Chapter 4
Rural–Urban Migration, Urban Poverty and Inequality, and Urbanization in the People's Republic of China

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1 Introduction

Over the past three decades, the Chinese economy has expanded at an exceptional 10% per annum, and the per capita income has increased sixfold, accompanied by extraordinary rural–urban migration and urbanization. There are now 166 million rural–urban migrants working in cities (National Bureau of Statistics 2014), among them are 130 million who moved to cities in the past 15 years. Over the course of the next two decades, the People's Republic of China (PRC) is expected to transform to a largely urban-based society. It is estimated that approximately two-thirds of the rural labor force will migrate to urban areas.

The PRC has witnessed this population movement on a much larger scale and within a much shorter period of time compared to most developed countries, where similar population movements occurred at the height of the Industrial Revolution. This phenomenon is driven by the PRC's current economic growth rates, which are twice as high compared to growth in the United States and Europe during the Industrial Revolution. Thus, the government is confronted by extremely challenging policy questions brought about by the unprecedented scale and pace of the migrations in the PRC.[1]

To gauge the dynamics of rural–urban migration, urbanization, and the policy challenges brought about as a result of the large-scale migration, the Rural–Urban Migration in China (RUMiC) project at the Australian National University was initiated in 2007. The survey is conducted in 15 cities located in 9 provinces, and these cities include (i) major exporting regions—Guangzhou, Shenzhen, Dongguan,

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[1] See also (RUMiC.anu.edu.au)

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Shanghai, Wuxi, Nanjiang, Hangzhao, and Ningbo, and (ii) major cities in the interior regions—Chengdu, Chongqing, Wuhan, Hefei, Bangbu, Zhengzhou, and Luoyang. Two companion surveys of rural and urban households were also conducted between 2008 and 2010. The rural survey was conducted in the rural areas of the provinces where the 15 cities are located while the migrant survey was conducted in the same 15 cities and the urban household survey was conducted in 4 additional cities. Both the rural and urban surveys utilized the National Bureau of Statistics Annual Household Survey sample. A comparison of the migrant survey and these two samples permits us to identify the distinctive features of migrants.[2] Due to lack of funding, the rural and urban household surveys were discontinued after 2010, but the survey of city migrants was continued till 2016.

RUMiC is intended to be a longitudinal survey. In 2008, 5000 migrant households from 15 cities were randomly selected. The attrition rate in the 2009 wave, however, was extremely high (63%) due partly to the nature of the sample (frequent mobility) and partly to the global financial crisis (GFC). GFC reduced the PRC's exports by 20% and, as a result, many migrants returned home. After 2009, the attrition rate has reduced gradually, and in 2012 it stands at 35%, which is quite normal for a mobile population. To maintain the original sample size, each year RUMiC resamples a certain number of new households, resulting in two subsamples: one traces part of the previous year's sample (labeled old sample) and one draws a new random sample (labeled new sample). The new sample provides a representative picture of migrants in general, while the old sample offers the dynamic picture of migrant life and work.[3]

In this report, I assess the dynamics of rural–urban migration in the PRC in the past decades or so, examine some of the remaining challenges the government is facing, and provide some policy suggestions. The data used is mainly from the RUMiC survey.

This chapter is structured as follows: The next section provides an institutional background on rural–urban migration and urbanization in the PRC. The third section presents an aggregate picture of rural–urban migration. The fourth section examines the changes in labor market outcomes for migrant workers. The fifth section discusses migrant access to urban social welfare and social services and the sixth section examines the impact of rural–urban migration on urban poverty and income inequality. In the seventh section, I investigate the urbanization trends and current policy impediments with regard to the urbanization strategy. The last section discusses policy recommendations and concludes the chapter.

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[2] For detailed information on the RUMiCI survey, see http://rse.anu.edu.au/rumici/ or Gong et al. (2008).

[3] See also RUMiC.anu.edu.au

2 Background: Rural–Urban Migration and Urbanization

The PRC's rural–urban migration and urbanization process differs considerably from the normal development process observed in other countries, largely due to its special institutional settings. Ever since the Communist Party came to power in 1949, the Chinese economy has been segregated into two parts, the rural and urban economies. For the next 30 years, rural–urban migration was forbidden. Individuals who were born in rural areas were given "rural household registration," commonly known as "rural hukou," and were deemed to live and work in rural areas (Meng, 2000).

Economic reforms began in the rural areas in 1978. As a result of rural reforms, agricultural productivity increased sharply, which, in turn, created large-scale surplus labor for agriculture. During that period, rural–urban migration was forbidden. The only way out for surplus labor was to develop rural nonagricultural industries. Thus, during the 1980s and early 1990s, government policy encouraged rural nonagricultural sector development, and rural Township and Village Enterprises (TVEs) thrived (Meng, 2000). Between 1980 and 1995, the share of the rural hukou labor force employed in the TVEs increased from 9.4% to 26.3%.

From the early 1990s, the government gradually relaxed the previously rigid rural–urban migration restrictions to allow rural people to work in cities in response to the PRC's "Open Door" policy, which encouraged large inflows of foreign direct investment and generated substantial demand for unskilled labor in cities. However, these migrants were treated as "guest workers," and after two decades of allowing farmers to work in cities and with gradually changing restrictions, migrant workers, as a general rule, are still not allowed access to urban social services and social welfare. There are two reasons for the persistence of the restriction: one is the potential financial burden and the complications in changing the current public finance system to accommodate rural workers as city residents. The other is the deep-rooted idea that "farmers can leave the agricultural sector but not their hometown." In 2014, the State Council of China announced the National New Urbanization Plan 2014–2020, which still reflects this idea and emphasizes the orderly building of small cities and towns to accommodate the future excess supply of agricultural workers (State Council of China 2014).

The new urbanization strategy of building small cities and towns works hand in hand with emerging big cities that incorporate the "industry upgrading" policy. It is widely discussed that if the PRC wants to become an economic superpower, its industrial structure should be dominated by capital-intensive high-end technology and future economic growth should be based on innovation and sophisticated technology and not on cheap labor. The "industrial upgrading" policy assumes that the PRC has diminishing low-skilled labor supply and the time has come for it to move from the "world factory" of cheap labor to the "world laboratory" that hires highly skilled workers. Since the GFC, many coastal cities have experimented "industry upgrading" policies to actively push low value-added firms and low-skilled labor out of the city (Meng 2014).

These policies have an increasingly significant impact on wages, labor supply, and the PRC's future urbanization and economic development outcomes.

3   Rural–Urban Migration Dynamics

In this section, I present the general trends of rural–urban migration since the beginning of the 1990s.

Figures 4.1 and 4.2 show the evolution of the total number of migrant workers with rural hukou between 1990 and 2013. Figure 4.1 presents the total number of migrant workers and the annual increase in the number of migrants, while Fig. 4.2 depicts the total number along with the 3-year moving average of the annual growth. In 1990, the stock of migrant workers was just below 25 million. It then increased to 39 million in 1997 with an average annual increase of 1.8 million or around 6% per annum. After 1997, the migration momentum picked up, lasting till the beginning of the GFC. The total number of migrants increased from 39 million to 140 million in 2007, an annual average net inflow of 10 million or an 11% increase per annum. In particular, from 1998 to 2004, just before the United States abolished the PRC's textile quota, the annual net inflow was between 10 and 20 million. After 2004, the inflow dropped below that level to around 6 to 8 million a year. The GFC saw Chinese exports reducing by more than 20% per annum, which considerably reduced the migrant labor net inflow. Soon after, as a result of the government rescue package, the inflow rebounded to the pre-crisis levels but faded away again as the PRC's economic growth momentum slowed.

As a result of the slowdown in the migrant net inflow and the strong per capita GDP growth (between 2004 and 2007, the annual growth rate was around 13%), coastal regions began to witness unskilled labor shortages from around 2004 and soon after, many economists began to announce that the PRC had run out of surplus labor. At that point, the Chinese migrants who move to county above cities numbered
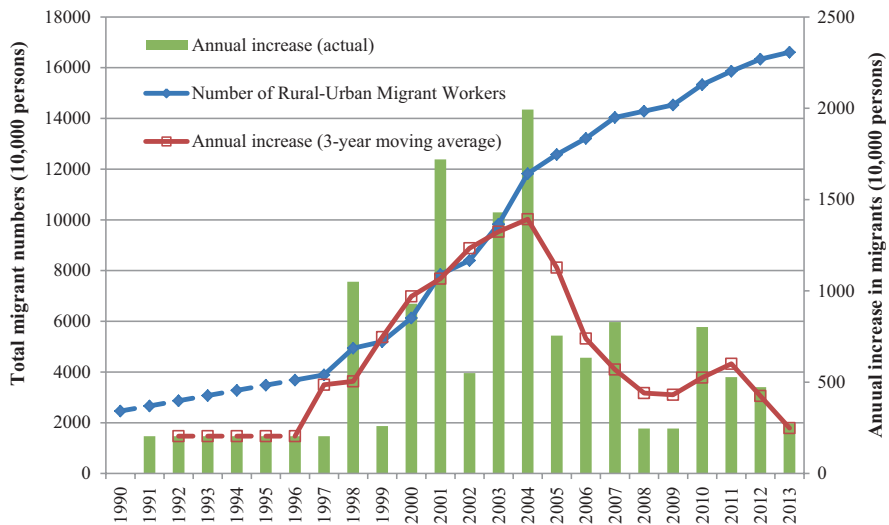

