

## CHAPTER TWO

# Market versus Social Benefits: Explaining China's Changing Income Inequality

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During the late twentieth and early twenty-first centuries, much of the world experienced increased economic inequality. The increase occurred among countries of the OECD (Atkinson 2003), as well as in such capitalist developing nations as India, Nepal, Bangladesh, and Sri Lanka in South Asia (World Bank 2006) and the major postsocialist economies such as Russia (Kislitsyna 2003) and China (Chen and Ravallion 2004; Khan and Riskin 2005). The Chinese case, however, is distinctive because after income inequality surged exceptionally fast, it appears to have plateaued or even slightly declined. For example, using the national China Household Income Project (CHIP) survey data, Khan and Riskin (1998, 2005) found that after sharp increases between 1988 and 1995, income inequality between 1995 and 2002 declined slightly in urban areas and quite substantially in rural areas.

The CHIP data used by Khan and Riskin contradicted earlier findings by the Chinese National Bureau of Statistics (NBS) and by others who have used NBS official data. For instance, Ravallion and Chen (2004) found that income inequality within both urban and rural populations had continued to rise between 1995 and 2001. The NBS data, however, disregard important (and rapidly changing) components of real income, such as rental value of owner-occupied housing and employer and government subsidies. By contrast, the CHIP data that document increase followed by decrease incorporate these additional income components. In this chapter, we return to analysis of the most recent CHIP data to demonstrate the value of developing more comprehensive measurement of per capita household income both to estimate trends over time and to identify the sources of change. In particular, unlike the studies that draw on the NBS data, we examine how changes in the relative importance of market and nonmarket sources of income account for the initially counterintuitive finding of reduced inequality among rural households and only slightly increased inequality in the cities since 1995.

In this chapter, we focus on the respective roles of market economy and social benefits in explaining changes in income inequality in urban and rural areas of China. Conceptually, these two central driving forces of changing income inequality could reinforce or offset each other's impact: If market

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reforms widen income gaps and if social benefits are distributed regressively, benefits will strengthen this market effect and further enlarge gaps. In contrast, if social benefits are distributed progressively, they will offset the market impact and narrow income gaps.

Riskin (2007) tentatively concluded that social policy was primarily responsible for at least temporarily halting the march toward greater inequality in China's cities and towns. We now take a more detailed look at social policy, and in particular at the impact of changes in social benefit programs. To date, the literature on income inequality has privileged the impact of the overall growth rate and microlevel elements of the structure and characteristics of the market economy. The important redistributive role of social benefit transfers has rarely been considered. In one of the first papers to assess the impact of social policies, Gao (2006, 2008) found that although specific urban social benefits (mainly cash transfers, including pensions, Minimum Living Standard Assurance [MLSA] subsidy and unemployment subsidy) significantly reduced income inequality in both 1988 and 2002, they were unable to close the rising income gap. By contrast, social benefits were minimal among rural households and had little impact on income inequality for this population during the same time period.

To build on prior work (Gao 2006, 2008; Riskin 2007), this chapter brings together the two sets of key factors—market developments and social policy changes—in explaining China's income inequality. We estimate the magnitude of their respective impact as well as their interaction. We will present changes in levels and composition of household per capita income and the contributions to it of market earnings and social benefits over time. To achieve this, we make fuller use of the CHIP data by including the previously underutilized data on various in-kind social benefits, including health, housing, food, and other in-kind transfers. We include their cash value in estimates of total household per capita income package and explore how each type of transfer impacts income inequality.

However, it is important to note the complex nature of both market economy and social policy in the Chinese context, as well as the interdependent relationship between the two forces. First, social policies have market consequences. For instance, the state decision in the late 1990s to invest heavily in infrastructure in backward western regions created wage-earning jobs among the rural population. The income from these jobs shows up as "market income" despite its source in state policy. Indeed, the market economy itself in China is far from being a *laissez-faire* model and has been guided and shaped by government policies and interventions in a myriad of ways.

Second, social policy reforms since the early 1980s have been heavily driven by economic reform objectives. They were initiated mainly to facilitate market economy reforms and to stimulate economic growth and efficiency

through reducing the heavy financial burdens of welfare provision borne by the state-owned and collective enterprises. For example, the provision of pensions and health insurance was shifted from being the sole responsibility of state-owned and collective enterprises to being shared among employers, employees, and the government. Urban housing has been privatized over time, also to relieve the housing provision responsibility of state-owned and collective enterprises, but has favored the more privileged in this process.

