PAA 2009 Extended Abstract

Permanent migrants in China: Hukou Origin and Economic Integration

Xiaozhou Wang, R.S. Oropesa, Glenn Firebaugh

Introduction

Over the past several decades, China has experienced a massive increase in the size of its urban population. Between 1997 and 2006, the number of people living in China's cities grew from approximately 384 million to 570 million and the share of the population living in cities grew from 31 to 43 percent (United Nations 2008: Table 6). Thus, the number of urban residents has grown by nearly 50 percent and the percentage of the population in cities has grown by 40 percent in the last decade. In short, cities play increasingly important roles as settlements and as the sites of economic activities in China.

The massive scale and pace of this urbanization is due primarily to internal migration flows that can be traced to economic reforms of the 1970s. Indeed, China is experiencing perhaps the largest volume of internal migration in history. The 2000 Census identified 144 million migrants, defined as those who left their registered place of residence for more than 6 months (Liang and Ma 2004: 475). About 80% of these migrants were from rural villages and roughly 80% migrated to towns and cities. Such figures suggest that the majority of the internal migration is from rural to urban areas (Liang and Ma 2004).

The internal migration stream consists of two segments: permanent migrants and temporary migrants who move to an area for a short period of time for seasonal work or for other reasons. To some extent, the amount of research attention devoted to these two segments has been uneven. Specifically, a number of studies document the characteristics and circumstances of the "floating population" of temporary migrants (Liang 2001; Ma, 2001; Ma and Xiang 1998; He 2005; Bakken 1998; Gaetano and Jacka 2004; Yang & Guo 1996). However, this provides an incomplete portrait of migrants given that many residents of cities are permanent migrants who are likely to differ systematically from temporary migrants. Despite a number of studies that have made significant inroads in describing their circumstances, the answers to basic questions about the current integration and adaptation of permanent migrants to cities remain unclear. This lack of clarity stems, in part, from the preponderance of studies that are primarily descriptive and qualitative (Honig 1990; Solinger, 1999a, 1999b), studies whose contemporary relevance has declined as the data upon which they are based have aged, and studies that have limited generalizability due to their reliance on local surveys (Fan 2001, 2002).

Using earnings data on men from the 2003 Chinese General Social Survey, the purpose of this paper is to answer two questions about the economic circumstances of permanent migrants to Chinese cities: Are permanent migrants economically advantaged (or disadvantaged) in comparison to their urban native counterparts? What are the sources of economic advantage (or disadvantage) for permanent migrants? These questions are important because some previous research suggests that permanent migrants generally enjoy economic advantages, despite the prevailing image of migrants in developing countries as a reserve labor pool that is mired in poverty. At the same time, there is a lack of consensus about the relative roles of human and political capital in securing economic advantages for permanent migrants in China's "transition"

economy. Thus, we attempt to identify the sources of migrants' advantages and disadvantages in Chinese cities.

Data and methods

Our analysis is based on the 2003 General Social Survey of China (CGSS), a project conducted jointly by the Hong Kong University of Science and Technology's Survey Research Center and the Sociology Department of People's University of China (Renmin University). The CGSS relies on a multi-stage stratified sampling procedure that starts with the selection of urban and suburban districts (and counties) as primary sampling units and culminates in the selection of one individual per household for a personal interview to generate a representative sample of residents of Chinese cities. The survey was administered to 5,894 urban respondents, with an overall response rate of 77%.

We analyze the responses of 1,049 males between the ages of 18 and 59 who were employed for more than one month at the time of the interview and who were also not retired or not attending school. The loss of observations stems from several decisions. Nearly three-fourths of the case attrition is due to the restriction of the sample to employed males with positive earnings in the working-age population. An addition restriction limited the analysis to non-migrants and those who migrated as adults (age 16+) with non-agricultural hukou and were registered at the household of interview (i.e. permanent migrants to cities). To reduce the potential for endogeniety in the relationship between migration status and wages, we also exclude those who hold local-valid non-agricultural hukou status because this "blue stamp" can be purchased from the local government. Lastly, listwise deletion of missing data is responsible for the loss of the remaining cases.

Before describing our measures, it should be noted that we would have liked to include temporary migrants in our analysis. Temporary migrants cannot be identified because the sampling frame of the CGSS is based on the selection of households from household registration records. By definition, temporary migrant household registration records are not at their destination. Obviously, some respondents who were not registered in the sampled household were surveyed, but we are not able to tell whether they are temporary migrants or just visitors to that household. Therefore, these individuals are excluded.