Fig. 4.1 Dynamics of rural–urban migration. (Source: Author's calculation)
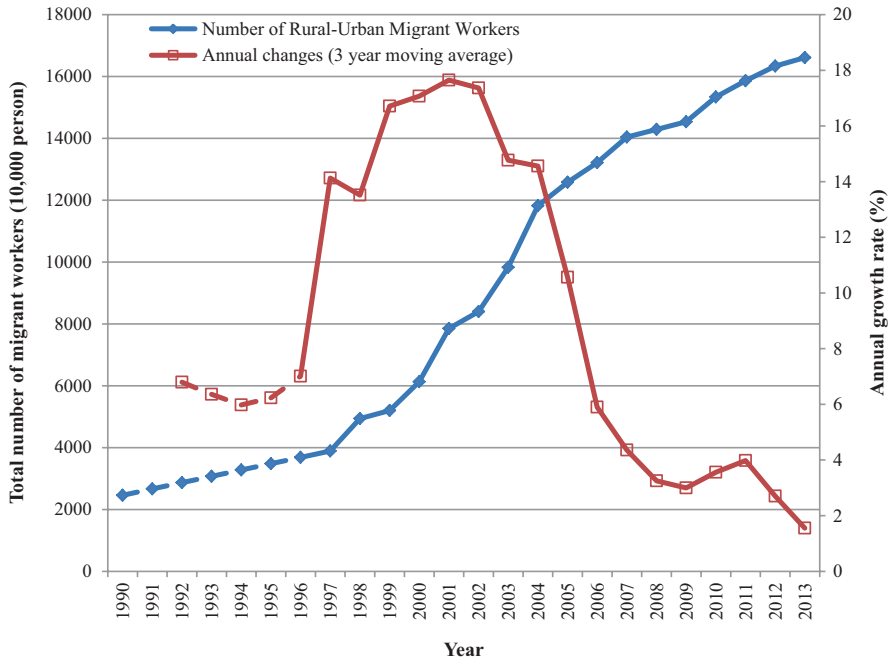
Fig. 4.2 Dynamics of rural–urban migration: total number and 3-year moving average. (Source: Author's calculation)

about 130–140 million, around 25% of the total rural hukou labor force or 18% of the total labor force. These proportions seem a little low to be representative of a situation where it can be said that the PRC has "run out" of surplus agriculture workers.

Why is it that at such an early stage, with only less than one-third of the rural labor force migrating to cities, the economy is already confronted with an unskilled labor shortage problem? The reason is largely due to institutional migration restrictions. Because migrants' access to city social insurance and social services is restricted, many people are unable to move to cities where they work permanently. These restrictions include limited access to health, unemployment, pension insurances, and limited or no access to childcare or children's schooling. As a result, individuals who are temporarily unemployed, sick, or need to give birth, rear children, or look after elderly household members have to return to their rural hometown. This, in turn, reduces the duration of migration and, hence, the stock of migrants in cities.

Figure 4.3 shows the gender breakup of the share of the rural hukou labor force that migrated to cities to work in 2012. Women tend to go to cities in their late teens, and the proportion peaks at 45% of the cohort when they are aged 20. Afterward, the share declines. At age 25, the ratio drops to less than 30%, and by the age of 30, it further drops to around 20%. Between 20 and 30 years of age, women tend to get married, give birth, and rear children.
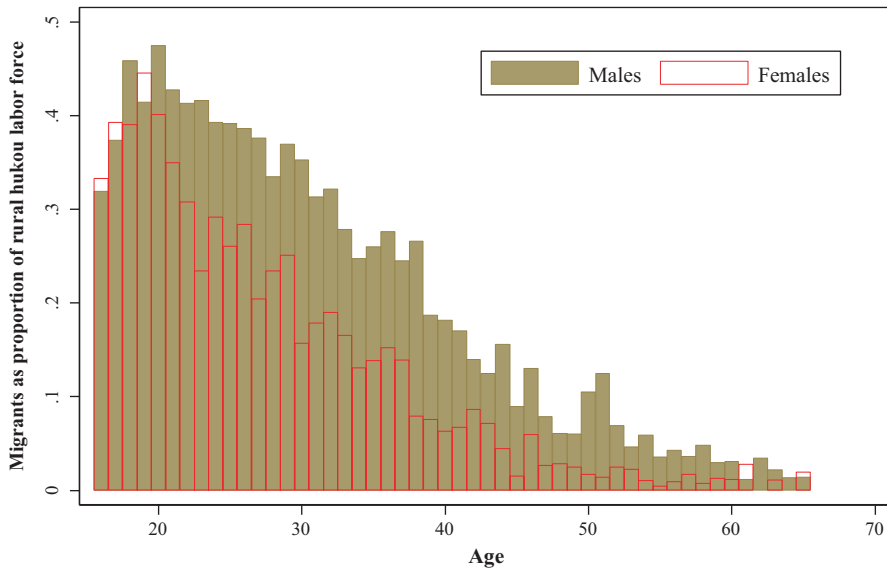
Fig. 4.3 Proportion of rural hukou workers that migrated to cities (by age and gender). (Source: Author's calculations)

For men, the decline in the migration proportion comes much later. They begin to return home when they turn 30, and by the age of 35, only 25% of the labor force remains in cities. Women tend to take all the responsibilities for children before they go to school, whereas after they go to school, fathers are more responsible for children's schoolwork. These age patterns can be shown in another way by the proportion of rural hukou workers who are return migrants at any particular point in time. For example, in 2010, 34% of the total rural workers who have ever migrated had returned home at the time of the survey. The age and gender distributions of the rural hukou labor force for migrants, return migrants, and nonmigrants are presented in Fig. 4.4 separately. The figure clearly indicates that a significant proportion of the rural labor force of all ages returns home.

Because migrants have to leave family members behind when they go to work in cities, normal life events, such as marriage, birth, children going to school, and sickness, often become obstacles for migrants to continue their working life in cities. Based on the RUMiC survey, the average number of years migrants stay in cities is between 8 and 9 years. The short duration of migration significantly reduces the stock of migrant workers. If the current duration doubled, the stock of migrant supply in cities would have doubled to 320 million rather than to 166 million. If so, it would be inconceivable if any unskilled "labor shortage" would have arisen at this point (Meng 2012 and Golley and Meng 2012).

Another possible reason that may have exacerbated the current "labor shortage" is a strange phenomenon in the Chinese manufacturing sector. Firms seem to prefer young workers to older and more experienced workers (Kuhn and Shen 2014). Even
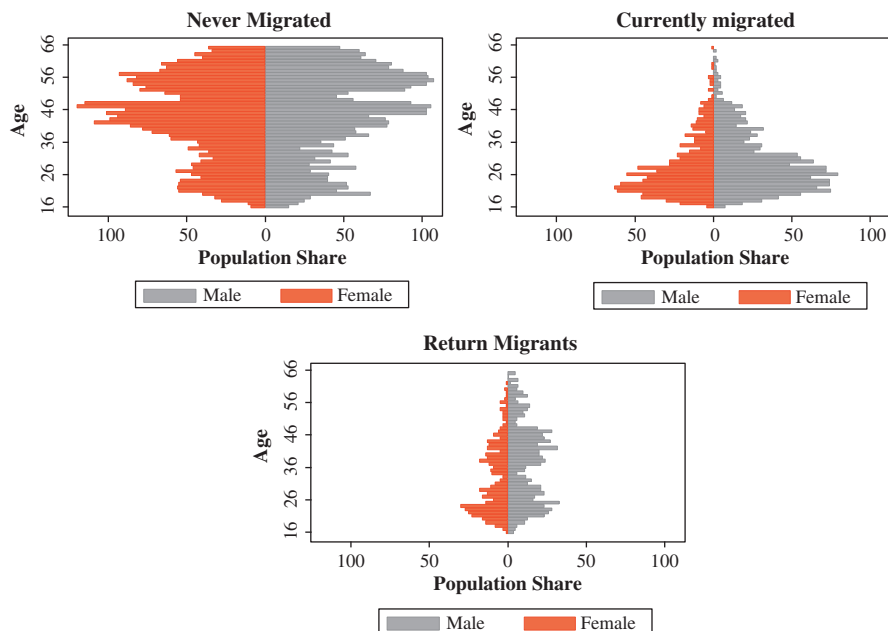
Fig. 4.4 Age and gender distribution of the rural hukou labor force, 2010. (Source: Author's calculation)

though the returns for on-the-job training seem to peak at 22 years of city work experience, suggesting that labor productivity increases with more city work experience (Meng 2012), factories are not bothered about the high level of job turnovers. For example, administrative data obtained from seven Adidas factories in Guangdong province in 2004 shows that the job turnover rate is above 30% (Meng 2006).

The situation may have changed slightly in the past 5 years due to unskilled labor shortage in cities. Table 4.1 (using RUMiC survey data) shows that the average age for the full sample increased by 3 years and for the new sample by 1.6 years. In addition, the proportion of male workers reduced by 3–4 percentage points over this period.