#### DATA AND METHODS

This chapter uses all three waves (1988, 1995, and 2002) of data from the CHIP project, a national cross-sectional study collectively designed by a team of Chinese and Western scholars and conducted by the Institute of Economics at the Chinese Academy of Social Sciences. Samples of the CHIP study were drawn from larger NBS samples using a multistage stratified probability sampling method. The CHIP study is arguably the best publicly available data source on household income and expenditures and includes sample provinces from eastern, central, and western regions of China. The CHIP urban sample includes 9,009 households in 1988, 6,931 households in 1995, and 6,835 households in 2002; the rural sample includes 10,258, 7,998, and 9,200 households in the three years, respectively (Khan and Riskin 2005; Riskin, Zhao, and Li 2001).

We adopt a comprehensive measure of total household per capita income, which includes "market income," cash and in-kind social benefits, and private transfers, less taxes and fees paid. In urban areas, "market income" (hereafter used without quotation marks) is made up of wages, income from private enterprises, property income, and rental value of owner-occupied housing. In rural areas, market income includes wages, income from family farming and nonfarm activities, income from property, rental value of owner-occupied housing, remittance income sent back by members working outside the household, and other miscellaneous income.

Rental value of owner-occupied housing is included because it is a standard component of the conventional definition of income throughout the world. Owned housing is a valued asset whose services would be costly if rented in or out. Still, the reader should be aware of the somewhat tenuous basis for the estimates of this income component, which were made either by residents themselves or from calculations based on house value. Such estimates may be imperfect reflections of the actual market value of housing service, especially in an incompletely marketized economy.

In both urban and rural areas, social benefits are composed of cash transfers and in-kind benefits, including health, housing, food, and other in-kind benefits. The inclusion of health benefits changes the conventional

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definition to one broader than that used in earlier analysis of CHIP data by Khan and Riskin (1998, 2005). Cash transfers are further divided into three subtypes: social insurance (mainly pensions, sometimes also living subsidies to older persons), supplementary income (price and regional subsidies in urban areas), and public assistance (living hardship subsidy, relief benefits, living subsidy for the urban laid-off, and the MLSA subsidy). Household per capita income is calculated to take into consideration household size and the economies afforded by resource pooling among household members. Official urban and rural Consumer Price Indices (CPI) are used to convert 1988 and 1995 values to constant 2002 values, for urban and rural areas respectively.<sup>1</sup> See Table 2.1.

#### INCOME INEQUALITY TREND REVISITED

We first explore whether or not our expanded definition of household income generates the same trend of income inequality among CHIP respondents as reported by Khan and Riskin (1998, 2005). Note that the only difference between our definition of household final income and theirs is the inclusion of the medical care expenses covered by the work unit, government, or collective, and the cash value of in-kind health services, as reported by survey participants.<sup>2</sup> When these various social benefit transfers are considered, we find that, in contrast with the pattern uncovered by Khan and Riskin (1998, 2005), in which urban inequality decreased slightly after 1995, our urban Gini for total income keeps increasing—although only very slightly—from 0.34 in 1995 to 0.35 in 2002, after a much sharper rise from 1988 (see Table 2.2). Such a change in urban income inequality trends therefore suggests

TABLE 2.1  
*Changes in household per capita income and social benefits in urban China*

	LEVELS (¥)			COMPOSITION (%)		
	1988	1995	2002	1988	1995	2002
Market income	2,480	4,744	8,054	54	73	78
Social benefits	1,997	1,738	2,559	44	27	25
Cash transfers	433	721	1,570	9	11	15
Social insurance	280	684	1,443	6	10	14
Supplementary income	153	34	81	3	1	1
Public assistance	1	2	46	0	0	0
Health	186	325	684	4	5	7
Housing	862	629	246	19	10	2
Food assistance	510	43	47	11	1	0
Other in-kind	6	19	12	0	0	0
Private transfers	108	120	170	2	2	2
Taxes and fees	-9	-80	-450	0	-1	-4
Total household income	4,576	6,521	10,333	100	100	100

that health subsidy, the social benefit included in our measure but not in that of Khan and Riskin, was distributed more regressively in 2002 than in 1995, which led to wider gaps in final household income. Indeed, market income, which omits health benefits as well as other social benefits, private transfers, and taxes, follows the Khan and Riskin trend, with inequality almost constant between 1995 and 2002 with a Gini ratio of 0.31 in both years.

The rural inequality trend estimated by our measure, however, remains consistent with that of Khan and Riskin. The rural Gini for total income declined quite significantly from 0.42 in 1995 to 0.37 in 2002, but remained higher than that of 1988 (0.36). With social benefits amounting to less than 1 percent of income in all three years, the close correspondence between the concentration ratios for market income and the Ginis for total rural income (see Tables 2.3 and 2.4) confirms that income inequality trends in rural China have been driven by changes in the market economy and that the redistributive role of social benefits has been marginal.

