DISCUSSION PAPER SERIES

IZA DP No. 3594

Social Protection and Migration in China: What Can Protect Migrants from Economic Uncertainty?

Lina Song
Simon Appleton

July 2008

Forschungsinstitut
zur Zukunft der Arbeit
Institute for the Study
of Labor

Social Protection and Migration in China: What Can Protect Migrants from Economic Uncertainty?

Lina Song
University of Nottingham
and IZA

Simon Appleton
University of Nottingham

Discussion Paper No. 3594
July 2008

IZA

P.O. Box 7240
53072 Bonn
Germany

Phone: +49-228-3894-0
Fax: +49-228-3894-180
E-mail: iza@iza.org

IZA Discussion Paper No. 3594
July 2008

ABSTRACT

Social Protection and Migration in China: What Can Protect Migrants from Economic Uncertainty?

Job-related welfare entitlements are common in China. Migrants who do not hold urban registration are, in principle, not entitled to job-related welfare even if they are employees in the State sector. The official explanation is that rural-urban migrants are allocated access to farm land in their rural origins, and hence their welfare rights and security are covered by this entitlement to the use of land. In this paper, we look at whether migrants still benefited from these opportunities. Second, we investigate whether it is the poor, the unentitled and the vulnerable that are excluded from public protection programs. Chinese official social protection programs are, like in most western countries, officially designated as being for poverty alleviation. However would such programs still be targeted in ways that limit their coverage, curtail the range of basic needs provided for and allocate benefits very unequally? Thirdly, we explore whether households with favourable productive characteristics are more likely to get into social protection programs. Here, the ongoing debate concerning equality of opportunity and equality of outcomes has some relevance. Finally, we examine the roles social networks or Guanxi (the Chinese term for social connections) may play in dealing with economic shocks.

JEL Classification: H41, H42, D63

Keywords: migration, social protection, entitlement, China

Corresponding author:

Lina Song
School of Sociology and Social Policy
University of Nottingham
Nottingham, NG7 2RD
United Kingdom
E-mail: lina.song@nottingham.ac.uk

1. Introduction: issues and context

More than 140 million Chinese people (10% of its population) are classified as being a "floating" population, the majority of them rural-to-urban migrants. Rural-urban migration in China has been described by the UN Country Team (2004) as "perhaps the most powerful force for further reducing poverty in China". However, it is commonly observed that migrants tend to be exposed to dangerous environments: living in dreadful conditions in order to save money; working in risky occupations or locations in order to obtain higher income. Moreover, few of them are covered against uncertainties by either publicly managed or commercially organised programmes. How do they protect themselves from unforeseen risks? What risk-copying mechanisms do they adopt in the unfavourable social environment in which they find themselves?

Using a nationally representative household survey from 2002, we explore whether rural-urban migrants are excluded from social protection and how they anticipate coping with unforeseen economic shocks. We employ a comparative approach, assessing the position of rural-urban migrants in relation to that of their urban or rural counterparts. For brevity of exposition, we use the terms "urban residents" and "urban households" to refer to those dwelling in urban areas who are not rural-urban migrants. The registration system in China is very rigid so that these urban residents will have official urban registration (*hukou*) but rural-urban migrants will still have rural registration.

First, we provide some descriptive information – comparing the coverage of social protection and job-related welfare benefits among three groups defined by residential status: rural, urban and migrant. We further look into the details of how they anticipate dealing with unforeseen economic uncertainties by asking to whom they would turn to for borrowing fund in order to pay for any unexpected events.

Job-related welfare entitlements are common in China. Migrants who do not hold urban registration are, in principle, not entitled to job-related welfare even if they are employees in the State sector. The official explanation is that rural-urban migrants are allocated access to farm land in their rural origins, and hence their welfare rights and

security are covered by this entitlement to the use of land. However, all individuals are allowed and even encouraged to join commercial welfare programmes, in particular, medical insurance and pensions, provided they can afford them. Employers, both State-owned and private, are requested by law or regulation to contribute to all their employees' welfare schemes in the formal sector. But the threshold to enter the formal employment for rural-urban migrants remains high. In the 1990s, jobs provided to migrants by official employment agents were usually assigned in the formal state sector (Song and Appleton, 2006). We look at whether migrants still benefited from these opportunities in 2002.