Whereas the average statistics of age and gender composition of migrants may not indicate significant changes, the distribution pictures can reveal detailed changes (see Fig. 4.5). The two panels of Fig. 4.5 present age–gender distributions for the total and the new samples. Focusing on the new sample, we observe that the proportion of old migrant workers over the age of 40 has increased a lot over the past 6 years while the proportion of those under 20 has declined. This is particularly true for the female labor force. Figure 4.6 presents the age distribution of the inflow at each year. It also shows some changes toward older workers, but the shift is quite small. These results could either suggest a change in demand for different age groups or a change in migration intention by different age groups. However, labor force pyramids alone will not provide the answer to these questions.

Table 4.1 Age distribution of migrant labor force: summary statistic of different samples

	Age	Males	Year since first migration	Schooling	No. of obs.
Panel A: migrant full sample					
2008	31.18	0.60	7.81	8.99	6749
2009	32.19	0.58	8.59	9.05	7399
2010	32.50	0.58	8.54	9.15	7155
2011	33.12	0.56	9.60	9.01	7793
2012	34.32	0.56	10.55	8.96	8068
Panel B: migrant new sample					
2008	31.18	0.60	7.81	8.99	6749
2009	31.57	0.59	7.96	9.12	4594
2010	31.20	0.58	6.67	9.30	3308
2011	31.78	0.56	8.09	8.97	3083
2012	32.88	0.57	8.95	9.02	2647

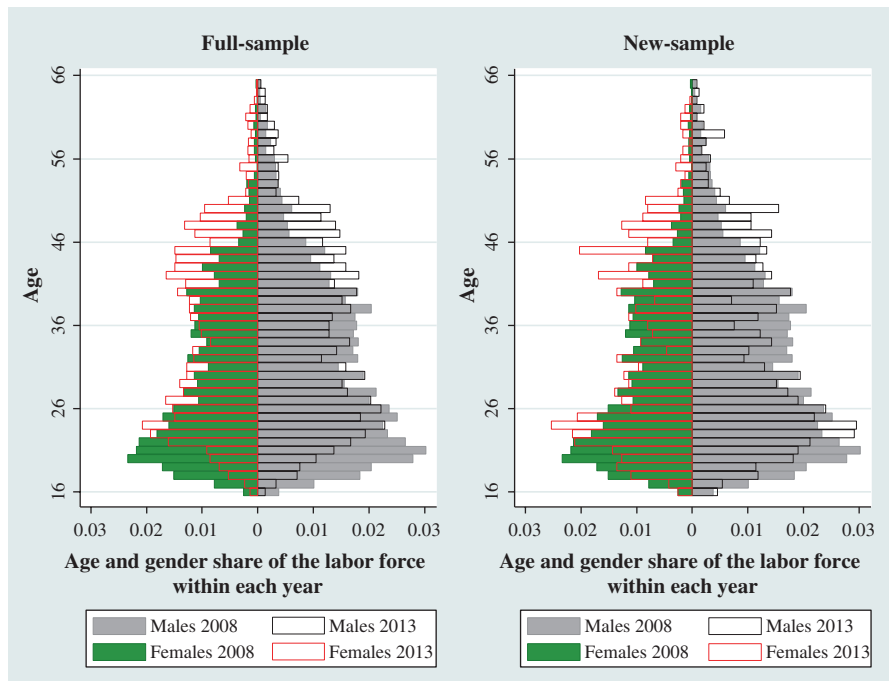Source: Author's calculations

Fig. 4.5 Age–gender distribution of migrant labor force. (Source: Author's calculations)

4 Migrants' Employment and Wages

Migrants have no or very limited access to the minimum living allowance and/or unemployment benefit in cities. Thus, if they lose jobs, they normally go back to their rural homes. Because of this, the measured migrant unemployment rate in
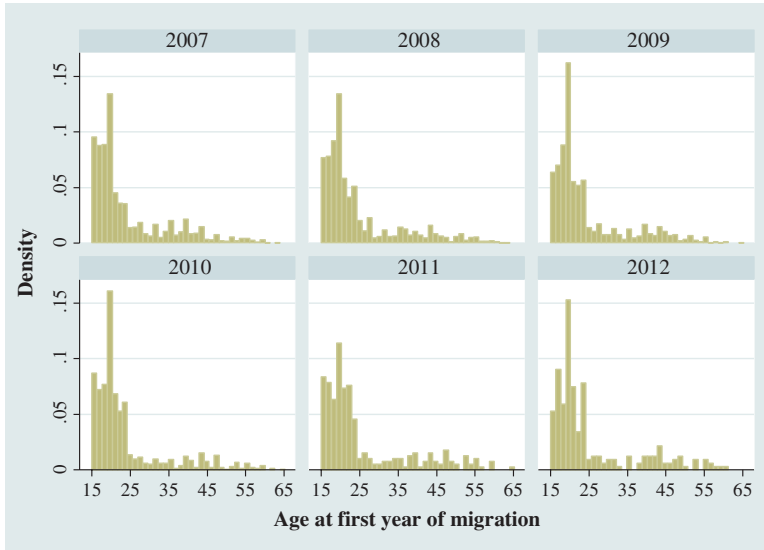
Fig. 4.6 Distribution of age at first year of migration. (Source: Author's calculations)

cities is very low. Between 2008 and 2013, the migrant unemployment rate surveyed in RUMiC surveys has never exceeded 2.2%. This, however, does not imply that migrants do not lose jobs. It is simply an artifact that most unemployed probably have left the survey location at the time of the survey. Had we been able to track down all the migrants from the first wave survey (2008), we would have observed a larger proportion that returned home or changed cities due to unemployment.

In this section, I examine labor market outcomes for migrant workers and focus mainly on the employment sector, self-employment, work hours, and earnings.

4.1   Type of Employment[4]

The majority of migrants work in the private sector. The ratio of migrants working in the private sector has increased slightly over the past 6 years (both self-employed and wage–salary workers) (see column 1 in each panel of Table 4.2). The ratio of wage and salary earners has also increased over time.

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[4] This part of the report draws some material from Meng (2013, 2014, 2015).

Table 4.2 Type of employment: 2008–2013

	Panel A: total sample			Panel B: new sample		
	Employed in the state sector	With a contract	Self-employed	Employed in the state sector	With a contract	Self-employed
All workers						
2008		48.77	23.75		48.77	23.75
2009	8.75	48.44	28.74	9.06	52.19	22.80
2010	8.93	48.92	28.83	10.04	55.33	23.08
2011	8.75	44.23	31.84	7.56	47.93	24.52
2012	6.33	40.47	33.56	6.34	46.88	23.66
2013	5.71	37.64	36.45	6.16	40.30	28.68
Wage and salary earners						
2008		64.00			64.00	
2009	11.98	68.26		11.48	68.06	
2010	12.03	69.06		12.37	72.36	
2011	12.83	65.90		9.99	65.33	
2012	9.61	61.42		8.36	62.01	
2013	8.86	59.01		8.55	56.20	

Source: Author's calculations

The government introduced the New Labor Law in January 2008. The law requires all employees to have formal contracts. We observe an interesting pattern with regard to the proportion of migrant workers whose employment is under a formal contract. In 2008, the ratio for all migrant workers and for wage and salary earners is 49% and 64%, respectively. By 2013, the ratio dropped to 40% and 56%, respectively, for the representative sample (new sample).

Is the reduction due to a change in the observable individual, industrial, ownership, and regional characteristics? Table 4.3 reports the regression results. Controlling for all observable characteristics, the proportion of wage-earning migrants with a formal contract is reducing significantly and monotonically over the past 6 years.

The literature often views employment under a formal contract as an indicator of the formality of employment. This reduction in the share of migrant workers with a formal contract is unexpected. This is because over the past few years, the unskilled labor market in cities has been tight, which should encourage more formal employment. In addition, the trend of a decline in the share of workers with formal contracts seems to be in an opposite direction to that observed for wages and other benefits, as will be discussed later in this chapter.

The rate of self-employment is relatively high among migrant workers. For the total sample (old plus new samples), the ratio of self-employment increased from 24% in 2008 to 36%, and for the representative sample, it increased from 24% to 27%. The reason why the total sample has a much higher rate of self-employment is due to the lower mobility rate and, hence, a higher probability of being tracked over time for the self-employed.