#### URBAN INCOME INEQUALITY

Between 1988 and 2002, urban per capita household incomes increased and the relative share of different market and nonmarket sources shifted (see Table 2.1). The CPI-adjusted total household per capita income increased from ¥4,576 in 1988 to ¥6,521 in 1995, and then jumped to ¥10,333 in 2002. In terms of income components, however, the most dramatic shift was from 1988 to 1995. In 1988 market income made up 54 percent of total income, social benefits contributed 44 percent, and urban families paid virtually no taxes. By 1995, the share of market income had increased to 73 percent of total income, social benefits dropped sharply to only 27 percent, and families paid 1 percent of their income in taxes. From 1995 to 2002, the share of market income increased slightly to 78 percent, social benefits fell to 25 percent, and tax payments rose to 4 percent of total income.

Table 2.2 details the effect of each income source in shaping urban income inequality over time. Column (1) of the top panel shows the share of each market income component in total household per capita income in the three years. Wage income, the largest component, increased from 49 percent in 1988 to 60 percent in 1995 and then fell back slightly to 58 percent in 2002. The other notable change from 1995 to 2002 was the sharp increase in rental value of owner-occupied housing, from 11 percent to about 17 percent of total income. This was a consequence of the implementation of housing reform, which privatized ownership of most urban housing. The increase in rental value of housing is mirrored by the fall in in-kind housing subsidy (from 10 percent in 1995 to 2 percent in 2002) going to renters, as the number of renters sharply declined.

TABLE 2.2  
Urban income inequality and its sources

Source	(1)	(2)	(3)
	Share of total income (%)	Gini/concentration ratio*	Contribution of income source to overall inequality (%) (col. 1) × (col. 2)/G

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 Urban income inequality and its sources

Source	(1)			(2)			(3)			
	Share of total income (%)			Gini/concentration ratio*			Contribution of income source to overall inequality (%) (col. 1) × (col. 2)/G			
	1988	1995	2002	1988	1995	2002	1988	1995	2002	
Market income										
Total market income	54.18	72.74	77.94	0.20	0.31	0.31	48.01	66.17	69.64	
Wages	48.99	59.98	58.31	0.18	0.24	0.30	39.59	43.68	50.77	
Income from private enterprises	0.79	0.51	2.59	0.39	0.01	0.04	1.34	0.01	0.29	
Property income	0.50	1.23	0.52	0.43	0.47	0.45	0.94	1.72	0.68	
Rental value of owner-occupied housing	3.90	11.03	16.68	0.36	0.63	0.37	6.13	20.75	17.75	
Social benefits										
Total social benefits	43.65	26.65	24.76	0.25	0.41	0.46	48.10	32.75	33.03	
Total cash transfers	9.47	11.05	15.20	0.33	0.32	0.33	13.62	10.66	14.36	
Social insurance	6.12	10.49	13.97	0.42	0.33	0.34	11.48	10.32	13.61	
Supplementary income	3.33	0.52	0.78	0.15	0.19	0.40	2.14	0.29	0.91	
Public assistance	0.01	0.04	0.45	-0.04	0.43	-0.12	0.00	0.05	-0.16	
Total in-kind transfers	34.18	15.61	9.57	0.23	0.48	0.67	34.48	22.09	18.67	
Health	4.07	4.99	6.62	0.19	0.45	0.83	3.43	6.73	15.89	
Housing	18.83	9.65	2.38	0.30	0.51	0.31	25.08	14.54	2.12	
Food	11.14	0.67	0.45	0.12	0.27	0.40	5.73	0.53	0.53	
Other in-kind	0.14	0.30	0.12	0.41	0.32	0.39	0.25	0.29	0.13	
Private transfers	2.36	1.84	1.65	0.40	0.38	0.37	4.14	2.06	1.77	
Taxes and fees	-0.19	-1.23	-4.36	0.29	0.27	0.35	-0.24	-0.98	-4.43	
Total income	100	100	100	0.23	0.34	0.35	100	100	100	

\*The "Gini/Concentration Ratios" for total income are Gini ratios; for all income components they are concentration ratios.

Column (2) shows the concentration ratios of income sources, along with the Gini ratio for total income. The concentration (or "pseudo-Gini") is a measure of the inequality of distribution of a particular income source (e.g., wages). It is measured analogously to the Gini itself, except that it measures the distribution of an income source over all income recipients, rather than just over recipients of that source (which would be a true Gini). It has the convenient property that, when multiplied by the source's share of total income and then summed over all sources, it yields the Gini for all income.<sup>3</sup> Thus, the product of the concentration ratio (shown in column 2) and income share of an income source can be interpreted as the absolute contribution of that source to total inequality.