Second, we investigate whether it is the poor, the unentitled and the vulnerable that are excluded from public protection programs. Chinese official social protection programs are, like in most western countries, officially designated as being for poverty alleviation. However such programs are still targeted in ways that limit their coverage, curtail the range of basic needs provided for and allocate benefits very unequally. For example, the poor and the vulnerable are not all covered by 'Low-income Allowance Scheme' (known as *Dibao*) in both rural areas and among the rural-urban migrant communities. Medical insurance and old-aged care are still linked to employment. Only those who have long-term contracts with their employers are able to enter schemes provided by public agents. Migrants or rural residents who are not entitled to obtain long-term urban jobs do not benefit from such protections.

Thirdly, we explore whether households with favourable productive characteristics are more likely to get into social protection programs. Here, the ongoing debate concerning equality of opportunity and equality of outcomes has some relevance (the World Bank, 2006). Those in favour of equality of opportunity often advocate building-up a market system in which competition provides equal chances for all. Believers in equality of outcomes argue that programs should protect the vulnerable population. Social protection in China in its current stage is unlikely to satisfy either camp. Far from using the market mechanism, most social protection schemes in China are provided by the government, public sector employers or local communities and are based on employment in public sector. Advocates of equality of outcomes would be dissatisfied by the fact that social protection in China is far from universal, being instead mainly job-oriented or based on urban residentship (Song, 2006).

Finally, we examine the roles social networks or *Guanxi* (the Chinese term for social connections) may play in dealing with economic shocks. Social networks, when manipulated for economic purposes, could be regarded as economic resources, and hence can be defined as social capital (James Coleman, 1988, 1990). Under decades of socialist planning, China suffered from a lack of the market mechanism. This has started to change with reform, but marketisation remains incomplete and economic resources are still mainly controlled by the state. In such a structure, social connections are essential for obtaining resources. *Guanxi* is used for economic gain and often substitutes for market exchanges; for the poor, it can be used for social support or social protection. This is especially so when household economic resources are not sufficient (Gary Becker, 1981). In this paper, we ask when there is a lack of centrally-funded or publicly-managed welfare programs, are the vulnerable more likely to rely upon their social connections for protection than the well-off?

Section 2 provides information about the data we use for the analysis. Section 3 presents some descriptive statistics. Section 4 outlines the methods used for modelling inclusion in social protection. We focus on a range of determinants of inclusion. One is household income: whether income increases access to social security or is a substitute for it. We also test whether people with more productive characteristics have a greater chance of inclusion. Finally, we look at the relation between people's anticipated source of support when coping with economic shocks and whether they are included in social protection. Section 5 presents the main results and Section 6 concludes.

2. Data

The household surveys used for this paper were conducted in 2003, obtaining information on 2002, as part of the Chinese Household Income Project 2002 (thereafter CHIP 2002). All three main types of Chinese households were surveyed: urban households (CHIP Urban Survey 2002), rural households (CHIP Rural Survey 2002), and rural-urban migrant households (CHIP Migrant Survey 2002). The sampling and questionnaires were designed by a team of scholars including the

authors. The surveys were implemented by the National Bureau of Statistics and the Research Institute of Economics, Chinese Academy of Social Sciences. All three surveys are intended to be nationally representative either using them separately or merging them together (Gustaffson, Li and Sicular, 2007 forthcoming). However, there was no adequate sample frame for rural-urban migrants. Migrants were sampled from those who resided in cities with addresses, so it is likely that the survey over-samples settled migrants relative to the more recent or more transitory ones (Appleton *el at*, 2005; Li and Sato, 2006).

The surveys covered all household members including children and elderly. The main categories of questions are similar across the three surveys. The information spans personal and household characteristics, employment, household production, assets, debts, income and consumption. Questions related to social protection and social networks were all included in the surveys, although the wording sometimes varied across the three kinds of household because of the very large difference in circumstances. All information was provided by a respondent, typically the household head.