The RUMiC urban surveys show that the rate of self-employment for urban hukou workers in 2009 was 8.7% and the ratio did not increase much in 2010

Table 4.3 Probability of having a contract (linear probability model)

	Baseline		Including industry control	
	All samples	New sample	All samples	New sample
2010.year	−0.006	0.020*		
	[0.009]	[0.012]		
2011.year	−0.021**	−0.026**	−0.035***	−0.035***
	[0.009]	[0.012]	[0.009]	[0.013]
2012.year	−0.068***	−0.072***	−0.081***	−0.070***
	[0.009]	[0.013]	[0.009]	[0.013]
2013.year	−0.091***	−0.126***	−0.102***	−0.118***
	[0.009]	[0.014]	[0.010]	[0.014]
Age	0.018***	0.017***	0.018***	0.018***
	[0.002]	[0.002]	[0.002]	[0.003]
Age squared	−0.000***	−0.000***	−0.000***	−0.000***
	[0.000]	[0.000]	[0.000]	[0.000]
Years of schooling	0.025***	0.027***	0.025***	0.025***
	[0.001]	[0.002]	[0.001]	[0.002]
New sample	−0.022***		−0.024***	
	[0.006]		[0.007]	
Firm size control	Yes	Yes	Yes	Yes
Ownership dummies	Yes	Yes	Yes	Yes
City fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	No	No	Yes	Yes
Observations	23,430	11,032	18,648	8,628
R-squared	0.208	0.181	0.231	0.22
Standard errors in brackets.				

Source: Author's calculation
Note: ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

(Frijters et al. 2011). In the same year, self-employment in the United States was 10.8% (Hipple 2010). Migrant workers are highly self-employed mainly due to their difficulties of getting salary jobs. To investigate this issue, the RUMiC survey directly inquires why individuals became self-employed and whether they are still looking for paid work. Table 4.4 summarizes the results for the new sample. The data shows that a very small proportion of individuals become self-employed because they could not find a wage–salary job, and this ratio has been reducing over time. In addition, an even smaller proportion of the self-employed is still looking for a wage–salary job.

Another employment-related issue is the size of firms where migrant workers are employed. Figure 4.7 presents the firm size distribution for the new sample of wage–salary earners. It shows that around 37% of migrant workers were working in firms with above 100 workers in 2008, and this percentage reduced to around 30% in 2013. The proportion of workers employed in firms with 8 to 49 workers increased from 30% in 2008 to 37% in 2013.

Table 4.4 Proportion of self employed and wage-salary job status

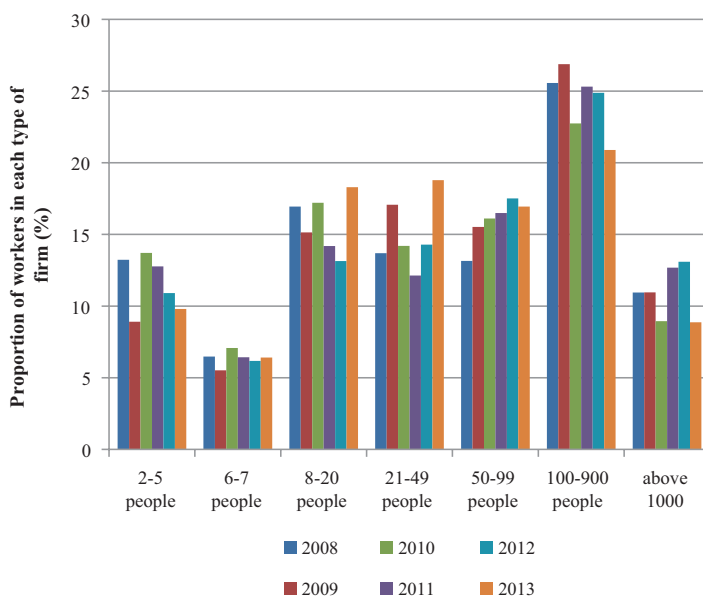|	Could not find a wage job	Still want to find a wage job
2008	12.61	11.98
2009	9.95	9.61
2010	6.63	7.87
2011	9.74	7.21
2012	11.49	6.21
2013	10.75	5.29
2014	10.51	7.66

Source: Author's calculations

Fig. 4.7 Migrant employment distribution across different sized firms. (Source: Author's calculations)

4.2 Working Hours and Wages[5]

Because of the institutional restrictions on migration, as discussed previously, migrants do not see a future in settling down in cities. Thus, they come to cities and work as hard as they can to make money and then return home. While in cities, they work long hours. For example, in 2008, there was a 17-h difference between the

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[5] This part of the report draws some material from Meng (2013, 2014, 2015).
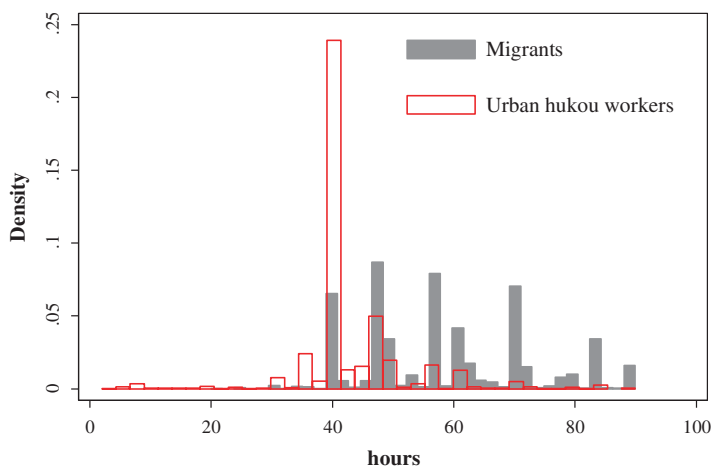
Fig. 4.8 Weekly hours worked for urban and migrant wage–salary workers, 2008. (Source: Author's calculation)

average number of hours worked by migrant wage–salary workers (59 hours per week) and urban hukou workers (43 hours). The majority of urban workers worked 40 hours a week compared to more than half of the migrants who worked above 50 hours weekly, as shown in Fig. 4.8.

Table 4.5 presents the new migrant sample's average working hours for the years 2008 to 2013.[6] Over the past 6 years, weekly hours worked for the self-employed increased slightly, whereas for wage–salary earners, it reduced by 2 hours from 59 to 57.

Although working hours have change marginally, the wages of migrant workers have increased significantly between 2008 and 2013. This partly reflects the tightening of the unskilled labor market and partly is a result of government policy.

Between 2008 and 2013, the annual increase in monthly and hourly earnings for wage–salary earners were 10% and 12%, respectively (see Table 4.6). More specifically, between 2010 and 2011, real hourly earnings increased by 21% for the new sample and 30% for the total sample. During the same period, the average minimum wage in the 15 cities of our sample increased by around 19%. For Shenzhen, Dongguan, and Guangzhou, the cities located in the Pearl River Delta and Yangtze River Delta in our sample, the average increase was around 20%.[7] This may suggest that minimum wages are being used by many local governments to influence the industrial structure. In recent years, cities in the more developed regions have been talking about the importance of moving up the value-added chain and are trying to trim down labor-intensive industries. Perhaps, the governments are trying to use the minimum wage as a policy device to achieve the objective of pushing the low-profit

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[6] I observe very few differences between the total and the new samples.

[7] Data for minimum wages in the 15 cities is from various city government webpages.

Table 4.5 Weekly hours worked

	All workers	Self-employed	Wage–salary
2008	63.3	76.7	58.5
2009	62.1	77.6	57.3
2010	61.7	77.1	57.0
2011	62.7	76.0	58.3
2012	62.1	77.6	57.3
2013	62.6	77.8	56.5

Source: Author's calculation

Table 4.6 Summary statistics of monthly and hourly earnings

Wage–salary earners	Whole sample				New sample		
	Real monthly earnings	Real hourly earnings	Annual change of hourly earnings		Real monthly earnings	Real hourly earnings	Annual change of hourly earnings
2008	1,207.16	5.26			1,207.16	5.26	
2009	1,418.27	6.38	0.21		1,411.62	6.32	0.20
2010	1,565.45	7.14	0.12		1,545.26	7.12	0.13
2011	1,935.90	9.30	0.30		1,929.72	8.62	0.21
2012	1,953.22	9.12	−0.02		1,958.96	8.73	0.01
2013	2,158.49	10.11	0.11		2,195.34	10.41	0.19

Source: Author's calculation

industries out of the cities, instead of directly picking industry winners. This, however, requires more in-depth research to be confirmed (Meng 2014, 2015).

The wage growth data presented here does not take into account that every additional year working in the city generates more work experience and, hence, increases migrant work skill, which, in turn should increase their earnings. This growth of earnings can be estimated from an earnings regression that controls for individual human capital and other wage-related characteristics (age, education, gender, year since migration, and city fixed effects). In Table 4.7, I present these regression results, which also include year dummy variables to examine the changing pay mainly due to the change in market prices for the same quality of workers. I use earnings data in two different ways. In addition to the monthly earnings of their current jobs, the RUMiC survey also asks migrants to report the year when they first migrated and the earnings they received in the first month of the first job. The earnings for the first month of the first job after migrants moved to cities give us a longer time period. It also teases out the wage increase due to the skills accumulated from additional city work experience. The data used in the regression restricts the earliest migration year to 2000.

Using the current monthly earnings data as the dependent variable, I found that the average annual increase over the 6 years (2008–2013) is 9.4%. Using the first month of first pay data, the annual average increase over the 14-year period is 5.7% per annum. If we only examine the 2008–2012 period, the annual change is 7.3%.