For components of market income, the most striking aspect is the great jump in inequality of rental value of owner-occupied housing between 1988 and 1995, followed by an equally sharp decline in inequality in 2002. The reason for this pattern is discussed below. The concentration ratio of total social benefits begins in 1988 (0.25) at a level about equal to the overall Gini coefficient (0.23); however, it then rises well above the Gini in 1995 and 2002, which implies that, contrary to the usual expectation that social benefits are to be targeted to the poor and vulnerable, in urban China they became a disequalizing component of income, in the sense that an increase in their share of income, *ceteris paribus*, would raise overall inequality. We discuss this further below.

The relative contributions of each source to the urban Gini are shown in column (3) of Table 2.2. The contributions of each source (top panel) indicate that market income inequality was dominated by wage income, whose contribution to overall inequality rose over time, reaching 51 percent in 2002. Rental value of owner-occupied housing also increased its contribution to overall inequality sharply between 1988 and 1995, but the ensuing years saw a decline both in inequality of this income source and in its contribution to the overall Gini coefficient.

Such a transition largely reflects the course of housing privatization in urban China. After a series of housing reform trials in different cities, the government started nationwide housing reform in 1988, including rent increases and the sale of public housing mostly to its occupants (Gao 2006). Therefore, in 1988, few urban residents (18 percent in the CHIP sample) owned their own housing while the majority still lived in free or heavily subsidized public housing. As the reform progressed, by 1995, a bigger group of privileged urban residents had been given priority to purchase housing from their work units at heavily subsidized prices, yielding both a higher share of housing value in final income and a much higher inequality of distribution of this income source. The government began to build generally affordable and functional housing in 1998 and introduced the publicly accumulated

housing fund nationwide for subsidized purchases, greatly increasing inequality in rental

Changes in total market income. As shares were slightly proportional (ratio = 0.29) than substituted only a very little impact on the 1 percent of income concentration ratio = 0 were now regression came to over 4 percent (concentration ratio the Gini ratio is

A designated impact on urban carried out in large compositions of 2006, 2008). Welfare share dropped of benefits varied the difference between from 19 percent to 2 percent in 2006. "Benefits" were primarily income (income to only ¥34 in 2006 dropped from

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housing fund nationwide in 1999. These reforms, as well as the spread of subsidized purchase opportunities more widely among the urban population, greatly increased urban housing ownership while sharply reducing inequality in rental value of housing by 2002.

Changes in tax policies in urban China accompanied the changes in market income. As shown in the bottom panel of Table 2.2, urban taxes in 1988 were slightly progressive, being distributed more unequally (concentration ratio = 0.29) than total per capita income (Gini = 0.23). However, they constituted only a very small share of total income (–0.19 percent) and thus had little impact on overall income inequality. By 1995, taxes had risen to over 1 percent of income and were distributed somewhat less unequally (concentration ratio = 0.27) than total income (Gini = 0.34), signifying that taxes were now regressive. By 2002, the ratio of taxes to total per capita income came to over 4 percent and they were distributed proportionally to income (concentration ratio and Gini both equal to 0.35). This made their impact on the Gini ratio essentially equal to their share of income (–4.4 percent).

A designated redistributive mechanism, social benefits have an important impact on urban income inequality, and the major social welfare reforms carried out in late 1980s have had a major impact on the changing levels and compositions of social benefits across the three different CHIP surveys (Gao 2006, 2008). While overall absolute value of all social benefits rose, the relative share dropped significantly and the relative importance of different types of benefits varied quite dramatically. For example, housing benefit, which is the difference between estimated market rent and rent actually paid, dropped from 19 percent of total income in 1988 to 10 percent in 1995 and only 2 percent in 2002. Food benefits, the second largest component of in-kind benefits in 1988, similarly became insignificant by 2002. “Other in-kind benefits” were minimal in all three years. Similarly the total value of supplementary income (i.e., price and regional subsidies) decreased from ¥153 in 1988 to only ¥34 in 1995 before rising to ¥81 in 2002, and its share in total income dropped from 3 percent in 1988 to only 1 percent in 1995 and 2002.

By contrast, the value of cash transfers increased from ¥433 in 1988 to ¥721 in 1995 and ¥1,570 in 2002, and their share in total income grew greatly from 1988 (9 percent) to 2002 (15 percent). The value of health benefits also increased from ¥186 in 1988 to ¥325 in 1995 and ¥684 in 2002, and its contribution to total household per capita income increased from 4 percent to 5 percent and then to 7 percent. The welfare policy reforms, however, actually had cut the levels and coverage of health benefits. Such an increase in amounts, therefore, most likely reflects the dramatic rise in health care costs and increased health consciousness among the public (Gao 2006).

The value of public assistance also increased dramatically from its original minimal level (¥1 in 1988 and ¥2 in 1995 to ¥46 in 2002). Although



public assistance still contributed only a very small portion of final per capita income, such an increase reflects the beginnings of government's effort to provide a basic safety net to the newly emerged urban poor since the mid-to-late 1990s, mainly through the MLSA program and unemployment living subsidy.