Dependent Variables

The dependent variable is the natural log of hourly earnings (in Chinese Yuan), which is computed by dividing the respondent's individual income by the estimated number of hours worked in 2002. The numerator includes income from all sources: wages, bonuses, profit sharing, dividends, net income from business earnings, interest from bank deposits, and contributions from other sources.

This is referred to as a measure of hourly "earnings" for convenience, despite the imprecision of doing so. This imprecision stems from the fact that the term "earnings" is typically reserved for wages, salaries, commissions, bonuses, and other income from employment. These sources are likely to account for most of the annual personal income reported by the employed respondents in the age range examined here. Nevertheless, this measure cannot be partitioned into income from various sources. Also, the results are not sensitive to the decision to include annual hours of work in the denominator of the measure, as opposed to treating it as a covariate in the right-hand side of the equation.

Independent Variables

Migration Status

Chan et al (1999) point out that one of the major reasons why permanent migration is understudied is the absence of the requisite data. One of the strengths of the CGSS is that it collected migration histories. Respondents were asked to indicate the year of migration, the type of origin community, the type of destination community, and the reason for a permanent move that involved a change in household registration status. To assure the accuracy of the retrospective information, the respondents were asked to refer to their household registration book during the interview.

These questions permit the identification of permanent rural-to-urban migrants, urban-to-urban migrants, and urban non-migrants. Hukou origin is counted as the place of hukou registration right before the first migration, with places ranging from rural villages and towns to provincial capitals and municipalities under the direct control of the central government. Permanent rural migrants to cities are those with an urban hukou registration at the time of the survey and rural hukou origins. Permanent urban migrants are those individuals who had migrated and had changed their hukou registration to the city of residence at the time of the survey, but whose origins were in another urban area. These two groups are contrasted to urban natives who were not migrants (i.e., the reference group).

Some analyses will also employ a measure that is potentially important for understanding the economic integration of migrants in cities. Specifically, length of residence in the city of interview can be determined and included in models of earnings for migrants. We suspect that wages are likely to increase with length of residence.

Two Types of Capital

As noted above, competing explanations of inequality in China focus on human capital and political capital. Human capital is measured with two variables. The primary measure is the number of years of education. Also included is a measure of years of work experience, determined by subtracting years of education plus 6 from age. Obviously, our inclusion of this measure of work experience makes age redundant and it is excluded from the analysis (Pearson's r for age and experience exceeds .9).

Some studies also include a quadratic term to allow for a curvilinear relationship between experience (or age) and earnings. We explored this possibility in the preliminary analysis, but the results were not significant. The inclusion of this variable also does not affect the other parameter estimates. Thus, we exclude the quadratic term for experience from the analysis for the sake of parsimony.

Political capital refers to resources that are a function of political position and political connections. Because access to political capital in China requires party membership, we contrast those who are members of the Communist Party (coded as 1) with those who are not members (coded as 0).

Other Covariates

Other covariates that are of secondary interest include full-time employment status (employed 35 or more hours per week), occupation (measured with a set of seven dummy variables), and economic sector of employment. Economic sector is measured with dummy variables that refer to the ownership of work units. The state-owned sector consists of government agencies, state-owned enterprises, state-owned institutions, and the Communist Party. The private sector includes individually-operated, privately-owned, and foreign-

investment enterprises. These are contrasted to enterprises in the collectively-owned sector (the reference group), which are reputed to be among the worst performing and lowest paying.

An additional set of eight dummy variables is included to recognize the east-west economic divide and uneven development of China. Using the capitol city of Beijing as the reference, we identify residents of Shanghai, Tianjin, Eastern cities and counties, Central cities and counties, and Western cities and counties.

Main Findings

In this paper we have pursued two objectives that focus on the economic integration of permanent migrants in urban China. The first objective was to determine whether permanent migrants are economically advantaged or disadvantaged. We hypothesized that permanent migrants would be economically advantaged based on the criteria for changing registration status and findings from previous studies. This expectation of a "permanent migrant" advantage was generally supported. Controlling for regional differences, permanent migrants generally enjoy higher earnings than their urban non-migrant counterparts, regardless of their origins. In addition, urban migrants have the highest mean earnings of any group, but their earnings are not significantly different from rural migrants. Thus, evidence for the hypothesis that permanent urban migrants are the most advantaged is equivocal.