Table 4.7 Earnings regression results (whole sample)

	Log real monthly earnings	Log real hourly earnings	Log real first month earnings
Age	0.032***	0.045***	0.036***
	[0.002]	[0.002]	[0.003]
Age squared	−0.001***	−0.001***	−0.000***
	[0.000]	[0.000]	[0.000]
Years of schooling	0.028***	0.047***	0.032***
	[0.001]	[0.001]	[0.002]
Dummy for males	0.184***	0.143***	0.059***
	[0.005]	[0.006]	[0.009]
Years since first migration	0.023***	0.020***	
	[0.001]	[0.002]	
Years since first migration^2	−0.001***	−0.000***	
	[0.000]	[0.000]	
2001			0.018
			[0.021]
2002			0.067***
			[0.019]
2003			0.118***
			[0.018]
2004			0.128***
			[0.019]
2005			0.196***
			[0.018]
2006			0.290***
			[0.019]
2007			0.297***
			[0.019]
2008			0.355***
			[0.020]
2009	0.149***	0.161***	0.503***
	[0.008]	[0.010]	[0.022]
2010	0.221***	0.234***	0.540***
	[0.008]	[0.010]	[0.023]
2011	0.461***	0.488***	0.647***
	[0.008]	[0.010]	[0.029]
2012	0.454***	0.478***	0.742***
	[0.008]	[0.010]	[0.034]
2013	0.561***	0.592***	0.793***
	[0.009]	[0.011]	[0.046]

(continued)

Table 4.7 (continued)

	Log real monthly earnings	Log real hourly earnings	Log real first month earnings
Dummy for new sample	−0.007	−0.029***	
	[0.005]	[0.007]	
City first effects	Yes	Yes	Yes
Observations	28,054	27,798	18,224
R-squared	0.421	0.368	0.181

Source: Author's calculations
Note: *** indicates significant at the 1% level

However, it is important to note that even in 2010 (the last year for which we have the urban household survey data), migrant wage–salary workers were only making 52% of the hourly earnings of the urban wage–salary workers.

5   Social Insurance and Social Services Access

One of the most important remaining hurdles for migrants to stay in cities permanently is lack of access to city social insurance and social services. As discussed previously, migrants face problems in obtaining adequate health facilities, work injury, unemployment insurances and pensions. This, to a large extent, reduces the migrants' duration of migration, which, in turn, puts a significant strain on migrant labor supply. Therefore, the increase in migrant social insurance access not only benefits the migrants themselves but is also going to increase migrant labor supply. Interestingly, this is the opposite of what economists would predict—that is, increasing social welfare availability decreases labor supply.

The past 6 years have seen some improvements on this front, as seen in Table 4.8. For example, for the total sample, the proportion of migrant workers with unemployment insurance increased from 11% to 24% between 2008 and 2013. The proportion of migrant workers with health and work injury insurances and pension increased from 9%, 17%, and 18% in 2008 to 30%, 25%, and 32% in 2013, respectively. Nevertheless, the majority of migrant workers still work in cities without any protections. For the representative new sample, the increases are much smaller, especially for health and pension insurances (see bottom panel of Table 4.8).

Another important deterrent for migrants that leads them to shorten their duration of migration is whether their children are able to go to schools in cities where migrants work. Although RUMiC surveys did not directly ask this question, there are a few indicative questions related to this issue. The first useful question is whether the child is currently living in this city or in a rural area. The summary statistics for the answers to this question show that among all children in the representative new sample, around 39% stayed in the same city as their parents in 2008 (see Table 4.9). If I restrict the sample to school-age children, this ratio dropped by

Table 4.8 Migrant access to social welfare (in percentage)

	Unemployment insurance	Health insurance	Pension insurance	Work injury insurance
Whole sample				
2008	0.113	0.090	0.182	0.167
2009	0.119	0.107	0.201	0.163
2010	0.143	0.230	0.219	0.187
2011	0.179	0.208	0.253	0.195
2012	0.206	0.273	0.305	0.233
2013	0.240	0.305	0.317	0.252
New sample				
2008	0.113	0.090	0.182	0.167
2009	0.122	0.108	0.202	0.165
2010	0.131	0.212	0.189	0.167
2011	0.176	0.182	0.245	0.192
2012	0.230	0.306	0.325	0.260
2013	0.225	0.266	0.277	0.242

Source: Author's calculation

Table 4.9 Migrant children's current living place

	% living in:			
Total new sample	This city	Another city	Rural area	Total number
2008	38.86	5.37	55.77	2,159
2009	39.43	5.23	55.34	1,301
2010	37.78	4.70	57.52	937
2011	40.59	4.31	55.10	813
2012	40.60	4.48	54.92	1,027
2013	42.42	8.66	48.92	693
New sample for school-age children only:				
2008	35.96	7.34	56.70	1,321
2009	38.43	7.29	54.29	851
2010	36.23	7.05	56.72	610
2011	40.49	6.27	53.23	526
2012	39.38	6.48	54.13	617
2013	42.49	11.37	46.14	466

Source: Author's calculation

2 percentage points to 36%. In both samples of children, around 56% were left behind in their rural hometowns. The ratio of children who came to cities with their parents has been increasing slightly over the past 6 years. By 2013, 42% of the children (total children and school-age children) were living in the same city as their parents. For the total children, 49% were left behind in rural areas, whereas for school-age children, this ratio in 2013 is 46%.

Another relevant question in the survey is "If your child goes to school in this city without local hukou, how much extra you will need to pay this year?" We have

Table 4.10 The proportion paid in additional school fees and the amount paid

	Zero	Non-zero		Total number and average amount	
	%	%	Amount (yuan)	Number of obs.	Amount (yuan)
2008	40.10	59.90	1984.3	384	1188.5
2009	50.00	50.00	3179.3	268	1589.6
2010	54.97	45.03	2791.7	171	1257.1
2011	62.92	37.08	4420.6	178	1639.1
2012	76.19	23.81	4812.7	168	1145.9

Source: Author's calculation

data for the answers to this question from 2008 to 2012. I summarize the average amount of additional fees for school-age children who are currently living in the same city as their parents in Table 4.10. In 2008, almost 60% of the parents paid additional fees while this ratio dropped significantly over time to 24% in 2012. However, for those who paid additional fees, the amount paid increased significantly from around 2000 yuan to 4800 yuan between 2008 and 2012. As a result of the combination of a reduced proportion of individuals who paid positive fees and an increased amount paid, the average additional fee paid for school-age children who lived in cities has not increased much.

The data suggests that over the past 5–6 years, migrant children's access to city schools has increased and, at the same time, the proportion of children who have to pay additional fees to attend urban schools has reduced. However, for the 24% who have to pay additional fees, the average amount paid has increased significantly.

6 Impact of Rural–Urban Migration on Urban Poverty and Income Inequality

To understand urban poverty and inequality in the PRC, we have to understand the PRC's rural–urban divide policy. For most of the first 40 years since the Communist Party took over power at the end of the 1940s, rural–urban migration was forbidden. Thus, urban poverty and inequality were only about poverty and inequality among the urban hukou population. At the end of the 1980s, income levels in both rural and urban areas were quite low and income distribution within each area was quite equal. For example, the average real per capita annual household income for urban and rural areas in 1988 were 686 yuan and 392 yuan (or US$ 106 and US$ 60 according to the exchange rate of US$ 1:6.5 yuan), respectively, while the Gini coefficients among urban and rural households were 21.1 and 29.7, respectively. Nonetheless, the income gap between the two parts of the economy is very large. The urban household per capita income in 1988 was twice as high on average as that of rural households. On combining rural and urban households, the Gini coefficient increases to 0.33 (Ravallion and Chen 2007).
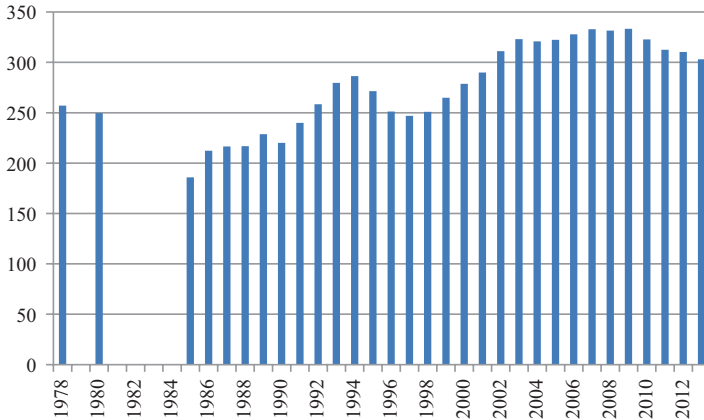
Fig. 4.9 Urban/rural per capita household income ratio (%), 1978–2013. (Source: National Bureau of Statistics, various years)

Since then, the rural–urban income gap has increased, and by the early 2000s, the average urban per capita income was more than three times that of the average rural per capita income (see Fig. 4.9), and the national Gini coefficient increased to a level above 45% in 2001 (Ravallion and Chen 2007).

Large-scale rural–urban migration occurred at the end of the 1990s (see Fig. 4.1). However, due to the lack of a coherent data collection, the PRC's household income level and distribution have continued to be analyzed for "rural" and "urban" separately. The National Bureau of Statistics was collecting household survey data separately for rural and urban households until 2010, and migrant workers were supposedly being covered by the "Rural Household Surveys" (RHS) conducted in rural areas. In the RHS, the income of migrant workers is included only if migrants remit the income home. Thus, it does not truly cover migrant income. In "Urban Household Surveys" (UHS) until 2009, only less than 4% of the sample had rural hukou, and among them, only 1% were not local residents—that is, rural–urban migrants.[8] As a result, none of the official household surveys take into account this large population group.