Both cash transfers and health benefits can be conceptualized as "equity-oriented" benefits, but do the above results indicate that the welfare reforms improved this set of benefits? One could argue that cash transfers were less necessary in premarket reform days, so that their increase in value represents less of an improvement in benefits than a cost of coping with the new levels of personal insecurity associated with the market. Moreover, the inequality of distribution of health benefits became quite extreme by 2002, which is not what one expects in a successful social benefits program. A closer look at benefits can distinguish the "intended" and "unintended" aspects of equity promotion. The biggest increases were in pensions and health, which were largely the unintended consequences of demographic trends, in the one case, and of health care price increases, in the other. Public assistance is the only component that can be clearly identified as an "intended equity-oriented" benefit, serving as a safety net for the poor. Another embedded goal of public assistance, of course, is to prevent social unrest and ensure political stability. Nonetheless, many progressive policies have found their origin in practical political motives, which should not detract from their progressive identity. It is less clear whether changes in supplementary income were "intended" or not.

The middle panel of Table 2.2 further explores the distributions of each social benefit component over all income recipients and their relative contributions to total inequality. Overall, total social benefits were distributed more and more unequally over time, both absolutely and relative to overall income inequality, as indicated in column (2). Compared to the overall Gini of 0.23 in 1988, the concentration ratio of total social benefits was 0.25 in 1988; in 1995, it was 0.41 (Gini = 0.34), and in 2002, 0.46 (Gini = 0.35). Contrasting cash and in-kind benefits, we find that the changing distribution patterns of the three types of cash benefits largely offset each other, yielding an almost constant concentration ratio for total cash benefits over time. More specifically, the inequality level of social insurance decreased after 1988 and that of supplementary income increased in 2002. Public assistance is the only category displaying a negative concentration ratio (except for the somewhat anomalous value in 1995), which signifies that more of it, appropriately, went to the poor than the rich. When it comes to in-kind benefits, all except for housing became more unequal over time, resulting in much increased concentration ratios for total in-kind benefits (from 0.23 in 1988 to 0.67 in 2002). The concentration ratio of total in-kind

benefits in 1995 was distributed more than Gini coefficient ratio for health percentage poor overall Gini

The concentration ratio in 1995 (3) of Table 2.2 shows a share (48 percent) of economic activity of market income in 1995 and 7 percent in 1995 contributed between the

#### RURAL INCOME

Rural income is significant. It was mainly from nonfarm income.

Table 2.2 shows levels and trends in per capita social insurance fees paid and then marginal income in 1995 and private contributions to the dominant income of benefits in shaping social benefits.

Table 2.2 shows of various market income all year

benefits in 1988 was the same as the Gini for total income, while they were distributed much more unequally in later years (concentration ratios larger than Gini coefficients). Particularly striking is the very high concentration ratio for health benefits (0.83) in 2002, which all by itself explains 16 percentage points of the 19 percent contribution of all in-kind benefits to the overall Gini.

The contribution of total social benefits to overall inequality was 48 percent in 1988, and 33 percent in both 1995 and 2002, as shown in column (3) of Table 2.2. In 1988 total social benefits were contributing the same share (48 percent) of income inequality as was market income. However, as economic and social welfare reforms progressed, the relative contribution of market income to overall inequality grew rapidly, reaching 66 percent in 1995 and 70 percent in 2002, pushing that of social benefits lower (33 percent in 1995 and 2002).<sup>4</sup> Among social benefits, in-kind benefits constantly contributed more to inequality than cash transfers although the difference between the two contributions declined over time.

#### RURAL INCOME INEQUALITY

Rural income inequality, regardless of which definition is used, increased significantly from 1988 to 1995 but then dropped between 1995 and 2002. It was mainly driven by changes in wages, income from family farming and nonfarm activities, rental value of owner-occupied housing, and taxes.

Table 2.3 presents the changing patterns of household per capita income levels and structure in rural China. Per capita market income increased from ¥1,874 in 1988 to ¥2,500 in 1995 and ¥3,187 in 2002. At the same time, per capita social benefits for rural families remained at a minimal level, despite a slight increase from ¥11 in 1988 to about ¥20 in 1995 and 2002. Taxes and fees paid by families increased from ¥39 per capita in 1988 to ¥99 in 1995 and then declined to ¥85 in 2002, and their share in total income remained marginal and largely constant (from -2 percent in 1988 to -4 percent in 1995 and -3 percent in 2002). As a result, the positive (social benefits and private transfers) and negative transfers (taxes and fees) offset each other in contributing to the total income package, leaving market income the dominant income component. Therefore, even before considering the distribution of benefits and taxes, it is clear that market income played the dominant role in shaping income inequality in rural China, and the redistributive roles of social benefits and taxes were very small.