The second objective was to identify the source(s) of economic advantage. This is an important issue within the context of current debates about the extent to which market-based reforms during a time of economic transition are responsible for shifting the basis of inequality in earnings from political capital to human capital. In keeping with market transition theory,

earnings-related advantages of permanent migrants can be mainly attributed to their relatively high levels of human capital. Party membership holds little explanatory power for the earning advantages of permanent migrants. Indeed, the association between party membership and earnings appears to be a spurious function of education. Needless to say, it would be a mistake to totally discount political capital as a source of advantage. Earnings are also associated with cadre status and employment in the state-own sector. Collectively, these findings suggest that the co-existence of the market economy and state socialism adds to the complexity of labor market dynamics.

The last part of the analysis explored the effect of length of residence in the locality of interview. Among rural migrants, the results indicate that length of time in the current city of residence has a negative effect on earnings and the total length of time in cities has no impact on earnings at all. This pattern does not support the classical view that as time goes by, migrants become more accustomed to the urban life and experience an improvement in their economic well-being. Because our earnings data is cross-sectional, we cannot identify what is responsible for this finding. It could indicate that an older cohort of rural migrants is of lower "quality" than the younger cohort on some unmeasured characteristics and were tracked into worse jobs.

Table 1 Descriptive Statistics

		Migration status			Test
		Urban	Rural	Urban	Statistic
	Total	Non-Migrants	Migrants	Migrants	F
Migration status					
% Urban non-migrants	55.7				
% Rural migrants	20.5				
% Urban migrants	23.8				
Earnings					
Mean hourly earnings	5.3	5.0	5.4	6.0	2.2
Human capital					
Mean years of experience	19.5	19.1	21.3	19.0	2.5+
Mean years of education	10.7	10.3	10.9	11.6	12.0***
Party member					
% No	76.7	85.0	61.3	70.7	17.7***
% Yes	23.3	15.1	38.7	29.3	
Full time worker					.1
% No	4.5	4.1	4.5	5.2	
% Yes	95.5	95.9	95.6	94.8	
Sector					5.1**
% Collective-owned	8.8	8.1	9.3	10.1	
% State-owned	61.0	52.5	69.8	73.4	
% Private-owned	30.2	39.4	21.0	16.6	
Occupation					2.8**
% Leading cadres	4.9	3.7	7.9	5.2	
% Prof. & tech. staff	9.9	6.7	16.9	11.4	
% Office wkrs & related staff	12.5	11.1	9.5	18.3	
% Commercial & service wkrs	11.1	13.1	6.7	10.1	
% Farming, forestry, etc.	1.3	2.0	0.3	0.4	
% Operators -prod. & trans.	39.2	40.4	37.2	38.0	
% Other unsorted wkrs.	21.1	22.9	21.4	16.7	
Region					1.5***
% Beijing	2.2	2.7	.5	2.6	
% Tianjin	1.9	2.5	.3	1.8	
% Shanghai	2.5	3.9	.0	1.1	
% East cities	5.4	5.0	3.9	7.7	
% Central cities	6.0	5.8	5.4	7.1	
% West cities	6.8	4.5	7.5	11.4	
% East counties	23.0	25.7	18.1	21.2	
% Central counties	38.9	36.3	49.3	36.1	
% West counties	13.4	13.7	14.9	11.1	

Note: The overall test statistic for each variable is Wald's F statistic (adjusted for the complex sample design). To maintain consistency with the multivariate analyses, the statistical tests for earnings are based on a logarithmic transformation.