The RUMiC survey fills in the gap by surveying three separate population groups: the rural households in rural areas, the urban hukou households in urban areas, and the rural–urban migrants in urban areas. The migrants and urban hukou households were surveyed in the same 15 cities. However, due to funding constraints, urban and rural household surveys were terminated in 2010. Thus, the latest

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[8] This is due mainly to the fact that NBS sample listing is residential based and mainly covers urban districts. Due to a lack of access to social welfare, migrants are less likely to bring their family to cities, and to save money, many migrants are living in factory dormitories, construction sites, and other workplaces. Those who are renting are largely renting from periphery rural residential places around cities.

data we can use to understand the impact of migration on urban poverty and inequality is 2010. In addition, as the survey for the two population groups was sampled separately, combining the two samples requires population weights, which we do not have. Thus, the analysis that follows should be interpreted with caution.

To understand how migration may change urban poverty and inequality, there are two important issues to note. First, migrant workers are the lowest paid group among all urban workers. For example, using the RUMiC survey of both urban workers and migrant workers in the same 15 survey cities, we find that in 2008, migrant workers, on average, earned 6 yuan an hour while urban local workers in the same cities earned 14 yuan an hour. This situation improved somewhat, but the gap was still quite large by 2010 with migrants' and urban workers' hourly earnings being 8.6 yuan and 17.3 yuan, respectively. This fact seems to suggest that migration should have increased urban poverty and worsened urban income distribution. However, the second point may offset this effect. As discussed earlier, the restrictions on migrant workers' access to social welfare and social services in cities have prevented many migrant families from moving to cities. Thus, a large proportion of migrants are living in the cities alone and without family members. For example, in 2010, the proportion of total households with one household member in the urban sample is 1.3%, whereas in the migrant sample, it is 31%, even though the proportion of married individuals in the migrant sample is as high as 55%, which is only 12 percentage points lower than the married proportion of the urban local population. As a result, in the years we have data for, the household size in the same 15 cities for migrants is around 1.5 to 1.6 while for urban households, it is around three people. In addition, the majority of migrants who are in the city are employed because very few have access to city unemployment insurance or minimum living insurance (Dibao). If they lose their jobs, they normally go back to their rural hometowns. For example, in 2010, the proportion of people who were currently working was 81% for the migrant sample while it was 50% for the urban sample.

When analyzing poverty and inequality, we were concerned mainly with per capita income. Even though migrants earn less, with more people working and fewer household members sharing income, migrant per capita household income may not be lower than that of urban households.

6.1   Poverty and Inequality Within the Migrant Sample

Table 4.11 presents the mean per capita income and expenditure, the Gini coefficients calculated from per capita income and expenditure, as well as the poverty rate based on two different poverty lines, the urban Dibao line and the US$ 2/day line using both per capita income and per capita expenditure. "Dibao" is the term for the minimum living allowance in Chinese. These data are only available for our 15 survey cities for the years 2008 and 2010.[9] I use the simple average of the 2008 and

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[9] I downloaded these data for 11 of our 15 cities from the Ministry of Civil Affairs website. But the data is only available for 2008 and 2010.

Table 4.11 Per capita income and expenditure, the Gini coefficient, and poverty

Migrant households	Per capita income (pcinc)	Per capita expenditure (pcexp)	Ratio of pcexp to pcinc	Gini pcinc	Gini pcexp
2008	1,499.00	898.60	0.60	0.29	0.32
2009	1,645.62	1,065.90	0.65	0.27	0.30
2010	1,921.13	1,220.73	0.64	0.29	0.31
2011	2,464.44	1,560.43	0.63	0.32	0.41
2012	2,696.96	1,539.28	0.57	0.33	0.33
2013	2,848.65	1,623.93	0.57	0.33	0.35
	Poverty rate pcinc (Dibao)	Poverty rate pcexp (Dibao)	Poverty rate pcinc (US$ 2/day)	Poverty rate pcexp (US$ 2/day)	Household size
2008	0.004	0.053	0.002	0.021	1.5
2009	0.003	0.041	0.001	0.009	1.6
2010	0.005	0.033	0.003	0.009	1.6
2011	.	.	0.009	0.007	1.6
2012	.	.	0.008	0.005	1.7
2013	.	.	0.025	0.031	1.9
Urban households	Per capita income (pcinc)	Per capita expenditure (pcexp)	Ratio of pcexp to pcinc	Gini pcinc	Gini pcexp
2008	1,733.43	1,031.39	0.59	0.36	0.34
2009	1,963.85	1,271.79	0.65	0.32	0.34
2010	2,067.71	1,228.32	0.59	0.38	0.37
	Poverty rate pcinc (dibao)	Poverty rate pcexp (dibao)	Poverty rate pcinc (US$ 2/day)	Poverty rate pcexp (US$ 2/day)	Household size
2008	0.009	0.030	0.004	0.009	3.00
2009	0.001	0.021	0.001	0.002	2.90
2010	0.025	0.050	0.019	0.013	2.93

Source: Author's own calculation based on RUMiC survey data

2010 as a proxy Dibao line for 2009 for the 15 cities. I believe that Dibao is a good measure for a poverty line. It takes into account regional living cost differences. Another possible measure of the poverty line is US$ 2 per day. I calculated this poverty line using the purchasing power parity (PPP) exchange rate. For example, for 2010, the PPP exchange rate for the PRC is 3.32,[10] thus, the poverty line measured this way should be 201 yuan monthly, which is significantly below the Dibao poverty line (the mean Dibao line is 353 yuan, with the minimum being 260 yuan and the maximum being 450 yuan across the 15 cities in our sample).

Table 4.11 shows that both Gini coefficients have increased slightly among migrant workers as the per capita income and expenditure increases. The level of the Gini among migrants, however, is low relative to that for the country as a whole.

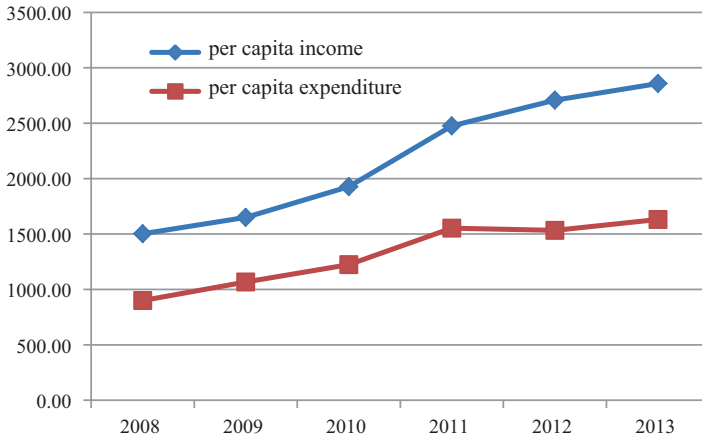[10] Data obtained from OECD StatExtracts: http://stats.oecd.org/Index.aspx?DataSetCode=SNA_Table4

Fig. 4.10 Trend of per capita income and expenditure (in US $), 2008–2013. (Source: Author's calculation)

The Gini coefficients for migrant workers during this period ranged between 0.27 and 0.33. During the same period, the official report on the Gini coefficient for the country as a whole ranges between 0.47 and 0.49. Academic studies have reported much higher inequality, with Gini coefficients reaching 0.6 in 2010 (Gan et al. 2013). The distribution of the per capita income in 2008, 2010, and 2012 is presented in Fig. 4.8. It seems that the increase in the extreme value of income in both a positive and a negative direction in 2012 contributed to the Gini increase.

The poverty rates based on the Dibao line using per capita income and expenditure are both trivial—0.3% and 0.5% for the 2 years, respectively. The poverty rate (Dibao line) using per capita expenditure is higher at 5.7% and 3.4% for the 2 years, respectively. The large difference between the poverty rate measured by per capita income and by expenditure is understandable. Migrant workers do not see their future life in cities. They come to cities to make money. They normally save a sizable amount of income to take back to their rural hometowns. This can be seen clearly when we compare their per capita income with per capita expenditure. Although income increases for migrant workers are significant over the period, the increases in expenditure are limited (see columns 1 and 2 of Table 4.11). The expenditure share of per capita income actually reduced in the final 2 years (see also Fig. 4.10).