The urban survey contains 7000 households from 11 provinces; the migrant survey covers 2000 households with over 5000 migrants from 27 cities in 6 provinces; and the rural survey has more than 9000 households from 22 provinces. In the analysis, some observations have had to be deleted due to missing values for key variables. The main exercise conducted in the paper uses a full sample of over 17,000 Chinese households merged from urban, rural and migrant surveys.

3. Descriptive information

Migrants face many disadvantages not encountered by urban residents. They often lack urban welfare entitlements. For example, their children would have to pay higher fees in order to attend urban schools than their urban counterparts; when food subsidies are issued to those who have urban residentship, they are not included; when the programmes of ‘unemployment benefit’, ‘low-income allowance’ and pension schemes are designed, rural-urban migrants are not considered for inclusion. The only

exceptions to this exclusion would be if migrants secured some social welfare linked to their jobs.

Only 5 % of sampled migrant workers, compared with 64% for urban workers, are covered by some sort of social protection programmes. Although very small, coverage of migrants is much greater than coverage of their rural counterparts - which stands at even less than 1 % (Table 1). Of all those who are covered nationally (24% of workers), 97% of them are urban residents (Table 2).

Those advocating extending social protection for migrant workers are sometimes seen as naïve. The official position is that rural-urban migrants have their access to welfare in their rural origins. However, these migrant workers, according to our survey, have been in the city for an average of over 7 years. They are fairly settled and a lot of them are now living and working with their spouse and children in the city. In recent (2007) fieldwork among with migrants in Beijing suburbs, a large number of migrant workers said they would go back to rural areas for medical treatment if they fell seriously ill. It is apparent that whether migrants could get settled in urban centres or not will largely depend on how well integrated they are into the urban system economically, socially and culturally. And all this may point to sweeping changes for rural Chinese in terms of their land ownership, citizenship, and entitlement to state assets.

Since the central government liberalised restrictions on internal migration, 'allowing' the movement between rural and urban sectors in China, there is no regulation to safeguard migrants' livelihoods. They have to find their own ways of dealing with problems.

One can conceptualise three typical kinds of settlement for rural-urban migrants in China. The first type is the "migrant settlement community". They have emerged in the suburbs of big cities like Beijing and Shanghai. Examples of such communities include Zhejiang Village, Xinjiang Village, and Henan Village in suburban Beijing. These communities are semi-autonomous and inhabited mostly by rural-urban migrants with the same provincial origins. These communities are clearly structured with services - clinics, transport, shops and restaurants - to cater to their own needs. In this type of community, migrant workers live with their employers in an environment where they do

not have many opportunities to contact "outsiders" (Ma and Xiang, 1998). But the employers have networks to transfer information about jobs, business and many other matters (Song, 2000). The second type of settlement is comparative isolation. Migrants live with their fellow-workers and their employers in a corner within a city. These migrants do not have many contacts with urban residents and their reference group remains their rural fellow-villagers or fellow-migrants. These migrants tend to work in manufacturing or on construction sites. The third type of rural-urban migrant is more intermingled with urban residents. Their clients are usually urban residents, or they rent accommodations from urban dwellers, or their children, if with them, are mixed with urban children in schools or residential sites. This chapter studies these more settled migrants, as they are likely to stay on in cities, and are resourceful of competing or co-existing with the entitled urban residents. With all three types of rural-urban migrants, social protection coverage against economic uncertainty has been deficient.

The living arrangements, in many ways, are not associated with social security coverage. Job-security in China, since the economic reform, has become the most secured protection. And obtaining jobs in the formal or State sector is the most likely route for migrants to obtain social protection. Entitlement to urban jobs implies welfare entitlement in China. In the 1990s, many types of jobs were not available for rural-urban migrants (whose hukou are registered in rural areas), while most welfare provisions were linked to those jobs (Knight and Song, 2005). This has not been reversed even though it has not openly mentioned since the current government came to power. The root, therefore, of the exclusion of rural-urban migrants from the current social protection system is, by and large, embedded in urban job-entitlements. However, according to our survey (Table 3), job opportunities have not kept pace with the numbers of rural-urban migrants. In 1999, 35% of the sampled migrant workers obtained their jobs from market competition; and this has fallen to 30% in 2002. Government job-centres have stopped helping migrant workers since 1999; less than 1% of migrant workers in 2002 got their jobs from such agents. We note that it is jobs introduced by government agents that are more likely to provide migrants with social protection coverage. 35% of sampled migrant workers received a pension package; 30% were covered by medical insurance and 30% could claim unemployment benefit (Table 4). The proportion of migrants' using their *guanxi* networks to find jobs remained at a similar level between 1999 and 2002. But the proportion of migrants