Table 2.4 details the distribution patterns and contributions to inequality of various components of total household per capita income. Overall, market income was distributed slightly more equally than total income across all years, as indicated by slightly lower concentration ratios as compared to

TABLE 2.3

	LEVELS (¥)			COMPOSITION (%)		
	1988	1995	2002	1988	1995	2002
Market income	1,874	2,500	3,187	100	102	99
Social benefits	11	21	20	1	1	1
Cash transfers	9	14	17	0	1	1
Social insurance	6	6	16	0	0	0
Supplementary income	0	0	0	0	0	0
Public assistance	3	8	2	0	0	0
Health	0	1	1	0	0	0
Housing	0	0	0	0	0	0
Food assistance	1	0	0	0	0	0
Other in-kind	1	6	2	0	0	0
Private transfers	34	22	83	2	1	3
Taxes and fees	-39	-99	-85	-2	-4	-3
Total income	1,881	2,444	3,205	100	100	100

The separate components of market income had quite different effects on overall inequality. First, wages, which had been highly disequalizing in 1988 and 1995, became much less so in 2002 as its concentration ratio dropped sharply even as its share of income grew. Wages contributed 27 percent of overall inequality in 1988, 39 percent in 1995, and 36 percent in 2002. The reduction from 1995 to 2002 was a major contributor to the overall decline in rural inequality during that period (Riskin 2007).

Second, between 1995 and 2002, income from family farming activities both fell substantially as a share of total income and became somewhat more equally distributed. Both changes worked to reduce sharply the relative contribution of this income source to the overall Gini ratio (from 27 percent to 22 percent). The opposite happened to income from family nonfarm activities: it both increased as a share of total income and became even more unequally distributed than it had already been.<sup>5</sup> These changes caused the relative contribution of family nonfarm income to overall inequality to grow from 12 percent of the Gini in 1995 to 18 percent in 2002.

TABLE 2.4

Source	(1)			(2)			(3)		
	Share of total income (%)			Gini/concentration ratio **			Contribution of income source to overall inequality (%)		
	1988	1995	2002	1988	1995	2002	1988	1995	2002
Market income	58.1	58.1	58.1	38.5	38.5	38.5	18.8	18.8	18.8
Government income	12.2	12.2	12.2	12.2	12.2	12.2	6.1	6.1	6.1
Private pension income	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8	0.8
Public pension income	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8	0.8
Other income	24.7	24.7	24.7	46.3	46.3	46.3	12.5	12.5	12.5
Total	96.0	96.0	96.0	100.0	100.0	100.0	39.0	39.0	39.0

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## Rural income inequality and its sources

\*The "Gini/Concentration Ratios" for total income are Gini ratios; for all income components they are concentration ratios.



Third, and very importantly, the share of rental value of owner-occupied housing in total household per capita income grew continuously from 9 percent in 1988 to 12 percent in 1995 to 14 percent in 2002. As the same time, the distribution of this income component became more and more unequal over time: Its concentration ratio (0.29) started well below the overall Gini (0.36) in 1988 and, while rising, remained lower than the faster rising Gini in 1995. By 2002, however, its concentration ratio increased to 0.37, identical to the overall Gini. Correspondingly, the rental value of owner-occupied housing accounted for more and more of overall income inequality over time, contributing 8 percent of the Gini in 1988, 9 percent in 1995, and 14 percent in 2002. Such a changing pattern reflects the great value placed by rural people on home ownership since the economic reforms, the ability of wealthier households to invest more in housing than less wealthy ones, and the increasing (and increasingly differentiated) prices of land and houses in rural areas.

Fourth, income from property and remittance income sent back by members working outside the household were distributed much more unequally in 2002 than in 1995. However, their contributions to overall inequality changed differently during the period: The contribution of income from property increased while that of remittance income decreased. Both remained a very small portion of final income and thus did not have a major impact on overall inequality.

Table 2.3 also presents the levels and composition of social benefits in rural China over time. The most significant characteristic is the lack of both cash and in-kind benefits to rural residents. There were minimal cash transfers (making up 1 percent of total household per capita income or less) in all three years—although their value increased over time from only ¥9 in 1988 to ¥14 in 1995 and ¥17 in 2002—and almost none of the important in-kind forms of support that urban families routinely received for health, housing, and food. The value of public assistance, a benefit targeting the very poor, increased slightly from a minimal ¥3 in 1988 to ¥8 in 1995, but dropped to ¥2 in 2002.<sup>6</sup>

The middle and bottom panels of Table 2.4 show the effects of social benefits and taxes on overall income inequality. As pointed out earlier, social benefits contributed less than 1 percent of total rural income in any of these three years. The small difference between cash and in-kind benefits converged between 1988 and 1995 and then diverged again between 1995 and 2002. By 2002, in-kind benefits were negligible, making up only 0.09 percent of total income as compared to 0.55 percent for cash benefits. Nevertheless, they were disequalizing in all three years (i.e., concentration ratios higher than overall Gini) and very disequalizing in 2002 (with a very high concentration ratio of 0.71). The reasons for this are unclear. The benefits with the highest concentration ratios are those available mostly to government employees.