*** p<0.01, ** p<0.01, * p<0.05, + p<0.1

Table 2. OLS Regressions: Hourly Earnings (log) for All Workers

	Bivariate	Multivariate				
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	b	b	b	b	b	b
Migration status						
Urban non-migrants	-----	-----	-----	-----	-----	-----
Rural migrants	.15	.24*	.12	.16+	.10	.06
Urban migrants	.21*	.23*	.06	.18+	.05	.02
Human capital						
Years of experience	-4.16E-04		.01*		.01*	.01
Years of education	.12***		.12***		.11***	.09***
Political capital						
Party member	.35***			.35***	.11	.06
Work status						
Full time	-.78***					-.89***
Sector						
Collective-owned	------					-----
State-owned	.35**					.23*
Private-owned	.04					-.01
Occupation						
Leading cadre	------					------
Professional & technical staff	.05					-.16
Office workers & related staff	-.38**					-.28*
Commercial and service workers	-.63***					-.41*
Farming, forestry, etc.	-.63					-.38
Operators – prod. & trans. equip	-.62***					-.31*
Other unsorted workers	-.50**					-.17
Region						
Beijing	-----	-----	-----	-----	-----	-----
Tianjin	-.47**	-.45**	-.22	-.42**	-.22	-.26+
Shanghai	.16	.21	.31*	.29+	.33**	.35*
East cities	-.03	-.07	.04	.00	.06	.10
Central cities	-.31	-.34	-.20	-.27	-.19	-.24
West cities	-.52*	-.60**	-.35+	-.57*	-.35+	-.41*
East counties	-.37*	-.38*	-.19	-.36*	-.19	-.20
Central counties	-.73***	-.76***	-.47***	-.72***	-.47***	-.52***
West counties	-.57***	-.60***	-.32*	-.58**	-.33*	-.42***
Constant		1.76***	.06	1.67***	.13	1.48***
Observations		1049	1049	1049	1049	1049
R-squared		.10	.24	.13	.30	.31

+p<0.10, * p<0.05, ** p<0.01, ***p<0.001

Table 3. OLS Regressions: Log of Hourly Earnings for Full-Time Workers

	Bivariate	Multivariate				
	Model 1 b	Model 2 b	Model 3 b	Model 4 b	Model 5 b	Model 6 b
Migration status						
Urban non-migrants	-----	-----	-----	-----	-----	-----
Rural migrants	.17+	.27**	.15*	.20*	.13+	.11
Urban migrants	.24*	.25**	.06	.20*	.05	.04
Human capital						
Experience	4.26E-04		.01**		.01**	.01*
Year of education	.12***		.12***		.12***	.10***
Political capital						
Party member	.34***			.34***	.11	.04
Sector						
Collective-owned	------				-----	-----
State-owned	.33**					.21+
Private-owned	-.04					-.02
Occupation						
Leading cadre	------					-----
Professional & technical staff	-.01					-.16
Office workers & related staff	-.40**					-.28*
Commercial & service wkrs	-.66***					-.35*
Farming, forestry, etc.	-.70					-.36
Operators–prod/trans. equip	-.63***					-.29*
Other unsorted workers	-.60***					-.21
Region						
Beijing	------	-----	-----	-----	-----	-----
Tianjin	-.47**	-.46**	-.22	-.42**	-.22	-.25+
Shanghai	.16	.22	.32*	.29+	.33**	.34*
East cities	-.03	-.07	.04	-.00	.06	.08
Central cities	-.30	-.34	-.20	-.27	-.18	-.23
West cities	-.55*	-.62**	-.36+	-.59*	-.36+	-.39+
East counties	-.40*	-.42*	-.22+	-.39*	-.22+	-.21
Central counties	-.76***	-.80***	-.50***	-.76***	-.50***	-.54***
West counties	-.72***	-.76***	-.47***	-.74***	-.48***	-.48***
Constant		1.75***	-.00	1.66***	.06	.51+
Observations		1007	1007	1007	1007	1007
R-squared		0.13	0.28	0.16	0.28	0.30

+ p<0.1, * p<0.05, ** p<0.01, *** p<0.001.

Table 4. OLS Regressions: Hourly Earnings by Migration Status

	Urban Non-Migrants		Rural Migrants		Urban Migrants	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Panel A. Total Sample						
Human capital						
Years of Education	.12***	.10***	.08***	.02	.15***	.12***
Political capital						
Party Member	.43***	.18	.32**	.10	.19	-.03
Panel B. Full-Time						
Human capital						
Year of education	.13***	.11***	.06**	.02	.17***	.13***
Political capital						
Party Member	.45***	.19+	.23**	.04	.18	-.06

Note: The cell entries are unstandardized regression coefficients (b) for a bivariate (Model 1) and multivariate models that include all other covariates (Model 2).

+p<0.10, * p<0.05, ** p<0.01, ***p<0.001

Table 5. OLS Regressions: Earnings on Migration Status and Length of Residence for Migrant Samples

	All Migrants		Rural Migrants		Urban Migrants
	Model 1	Model 2	Model 3	Model 4	Model 5
Migration status					
Rural migrants	-----	-----			
Urban migrants	-.05	-.04			
Length of residence					
Current urban area		-.01+	-.02**		-.01
Total in urban areas				-2.07E-03	

Note: All parameter estimates are unstandardized regression coefficients from models that include all covariates

+ p < .10, * p<0.05, ** p<0.01, *** p < .001