who are in self-employment is 8 percentage points higher. More and more migrants come to cities and create their own work. This raises the issue of whether they can protect themselves from risk.

4. Methods and modelling specification

The main purpose of this paper is to examine the determinants of inclusion in the social protection programs available to Chinese households. A recent study by the World Bank researchers pioneered an investigation into social protection and expanded the conventional concept into "the double role of risk management instruments—protecting basic livelihoods as well as promoting risk taking" (Holzmann and Jørgensen, 2001). Unfortunately, the data used here does not sufficiently capture all dimensions of risk-taking. Nor did it measure household shocks, such as those studied by Dercon *et al* (2004, 2005). We do not yet have access to nationally representative longitudinal data that would be ideal for such a study. Consequently, we confine ourselves to analyzing the coverage of social protection programs. The dependent variable is a dummy variable for whether the individual is included in any publicly-funded or managed social security program. These programs are defined as medical insurance (for all three surveys) together with pensions and unemployment benefits for the urban and migrant samples only. Unemployment benefits and state pensions are typically not available to rural residents and so were not inquired about in the rural survey.

Social protection and social support have a role given uncertainty over health and incomes. We model whether a household *i* is covered by publicly funded social protection program ($SP_i = 1$) or not ($SP_i = 0$) using a probit:

$$SP^*_i = \alpha' Q_i + U_i \quad \text{where} \quad U_i \sim N(0,1)$$

$$\Pr(SP_i = 1) = \Pr(SP^*_i > 0) = \Phi(\alpha' Q_i) \qquad (1)$$

In Equation 1, Q_i is a vector of explanatory variables and α a vector of associated coefficients. Among the explanatory variables are

(1) household income per capita (logged);

(2) logged household income per capita (predicted);
(3) dummy variables to define whether observations are urban, rural or migrant households;
(4) household stock of social capital, proxied by dummy variables for self-assessed sources for social support;
(5) household stock of human capital, proxied by the respondent's education in years and their self-assessed health status;
(6) household stock of political capital, proxied by the respondent's Communist Party membership;
(7) personal characteristics including sex and age;
(8) marital status; and
(9) province dummy variables

There are several methodological issues that arise from this model. Household income variable may be endogenous, since it includes public transfers from social protection (medical insurance and safety nets). Consequently, we employ a two-stage probit model, use predicted rather than actual log income as an explanatory variable. The dummy for being a migrant may also be endogenous due to the selectivity of migration.

5. Results: examining the determinants of social protection exclusion

Table 6 presents a binary probit model for whether adults are included in publicly funded social safety programs. The actual proportion of adults who are included is 28%, although due to the non-linearity of the probit model, it predicts a smaller mean proportion (10%) at the mean of the explanatory variables. Two variants of the model are estimated - one with actual household income per capita as an explanatory variable; another with that variable instrumented by household income in the previous year. The models have a high goodness of fit: the pseudo R^2 for the first model is 56%, and for the second model is 53%.

In the first variant of model (1st Column Table 6), using actual income, the marginal effect of logged income on the probability of being included in a social protection

scheme is 8%. This implies that doubling household income would raise the predicted probability of being included by 8 percentage points. Compared with urban individuals and controlling for other determinants, rural residents are 34 percentage points and rural-urban migrants 8 percentage points less likely to be covered by social protection. One extra year of education for household heads would increase the likelihood of being protected by half a percentage point. Political status, proxied by whether household heads are Communist Party members, also has a positive and significant effect on inclusion in social protection. Having a Party member as household head means it is 3.5 percentage points more likely that they will be socially protected, *ceteris paribu*s. Working in the State sector has a very large impact on the probability of social protection - raising it by eight percentage points. Being unemployed, other things are equal, reduces the chance of getting protection by 5 percentage points. This reflects the loss of access to work-unit based entitlements. Men are 2% less than women to be protected and age has statistically insignificant effects. In the model we also test whether marital status has any impacts on social protection. Married couples may be more security-mined and it would be more likely for this kind of households to seek for extra certainty (Song, 1999). Indeed, in our model, we find that being married raises the probability of being included in social protection by three percentage points.