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Civil service worker wages have more than doubled since 1999, as the government has strived to maintain social stability (Wong 2007). It is possible that benefits have risen hand in hand with wages paid to this small, favored component of the rural population. More specifically, total cash transfers, driven by social insurance income including pension and elder living subsidies, changed from quite equalizing in 1995 to very disequalizing in 2002. Thus, their contribution to overall inequality also increased from 1995 to 2002, but they still contributed only about 1 percent of overall inequality in 2002 because of their very small share of income. Other benefits, as we discussed, were minimal and contributed little to overall inequality.

Rural taxes were distributed very regressively (i.e., much less unequally than total income), although the tax structure moved in a slightly more progressive direction in 2002. Table 2.5 shows just how regressive the rural tax structure has been. In 1995 the richest decile paid only 1.3 percent of its income in taxes and fees, whereas the poorest paid almost 17 percent of its income. All deciles but the richest had lower tax bills (as a share of income) in 2002 than in 1995 but the biggest drop occurred for the poorest decile. Even so, that decile still paid over four times as high a share of its income in taxes as did the richest decile.

#### INCOME AND SOCIAL BENEFITS AMONG MIGRANTS

Since the early 1980s an increasing number of those who hold rural household registration status actually live in the towns and cities. The number of rural to urban migrants increased from 11 million in 1982 to 18 million

TABLE 2.5  
*Share of tax payments in total household income  
by decile in rural China (%)*

Decile	1988	1995	2002
1	15.69	16.85	6.78
2	3.25	7.95	4.80
3	3.13	7.74	4.07
4	2.54	6.74	3.99
5	2.40	6.40	3.58
6	2.21	5.68	3.31
7	2.03	4.80	2.94
8	1.73	3.84	2.41
9	1.44	2.89	2.06
10	0.95	1.34	1.37
Total	2.07	4.05	2.65

by 1989 (Liang 2001). Official estimates indicate that there were about 70 million rural migrants in 1993, and that number had doubled by 2003 (Zhu and Zhou 2005). If this is accurate, the 140 million migrants in 2003 made up about 11 percent of the national population and more than 20 percent of the actual urban residents.

In the 2002 survey, the CHIP project for the first time included a sub-survey of 2,000 migrant households. Table 2.6 presents the levels, composition, and distribution of income among migrants in 2002 (Khan and Riskin 2005). In terms of per capita total household income, migrants' average of ¥6,365 was nearly double that of those in the rural areas (¥3,205), but only two-thirds that of urban residents (¥10,333). Moreover, migrants' income is more unequally distributed (Gini = 0.38) than that of either full-status urban residents (0.35) or rural residents (0.37).

The leading component (60 percent) of migrant income was derived from individual enterprises. Wage income provided an additional third, while rental value of owner-occupied housing in total income (5 percent) and other income (including pensions) (2 percent) provided the balance. Among these income components, rental value of owner-occupied housing was the most disequalizing item; its concentration ratio was 0.658, much higher than the Gini (0.38). This reflects the fact that only a very small advantaged group of migrants own their homes in the cities where they currently reside. Rental value contributes about 9 percent of overall migrant income inequality. The other two disequalizing income sources were income from individual enterprises and "other income," the concentration ratios of which were somewhat higher than the Gini (0.43 for income from individual enterprises and 0.41 for "other income"). Income from individual enterprises, the main in-

TABLE 2.6  
*Composition and distribution of income of rural migrants in 2002*

	Level (¥)	Composition (%)	Gini/concentration ratio	Contribution to overall inequality (%)
Wages	2,189	34.40	0.250	22.63
Individual enterprise	3,758	59.04	0.429	66.65
Property	8	0.29	0.189	0.14
Net subsidies	-60	-0.95	0.208	-0.52
Rental value of housing	311	4.88	0.658	8.45
Other (including pensions)	149	2.34	0.408	2.51
Total income	6,365	100.0	0.380	100.0

SOURCE: Khan and Riskin (2005, p. 373). Column 4 calculated by authors based on figures in columns 2 and 3.

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come source for migrants, contributed two-thirds of overall inequality, while "other income" accounted for only 3 percent of it. Wages were the main equalizing item, contributing only 23 percent of overall inequality despite their 34 percent share of total income.

