only pensions increased substantially as a fraction of their total income, and this at least partly reflects an aging population as well as the shoring up of the financial status of the new pension system by the government toward the end of the period. Otherwise, there is no evidence of a significant impact of direct benefit payments on the incomes of the poor and near-poor. What distinguishes the composition of their income from that of the urban population as a whole is a much larger share of private (informal) sector income (8 percent for the poor compared with 2.7 percent for the entire urban population) and a much lower share of imputed rental income of owned housing (8 percent vs. almost 18 percent). Both of these differences are indications of disadvantage on the part of the poor.

China's social safety net and other benefits programs are still works in progress. While they have been injected with growing amounts of funding by the government in recent years, by 2002, with the possible and important exception of the new social security system, they were still not making a

measurable impact on urban poverty or near poverty. This does not imply that government policy bears no responsibility for the reduction in urban poverty after 1997, only that direct benefits programs other than pensions evidently were not the cause.

* We would like to acknowledge the gracious and useful help of Shaohua Chen, Athar Hussain and Xin Meng in answering queries about various issues dealt with in this paper. Thanks are also due to anonymous readers who provided useful comments.

¹ Amartya Sen (1983) puts this point particularly clearly, arguing that “absolute deprivation in terms of *capabilities* relates to relative deprivation in terms of commodities, incomes and resources.” On the other hand, Ravallion et al. (2007) argues that absolute poverty should be defined to rule out change in the aggregate measure of poverty from simply moving individuals between urban and rural areas (or countries) without change in their real consumption, and that, therefore, absolute poverty measures must have “a constant real value both between countries and between urban and rural areas within countries” (p. 7).

² It is true, however, that periodically during the pre-reform period these expectations fell short of full realization. Thus, when the pace of economic growth, using Soviet-derived capital-intensive technology, could not absorb all available urban labor, a form of de facto unemployment developed known as “waiting for work,” in which school graduates entering the workforce might wait many months to be assigned to a job. However, once assigned, their continued employment was guaranteed.

³ In addition to the basic general problem of using existing PPP estimates to examine poverty (Pogge and Reddy 2005), the problem in China is made more acute by the fact that China had not until very recently participated in an comprehensive price survey, which is what provides the empirical basis for a country’s PPP exchange rate. Thus, the empirical foundation for the use of the PPP\$1 a day poverty line for China has been very weak. The results of a new price survey for China was finally announced by the Asian Development Bank in 2007, which had the effect of

greatly reducing the PPP estimate of China's GDP and increasing the headcount of PPP \$1-per-day poor. See World Bank, 2008. See also Asian Development Bank, 2007; and Keidel 2007. This information became available too late to be incorporated in the present article, which therefore uses the World Bank's old PPP estimates.

⁴ For a description of the surveys, see Khan and Riskin (2001).

⁵ Diagnostic poverty rates are constructed to identify the poor, and are to be distinguished from what might be called "benefit lines," meaning cut-off thresholds for benefit eligibility. The latter are constrained by budget limitations and other policy considerations. See Hussain 2005, p. 7 ff.

⁶ The use of \$1PPP/day poverty line had been sharply criticized. See Pogge and Reddy, 2005.

⁷ Personal communication from David Dollar.

⁸ See National Bureau of Statistics 2003, Table 10.7, p. 348.

⁹ There is an enormous literature on poverty and its measurement, beginning perhaps with Sen (1976). For some accessible discussions of the issues, see Maxwell (1999) and Khan (2004).

¹⁰ It comes to 2291 yuan in 1995 and 2534 yuan in 2002. This amounted to 40% and 26% of average urban per capita income, in the two respective years. However, income as defined in Khan's study is quite a bit higher than the official estimate, and Khan's poverty line is also based on this definition of income. Khan also generated a "low" urban poverty line equal to 70% of the original line. We here discuss only the original one and its results

¹¹ They exclude Tibet because of its small sample size. The number of provinces grew from 29 to 30 with the elevation of Hainan to province status in 1990, and to 31 in 1997 with the elevation of Chongqing, previously part of Sichuan Province, to separate provincial status. Meng et al (1995) kept Chongqing in Sichuan for the duration of their series (Source: communication from Xin Meng).

¹² Relative austerity also depends on time, which correlates with level of income. The higher the mean income, the smaller the ratio of any given poverty line to it, *ceteris paribus*.

¹³ The high figure of 60% is unlikely to apply to any actual locality, because the localities with the most generous minimum livelihood lines (e.g., Shanghai) also have the highest average incomes, so their percentage would be lower than 60%. Conversely, localities with the lowest lines are likely to have lower incomes, thus raising their percentages above 14%.

¹⁴ Hussain used a 1999 one-time survey of urban residents, including migrants, which collected information for only the single month of August in which the survey was carried out rather than for a full year, as in the case of the regular household incomes surveys. This has obvious disadvantages, among them the inability to distinguish between “temporary” and “permanent” income. Many more households were found to report zero income, for instance, than typically do in the normal household surveys.