One of the assumptions we wish to test is whether anticipated social support from informal arrangements is a good substitute for publicly funded social insurance. The data allows us to include such information in the model. It includes a question asking what source of financial assistance households would turn to if they had economic difficulties. Three responses were coded: (1) social networks - relatives, friends, and etc); (2) institutional support - work units, local communities and banks; and (3) not using any particular social connection, which mostly can be interpreted as being self-sufficient. However, when we put entered dummy variables for these responses into the model (category 1 is omitted as the default), they were statistically insignificant, with small marginal effects.

The second variant of the model presented in Table 5 allows for the possible endogeneity of income with respect to social protection. This greatly increases the marginal effect of doubling income from 8% to 42%. In general terms, the absolute

size and significance of the other explanatory variables are greatly reduced if income is treated as endogenous. Only location and public sector employment remain significant at conventional levels. If we accept the results of the second variant of the model, this implies household income has the utmost impact on inclusion of social protection programs. The higher the households' income, the more likely for them to be covered by publicly funded or managed safety nets. The productive characteristics of the labour force may indirectly - via income generation - increase the likelihood of being covered by social protection, but not have a significant direct effect.

Given that income can be singled out as the most important factor for determining social protection, migrants' relentless pursuit of income seems easily understandable. With the same national household survey dataset, researchers reported from an exercise modelling on household income (an OLS regression with logged household income per capita as the dependent variable), after controlling for all other explanatory variables, the coefficient on the rural dummy is - 1.178 and that on the migrant dummy is -0.694. In other words, household income per capita is estimated to be 69% lower for rural residents than for urban ones, controlling for other observed characteristics[1]. Migrant households are predicted to earn more than their rural counterparts, *ceteris paribus*, but still earn 50% less than urban households. Urban households therefore receive significant income advantages not attributable to their observed human capital (education, health or experience) (Song and Appleton, 2007).

Rural-urban migrants are less likely to get social protection funded or managed by public agents. If they had remained residing in their rural origins, traditional methods of social support from the extended family or fellow villagers could provide some alternative for protection. When away from home, they would be expected to establish their own protection system for coping with adverse shocks. Having a closely-knit network could provide not only economic benefits but also emotional protection. In Table 6, however, the sources of anticipated methods to cope with economic risks are not associated with the dependent variable – whether they are included in social protection schemes. To explore differences in how people anticipate coping with future risks differ and what factors determine these differences would be of interest.

[1] This is calculated using the $\exp(\beta)-1$ where β is the coefficient on an explanatory variable.

According to Song and Appleton (2007), who have employed a multi-nomial logit model on anticipated source for coping with future risks, both migrants and rural residents are much more likely to rely on self-sufficiency in the event of an adverse economic shock. They are much less likely to rely on social networks (83-90 percentage points less likely), but also less inclined to use institutional agents. Urban residents are more likely to practice *Guanxi* for economic gains. High income per capita tends to increase the likelihood of households relying on their own resources to cope with shocks. Inclusion in social protection schemes is associated with reduced self-sufficiency - raising use of both institutional agents and social networks by roughly equal amounts.

6. Conclusion

In this paper, we have used a nationally representative household survey from 2002 to analyse how social protection varies between three different groups: urban residents, rural residents and rural-urban migrants. We began by comparing the level of social protection of these three groups. Urban residents unsurprisingly came out best in terms of safety-net coverage, although only less than a quarter of China's working population was in fact protected. Job opportunities for rural-urban migrants in 2002 do not seem to have improved, with more choosing self-employment. Ceteris paribus, this trend would worsen access to social protection, which is typically employment-related in urban China.