The poverty rate measured by the US$ 2/day poverty line is very low for both per capita income and per capita expenditure terms, except for the year 2013. In all the other years, the poverty rate is below 1%. The reason the data in 2013 has 2.5% to 2.9% poverty is related to the fact that there is a sizable number of self-employed households reporting zero or negative income. Table 4.2 shows that the self-employed proportion increased in 2013. For the total sample, around 38% of migrant
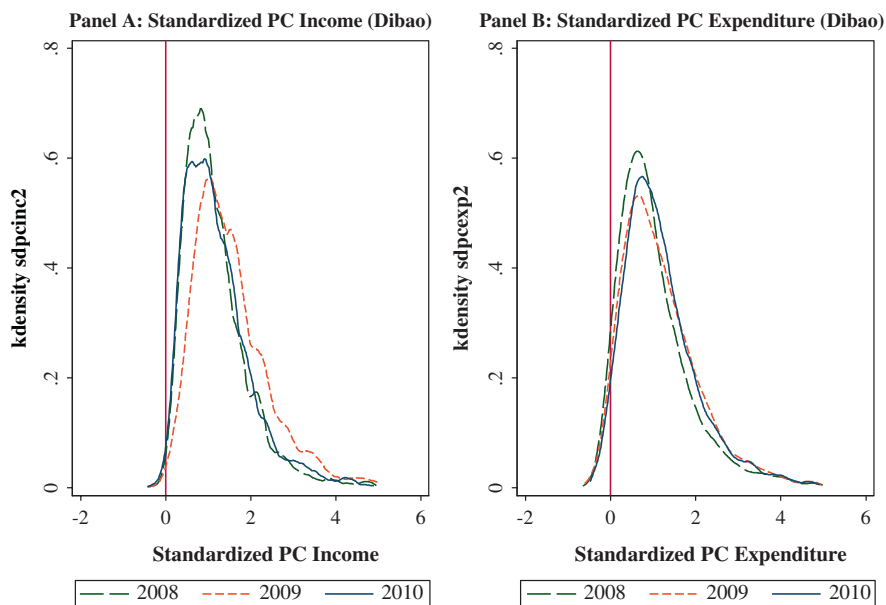
Panel A: Standardized PC Income (Dibao)   **Panel B: Standardized PC Expenditure (Dibao)**

Fig. 4.11 Distribution of per capita income and expenditure standardized by the Dibao poverty line (2008 and 2010). (Source: Author's calculation)

workers were self-employed in that year, and the ratio is 28% for the new sample. In addition, a significantly larger proportion of the self-employed reported zero or negative income in 2013 (2.3% in 2013 compared with less than 0.5% in any other years). The reason for this is hard to identify.

Panels A and B of Fig. 4.11 present the standardized per capita income and expenditure adjusted by the Dibao poverty line ((pcinc-dibao)/SD(pcinc)) and the US$ 2/day poverty line, respectively. Households with a standardized per capita income or expenditure below zero are those who are living under the poverty line. As can be seen from Panel A, the distributions of per capita income around the poverty line in both years are not very dense (Fig. 4.11). Thus, if the poverty line shifts, the change in the poverty rate may be mild. However, the distributions of per capita expenditure around the poverty line are very thick (Panel B of the figure), suggesting that the poverty rate can be sensitive to where the poverty line lies.

The clear left shift of the standardized per capita income distribution for the year 2013 in Panel A of Fig. 4.11b indicates both the increase in the PPP exchange rate-adjusted poverty line and the significant increase in the left tail of the per capita income distribution.

6.2 Poverty and Inequality Comparison Between Migrants and Urban Hukou Workers

In this subsection, I compare the distribution of per capita income and expenditure as well as the poverty rate between migrants and urban hukou workers. The data used is from the 2008–2010 surveys only. As discussed earlier, due to the lack of information on migrant population share in each city, I am reluctant to pool the two samples to examine the combined poverty and inequality. Later in this subsection, however, I will estimate whether being a migrant increases an individual's probability of being poor.

The lower panel of Table 4.11 reports the income and expenditure per capita, the Gini coefficients, and the poverty rate using two different poverty lines for the urban households in the same 15 cities. I find that despite urban households having twice as many members as the average migrant household, their per capita income is higher in each of the 3 years. This reflects the fact that migrant workers on average earn much less than urban workers in the labor market.

Comparison between the top and lower panels of Table 4.11 also indicates that inequality among migrants is less serious than that among urban households. Gini coefficients for per capita income for the 3 years are between 6 and 9 percentage points lower for the migrant households than those for the urban households. The difference is smaller if we measure per capita expenditure differences.

Because per capita income (and expenditure) dispersion is narrower for migrant households than for urban households, including the former in the city sample should not increase the poverty rate even though migrant average per capita income and expenditure are slightly lower than that of urban households. Figure 4.12 presents the standardized per capita income distributions. In each of the 3 years, the left tail of the distribution for urban households is thicker than that for the migrant sample.

If we examine the poverty measured in terms of per capita expenditure, the situation changes slightly (Fig. 4.13). Here, for both 2008 and 2009, the left tails of the distribution are thicker for migrants than for urban households. As a result, poverty rates among migrant households for these 2 years are higher for migrants than for urban households.

I estimate a linear probit model to examine whether migrant households are more or less likely to fall under the poverty line (Table 4.12). There are two specifications: one regression without any control variables (dummy for migrant households and year dummies only) and one with household head age, gender and schooling, and household size controls. Using poverty measured by per capita income, the dummy for migrant households is negative and statistically significant. The magnitude of the coefficient suggests that with or without other controls, migrant households are 0.7 percentage point less likely to be poor. Given that the total poverty rates for both samples are very small, the difference is statistically significant.

When poverty is measured using per capita expenditure, the coefficient on the migrant dummy variable switches signs and becomes positive and statistically significant. As such, migrant households are 0.9–1.5 percentage point more likely to be poor than urban households.
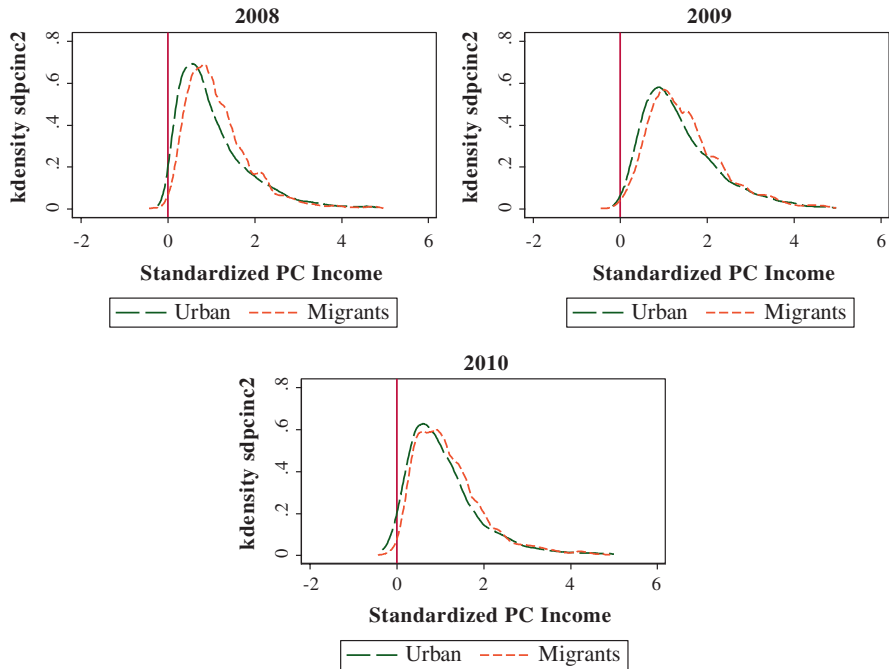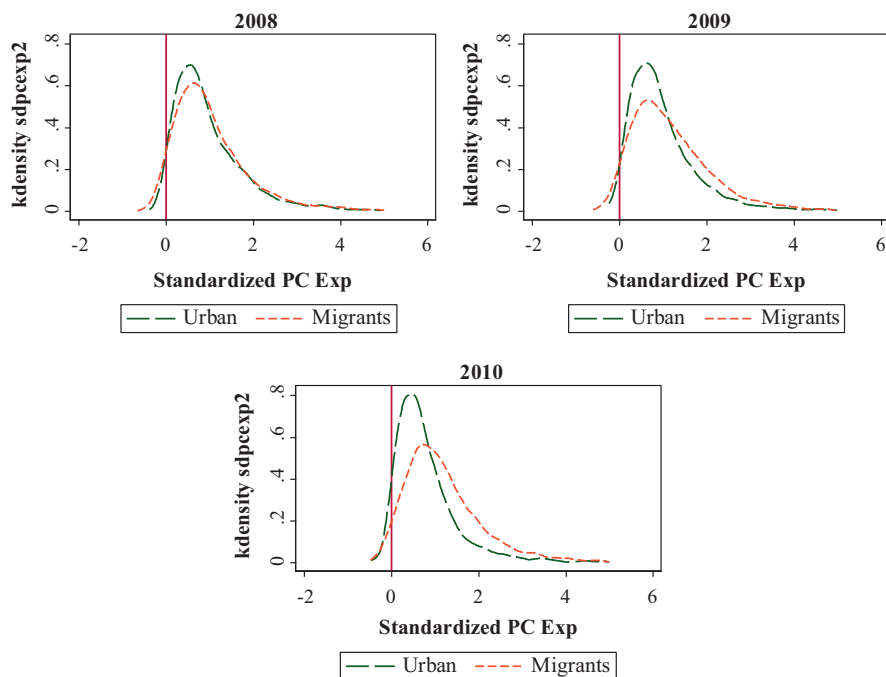
Fig. 4.12 Distribution of per capita income standardized by Dibao poverty line (2008–2010). (Source: Author's calculation)

In both regressions, the family size variable is positive and statistically significant. As the dependent variable in both cases is measured in per capita terms, the family size effect indicates that large families have additional disadvantages. This is not consistent with the idea of economies of scale within the household, which suggests that using per capita measures, a larger family size should have a lower probability of being poor. Here, the positive effect is perhaps related to behavioral issues, such as fertility.