¹⁵ Hussain’s estimate of 10.3% for permanent residents does not contradict his finding of a 4.7% rate reported in Table 2. The former rate derives from a different and more limited sample, corresponding to the one for migrants (see previous note), and a different methodology.

¹⁶ The decline in urban poverty is also consistent with the finding of Ravallion et al. (2007) that China has experienced a “ruralization of poverty” since the late 1990s, in the sense that the urban share of PPP\$2 per day total poverty has fallen.

¹⁷ See Deaton and Kozel (2005). The reported decline in poverty is controversial and the 1999/2000 figure represents a lower bound.

¹⁸ The samples are described in Khan and Riskin (2001, 2005).

¹⁹ Meng et al (2007) do not directly examine unemployment as a contributor to poverty. It is implicitly present in the characteristic, “% of members working”, the reciprocal of the dependency rate.

²⁰ Meng, et al. (2007) also showed household size to be highly significant, and also find this effect to rise from 1986 until 1997 and then to fall again.

²¹ Meng et al. (2007) showed mixed results with respect to seniors, whom they identify as those over 65 and break down by sex. For some years in their series they got significant coefficients and for others they did not. For the two years that overlap with our surveys, 1988 and 1995, they got significant results only for older women in 1988.

²² For a discussion of the geographic distribution of the population, and other demographic characteristics as derived from the 2000 census, see Fan 2002).

²³ The distribution of income from employment in the private sector is bipolar, including many poor self-employed in the informal sector, as well as some well-off employees of large private or foreign invested enterprises (see Khan and Riskin 2005). On balance, the coefficients on private sector employment in the probit exercise are positive and significant. If the sample could be broken into its two parts and only the first examined, we conjecture that the coefficients would be much higher and the significance level greater.

²⁴ The gross elasticity of poverty reduction is defined as the percentage decline (rise) in poverty rate divided by the percentage rise (decline) in per capita income. Thus, it includes poverty changes caused by other factors than income.

²⁵ “Individual enterprises” are private enterprises with a small number of employees. The term was a means by which the state permitted the spread of private economic activity while using an

ambiguous nomenclature that avoided the ideologically loaded term, “private” and thus reduced the risk of going into business.

²⁶ Of course, other progressive changes in policy could have played a role in reducing poverty, such as providing job retraining or early retirement to laid off workers, pumping funds into the new social security program, or simply investing in labor –intensive activities that would provide employment.

²⁷ For those below Khan’s lower poverty line, equal to 70% of the one we are using in this paper, the shares of subsidy income in total income of the poor and near-poor are slightly higher, 6% and 4%, respectively.

²⁸ A new study of the effectiveness of China’s Minimum Living Standard program finds that, while the MLSA program slightly reduced the observed poverty rate of program participants in 2002, using the same poverty line as in this paper, it had virtually no impact on the poverty rate among all eligible people (including non-participants). See Gao et al, (2007).

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Appendix: Demographic Characteristics of Poor Families

	1988	1995	2002
<u>Household Head Characteristics</u>			
Age (mean)	42.85	43.30	47.14
21-29	7%	9%	3%
30-39	30%	34%	24%
40-49	40%	29%	39%
50-59	19%	16%	19%
60+	4%	11%	15%
Ethnic Minority	3%	7%	5%
CCP Member	22%	23%	12%
Education (mean years of schooling)	NA	8.99	8.28
primary school or less	29%	18%	20%
junior high school	42%	37%	50%
senior high school	14%	20%	22%
secondary technology school	9%	12%	5%
2-year college	5%	9%	3%
4-year college+	2%	3%	0%
Employment Status			
employed	93%	81%	61%
retired	7%	15%	16%
unemployed	0%	4%	23%
Among those who were employed...			
Employment Sector			
state-owned, central/provincial	52%	15%	33%
state-owned, local	21%	61%	32%
urban collective	24%	19%	12%
private sector	3%	5%	22%
Employment Tenure Nature			
permanent	96%	76%	25%
contract (short- or long-term)	1%	19%	50%
proprietor or self-employed	2%	4%	19%
other	0%	1%	5%
<u>Household Characteristics</u>			
Household Size (mean)	4.71	3.87	3.73
Number of Children <18 (mean)	1.86	1.17	0.93
0	7%	14%	24%
1	26%	57%	60%
2	45%	27%	15%
3+	22%	2%	1%
Number of Children <6 (mean)	0.32	0.30	0.16
Number of Elders >60 (mean)	0.27	0.36	0.40
0	80%	73%	71%
1	14%	17%	18%
2+	6%	9%	10%
Number of Elders >65 (mean)	0.20	0.25	0.27

Region			
eastern	6%	11%	19%
central	80%	62%	47%
western	13%	27%	34%

Note: "NA" indicates data unavailable.

Source: Authors' calculations using the CHIP data.