That inclusion in state social protection schemes is very concentrated on urban residents is not surprising. When modelling access to formal social protection schemes, we found differences by residence status persisted after controlling for observable factors such as personal characteristics. Perversely, although social protection was intended to support the poor and vulnerable, household income had a positive effect on access. Even after controlling for residence, more affluent households were more likely to be covered by social protection schemes.

Finally, we have to answer what can protect migrants from economic risks. Looking at who households intended to turn to in the event of adverse economic shocks, we

realised that they mainly have to rely on themselves. Like rural households, migrants who appear reliant on self-sufficiency, which could mean a simple ‘not-sufficiency’. They are trying their luck as their ancestors did in traditional China. For this, they would have to build up their savings by relentless making money. Only coverage by social protection would reduce the likelihood of households relying on self-sufficiency, but such protection largely excludes migrant households. Urban residents are more likely to have to their social networks or to institutional agencies to turn to for help. This finding, together with the regressive distribution of social protection, provides some support for the case for further welfare reform to assist rural households and migrants in coping with economic uncertainties.

References

Appleton, Simon, Knight, John, Song, Lina and Qingjie Xia (2002),"Labour Retrenchment in China: Determinants and Consequences" *China Economic Review*, 13, 2-3. 252-76

Becker, Gary (1981), *A Treatise of Family*, Cambridge, Mass: Harvard University Press

Coleman, JS (1988), "Social Capital in the Creation of Human Capital", *The American Journal of Sociology*, Vol. 94, Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure (1988), pp. S95-S120

Coleman, JS (1990) *The Foundation of Social Theory*, Cambridge, Mass: Harvard University Press.

Dercon, S. John Hoddinott and Tassew Woldehanna (2005) "Shocks and consumption in 15 Ethiopian Villages, 1999-2004", Oxford University: mimeo

Dercon, Stefan and Joachim De Weerdt (2005) RISK-SHARING NETWORKS AND
INSURANCE AGAINST ILLNESS, Oxford University: mimeo

Gustaffson, B, Li, S, Sicular, T (2007), eds., *Inequality and Public Policy in China*, Cambridge University Press

Holzmann, Robert and Jørgensen, Steen (2001), "Social Risk Management: A New Conceptual Framework for Social Protection, and Beyond", *International Tax and Public Finance*, **8**, 4, 529-556

Li Shi and Hiroshi Sato (2006), eds., *Unemployment, Inequality and Poverty in Urban China*, RoutledgeCurzon

Knight, John and Ramani Gunatilaka (2007), 'The rural-urban divide in China: income but not happiness?', Department of Economics, University of Oxford, mimeo.

Knight, John and Gunatilaka, Ramani (2006), "Great Expectations? The Subjective Well-Being of Rural-Urban Migrants in China"

Knight, John, Lina Song and Ramani Gunatilaka (2007), 'The determinants of subjective well-being in rural China', Department of Economics, University of Oxford, mimeo

Knight, John and Song, Lina (2005), *Towards a Labour Market in China*, New York and Oxford: Oxford University Press

Knight, John and Song, Lina (1999), *The Rural-Urban Divide, Economic Disparities and Interactions in China*, New York and Oxford: Oxford University Press

Knight, J. and L. Song (1993), "The Length of Life and the Standard of Living: Economic Influences on Premature Death in China", *Journal of Development Studies* 30 (1): 58-91

Song, Lina and Simon Appleton (2005) "The Entitled versus the Unentitled: An Investigation into Government Interventions of Job-search in China", China Social Science Publishers: *China Labor Economics*, **2**, 3, 167-188

Song, Lina and Appleton, Simon (2006), "Inequality and Instability: An Empirical Investigation into Social Discontent in China", Nottingham University: *Leverhulme Centre for Globalisation and Economic Policy's Nottingham Research Paper No. 2006/45*

Song, Lina and Appleton, Simon (2007), "In pursuit of wealth, health and happiness in China", Nottingham University, mimeo

Song, Lina (2006), "Government and Family: Change of a Social Support System in China" Nottingham University, mimeo

UN Country Team (2004). *Millenium Development Goals: China's Progress* Office of UN Resident Coordinator in China: Beijing.