7   Policy Implications and Recommendations

The PRC's historical rural–urban divide policies, its anti-big city urbanization strategies, and its planned economy have generated many past and future development challenges. At the same time, it also avoided many development diseases, such as slum in large cities and a worsening of city poverty and inequality. The question naturally arises as to whether the orderly growth of the large cities is a worthwhile trade-off for the past and future potential challenges. In this section, I discuss some of the most imminent challenges due to this trade-off and conclude the report by providing some recommendations.

Fig. 4.13 Distribution of per capita expenditure standardized by the Dibao poverty line (2008–2010). (Source: Author's calculation)

7.1 Migration Restrictions and Labor Shortage

The discussion in this report seems to suggest that unskilled labor in Chinese coastal and other more developed cities is partly due to the institutional restrictions on rural–urban migration. In a normal market economy, within the country, rural–urban migration is free. Individuals are treated equally in terms of access to social welfare and social services whether they were born in cities or in rural areas. Thus, people who wish to live in cities (large or small) will move there and settle there and sever their ties with the agricultural sector and rural life. The inability to do this means that the majority of migrants have no choice but to shorten their working life duration in the cities to attend to their families. The RUMiC survey asks migrant workers that if the policy allowed them to stay, how long would they like to stay in the city. Over the past 6 years, the proportion that would like to stay in cities forever has always been around 60%, suggesting a strong desire.

As discussed earlier, the shortened migration duration significantly reduces unskilled labor supply in cities, leading to a pressure on wage increases, which in turn generated the new implicit policy of shifting labor-intensive industries to other low-cost countries.

Table 4.12 Linear probit model on poverty (Dibao line)

	Poor measured in pcinc		Poor measured in pcexp	
Dummy for migrant household	−0.007***	−0.007***	0.009***	0.015***
	[0.001]	[0.002]	[0.002]	[0.004]
Age of household head		−0.001***		0.000
		[0.000]		[0.000]
Age squared		0.000***		0.000
		[0.000]		[0.000]
Household gender		−0.001		0.000
		[0.001]		[0.002]
Household years of schooling		−0.001***		−0.003***
		[0.000]		[0.000]
Family size		0.004***		0.007***
		[0.001]		[0.001]
2009.year	−0.003***	−0.003**	−0.010***	−0.010***
	[0.001]	[0.001]	[0.003]	[0.003]
2010.year	0.008***	0.008***	−0.003	−0.003
	[0.001]	[0.001]	[0.003]	[0.003]
Constant	0.010***	0.027***	0.038***	0.044***
	[0.001]	[0.005]	[0.002]	[0.011]
Observations	28,206	28,057	28,200	28,051
R-squared	0.005	0.007	0.001	0.009

Source: Author's calculation
Note: *** indicates significant at the 1% level

7.2 *Misreading of the Labor Shortage and the Consequence of Industrial Upgrading*[11]

Partly due to the pressure of labor shortage in cities, perhaps exaggerating its extent and misreading the cause (Lewisian turning point), and partly due to the belief that an economic power should have a more advanced industrial structure, many Chinese cities have begun industrial upgrading to systematically push the unskilled labor-intensive industry out. One such policy tool is to increase the minimum wage significantly to make low-skilled labor-intensive activities, which are only marginally profitable, to become unviable in these cities. Between 2008 and 2013, among our 15 survey cities, the average minimum wage increased by 10% per annum. During the same period, the total number of migrant workers in these cities reduced by 18% while the proportion of them working in the manufacturing and construction sectors reduced from 27% to 15%—a 12 percentage points reduction.

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[11] See Meng (2013, 2014) for a detailed discussion.

As industrial upgrading reduces the demand for low-skilled workers in medium and large cities, the main question becomes whether this will bring the PRC to a new and sensible equilibrium point with regard to migrant labor supply and demand. The short answer is no. The discussion in Sect. 7.3 demonstrated that the majority of the rural labor force (aged 16–65 years and not currently at school) has not migrated. Note that migration in that section was defined as moving to county- or above-level cities (of the 553 million rural hukou workers, only 166 million migrated to county or above level cities to work in 2013 according to NBS [2014]). The rest of the workforce is employed either in the rural agriculture or nonagriculture sectors. On average, those who are currently living in rural areas and working primarily in the agriculture sector work 154 days a year based on the China Family Panel Survey conducted by Peking University in 2012, which is comparable to the 150-day figure using the RUMiC 2010 data. In other words, these workers are grossly underemployed.

Can these workers be employed in cities where the upgraded industries have significantly changed the skill level demanded? Probably not. The farm workers who are currently remaining in rural areas have a much lower level of education than those who have migrated. Around 60% of the workers currently remaining in rural areas only have primary school education. In summary, the industrial upgrading policy currently being implemented will not provide a favorable labor market condition for those who are currently engaged in agricultural work and will soon become redundant from the agricultural sector.

7.3   New Urbanization Strategy and Future Growth[12]

The future excess supply of agricultural workers can be accommodated by the orderly building of small cities and towns, as emphasized by the PRC's newly published "National New Urbanization Plan 2014–2020" (State Council of China 2014). Can this strategy be a solution to the labor market fiction? Not really.

The "National New Urbanization Plan 2014–2020" states that hukou permit access for megacities (5 million and above) is "strictly restricted"; for large cities (3–5 million), it should be "reasonably contained"; for cities with 1–3 million population, hukou restriction can be relaxed "slightly"; for cities with 0.5 to 1 million population, it can be "relaxed orderly," while for local towns, there will be "no restriction." The document makes it clear that low-skilled migrants are to be rechanneled to medium-sized cities and many current farm workers are to be channeled to small local towns. However, no concrete measures or indicative directions are given in the document. For example, will individuals and their families who are currently working in megacities or large cities be able to obtain hukou status there, will they be rechanneled to medium or small cities, or will they be kept the current "floating" status, that is, working in large or megacities without access to local services?

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[12] See Meng (2014) for a detailed discussion.

Although the New National Urbanization Plan documents at great length the hukou permit restrictions at different city levels, very little is said about where the jobs would come from. Urbanization process in most developed countries occurred as a result of individuals choosing to go to cities where they could thrive or survive or, in other words, where they could obtain jobs. The current New National Urbanization Plan, however, uses permits for citizenship (hukou) to direct people where they can take their families to live with access to city privileges regardless of whether jobs are available. It is unlikely that the central planners are capable of designing such a large-scale social movement given the current less planned nature of the Chinese economy.

There may be ways, rather than direct administrative intervention, to "rechannel" population movement toward medium-sized cities. For instance, building satellite cities near mega- and large cities to reduce housing prices or reducing taxes to redirect industries to median and small cities. But all of these will involve some adjustment costs. Alternatively, using administrative tools may create more labor market tensions. The most important thing for policymakers is to understand the potential costs of each option.

Moving current farm workers to local towns could also be challenging if it is not more so. The main issue once again is related to where jobs should come from. Anecdotal evidences suggest that such administratively directed reallocation may lead to a deterioration of local communities and the idleness of the workforce. Of course, if farmers continue to work on their land while living in local towns, it will not create a big problem. However, as agriculture productivity continues to increase, a large group of the farming workforce will lose their jobs, and idleness in small towns will become a social problem. Thus, reallocation needs to be considered together with job opportunities.

In addition to the fact that small towns are too far away from the input and output markets and are not economically optimal for development, the strategy of reallocating farmers to small towns may also have a negative impact on human capital accumulation in the long run. A study by Bleakley and Lin (2012) found that there are not enough firms offering jobs in the same occupation or industry within small cities, and, as a result, individuals in less population dense markets cannot be too specialized, or they risk not being able to find another job once displaced. Consequently, encouraging development of small towns in the long run may depress human capital investment.

7.4 Recommendations

Based on the foregoing analysis, it seems that the cost of following an "orderly growth" route is quite high. Many unforeseeable challenges may completely change the PRC's economic growth potential.

First, at this stage, it is important to understand the skill level of current and future rural labor supply, which is and will be the majority of the new entrants into the urban labor market, and rethink whether the PRC can afford to only develop high-tech industries.

Second, the development of cities should follow what economic development requires rather than what central planners wish. The latter strategy may create more problems than it can solve. In particular, if rural workers will only be allowed to live in small cities where jobs are not available, it may create both economic and political problems.

Third, more importantly, given that the industrial structure in the PRC is already changing toward more capital and technology intensiveness, the PRC should try to improve education for rural and migrant children so that, in the near future, when they enter the urban labor market, they will not become unemployable.

Fourth, the most difficult reform may be to allow migrants to settle in cities where they can find jobs. This requires changes in the social welfare system, which, in turn, requires change in the public finance system so that the system can accommodate the basic idea of equal treatment to all citizens.

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