The "net subsidies" received by migrant families (equal to subsidies received less taxes and fees paid) were negative ¥60 on average (1 percent of total income), indicating that taxes and fees paid by migrants exceeded any sums they received from the government. This net tax was distributed regressively, with a concentration ratio of 0.21, much lower than the overall Gini (0.38).

Our calculations from the CHIP migrant data show that migrants received minimal social benefits in 2002. Less than 5 percent of the migrant sample received pension benefits, or health or unemployment insurance. The CHIP survey did not ask about the exact values of most kinds of benefits, perhaps on the general assumption that they did not exist for migrants. Fewer than 8 percent of migrants enjoyed housing benefits from their employers. Note that even if housing is provided to migrants, as in the case of construction sites or rooms for live-in nannies, the quality of such housing is likely to be lower than that of full-status urban residents and attaching a value to it would be very difficult. Migrants were also ineligible for the MLSA subsidy due to residency requirements (Gao 2006). Therefore, the redistributive role of social benefits among the migrants is negligible.

# CONCLUSION AND DISCUSSION

This chapter has examined the contributions of market income and social benefits to overall income inequality in urban and rural areas to advance current debates about the degree and causes of income inequality since China moved from a planned to a market economy. Using all three waves of the CHIP survey data, we find that urban income inequality increased significantly from 1988 to 1995, and rose again very slightly to 2002, while rural inequality rose rapidly between 1988 and 1995, and then declined to a level below 1995 but above 1988 by 2002. The difference between these results and those of Khan and Riskin (2005) is primarily in the findings about urban China and the additional new findings on migrants in 2002.

In regard to the urban trends, we find that our differences from the Khan and Riskin (2005) analysis is due entirely to our inclusion of health benefits, which became highly unequal by 2002. Health benefits, which used to be universal for urban workers, have been increasingly linked to employment status, sector, and type. Those with higher market earnings from better employment also gain more from health benefits.

We also find that the cash value of urban social benefits has become more unequally distributed than market income and therefore displays higher Gini

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coefficients than those for total income. Between 1988 and 1995 benefits fell as share of income but increased slightly in 2002 because of higher concentration ratios. Initially market income primarily in the form of wages drove the new patterns of inequality. Wage income rose relative to total income and became increasingly unequal. But the effect was offset in 2002 by the decline in inequality of rental value of owner-occupied housing. Over time urban social benefits have had an uneven effect. Cash transfers, particularly public assistance, turned from largely regressive in the early stages of the reform to slightly progressive more recently, whereas in-kind benefits with the exception of in-kind housing subsidy were distributed more and more regressively over time and contributed to the rise in overall inequality.

In rural China, overall income inequality decreased from 1995 to 2002, after a sharp increase from 1988 to 1995. In contrast to urban China, market income from wages reduced inequality as did even more equally distributed income from family farm production. Other income sources, including income from nonfarm production, property, remittances, and rental value of owner-occupied housing, were disequalizing from 1995 to 2002. Rural social benefits remained minimal since the economic reforms and did not play any significant role in changing income inequality. If anything, the level of cash transfers increased slightly over time but became more regressive. Finally we should note that rural taxes were reduced after 1995 and were distributed less regressively, contributing to the fall in rural inequality.

Among rural to urban migrants, income inequality by 2002 was greater than among either urban or rural families. Income from individual enterprises was disequalizing and contributed about two-thirds of overall inequality. Rental value of owner-occupied housing was the most disequalizing item, reflecting the fact that only a very small and privileged group among the migrants enjoys home ownership in the cities. On the other hand, wages were an equalizing item. Migrant families received only minimal social benefits which thus had no significant effect on overall income inequality.

As expected, "market forces" have driven the major trends in income inequality. However, public policy has also influenced outcomes. For example, policies that deliberately privileged coastal areas increased inequality after the mid-1980s while others that created jobs in poor areas and reduced rural taxes reduced inequality. On the other hand, most social benefit programs with the exception of public assistance have been highly and increasingly disequalizing. Social benefits as a whole have yet to play a significant progressive role.

## Market and Geography Have Chinese Inequality

Philip N. C.

In the process of creating a new social order, inequalities are assigned. One of the main questions is the relationship between the market and the state. It was one of the main questions in the past, when the market was longer high on the political agenda. The position of resources and the market, which many presume to be a greater degree of freedom, has been the start of China's economic reforms. At the time has come for

Gender inequality dynamics should not be the focus of this chapter. It is a question of inequality at work, among different groups. We first examine the trajectory of the emerging market economy, as seen in income trends and the different levels of market inequality.

The market transition has increased or decreased the level of inequality (see Table 1996). Instead, it altered the pattern of inequality, which in turn has affected the level of inequality. Although we have seen in Eastern European countries that the market reforms did not result in a significant reduction of educational and occupational inequality, they were more highly regressive.

Chinese society is setting to examine the impact of the economic reforms have on the market and the older, state-owned