Table 1
Percentage of households with security covers by types of households' residing status

Household Type:	Rural	Migrant	Urban	National
Included in Social Protection Programs (unit=number)	15	98	4204	4317
% covered in the type of household	0.16	4.92	64.27	24.34
Number of cases	9,200	1,992	6,541	17,733

Note:
Social protection is defined in the paper as whether households are included in social safety nets provided by both publicly and commercially funded or managed programs.

Table 2
Among those who are covered: percentage by types of households

Household Type:	Rural	Migrant	Urban	National
% covered in the full sample	0.35	2.27	97.38	100
Number of cases	9,200	1,992	6,541	17,733

Note:
Social protection is defined in the paper as whether households are included in social safety nets provided by both publicly and commercially funded or managed programs.

Table 3
Anticipated Sources of Economic Resources in Dealing with Uncertainties (%)

Household type	**Rural**	**Migrant**	**Urban**	**National**
Using private networks	53.6	85.3	69.9	63.2
Relying on institutional assistance	10.6	11.8	4.1	8.4
Self-sufficient	35.8	2.9	26.0	28.5
Number of cases	9,066	1,980	6,384	17,430

Table 4

Comparing Job-search Methods between Migrants in 1999 and 2002
1999 and 2002 CASS Surveys
(Percentage)

Current job-seeking method:	Migrant (1999)	Migrant (2002)
Getting jobs from market competition	35.02	30.01
Getting jobs from government agent	2.83	0.60
Getting jobs from social networks	25.98	26.41
Self-employed	34.57	42.99
Other (non-specified)	1.6	0.0
Number of observations	1,128	3,359

Notes:

(1) Job-search method refers to that used to obtain their current jobs.

Table 5
Safety Net Coverage by Job-search Method (%)

Method of job-search:	Pension %	Medical insurance %	Unemployment benefit %
From government agent	35.00	30.00	30.00
Market competition	6.07	4.26	2.38
Social network	4.40	2.71	1.69
Self-employed	3.24	1.81	0.69
% of recipients to the sample as a whole	4.77	2.98	1.55

Table 6
Probit model for Inclusion in Social Protection:
All Sampled Households (2002 CHIP Surveys)

Variable	Marginal effects (Robust standard error)	
	Variant One	Variant Two
Log (household income per capita)	0.0813 (0.0065)***	|
Log (predicted household income per capita)		0.4233 (0.0795)***
Rural household	-0.3478 (0.0220)***	-0.2811 (0.0383)***
Migrant household	-0.0822 (0.0068)***	-0.0754 (0.0186)***
Anticipate using institutional resources in event of adverse shock	-0.0015 (0.0098)	-0.0029 (0.0127)
Anticipate being self-sufficient in event of adverse shock	0.0054 (0.0053)	0.0042 (0.0072)
Communist Party member	0.0350 (0.0063)***	0.0129 (0.0104)
Education in year	0.0051 (0.0009)***	0.0029 (0.0019)
Unemployed	-0.0511 (0.0069)***	-0.0177 (0.0240)
Working in State Sector	0.0866 (0.0105)***	0.0235 (0.0153) *
Male	0.0174 (0.0043)***	0.0011 (0.0060)
Married	-0.0301 (0.0135) ***	0.0050 (0.0161)
Age	0.0008 (0.00123)	0.0005 (0.0016)
Age ^{2}	8.48e-06 (0.0000)	2.87e-06 (0.0000)
Mean proportion protected	0.2786	
Predicted proportion (at mean of explanatory variables).	0.0666	0.1000
Pseudo R^2	0.5565	0.5282
Wald Statistic	2748.56	3575.44
Number of observations	14,897	14,432

Dependent variable: 0 = excluded from social protection; 1= included

Notes:

(1) Robust standard errors are in brackets. *** denotes statistics significance at 1% level, and %% at less than 5% level.
(2) Omitted dummy variables are urban households, social support from closely-nit networks, not Communist Party member and not in marriage. Province dummy variables are included in both models but not presented for brevity.
(3) In the second model, predicted household income per capita is instrumented with the previous year's income as the identifying instrument.