

## **Internal Migration, Elderly Care and Mortality in China**

This paper investigates the implications of the out-migration from rural to urban areas in China for the social and economic well-being of elderly parents who remain in the rural areas. China is experiencing rapid aging and vast waves of out migration from rural to urban areas simultaneously. Base on data from the Chinese Longitudinal Healthy Longevity Survey (CLHLS), we explore how the out-migration of adult children affects monetary, instrumental help, and emotional support of Chinese rural elders. Preliminary results show that a quarter of the rural elderly had at least one child living in a different county. Almost 90% of the elderly received money from children, while only 10% gave money to their children. Number of migrant children is positively related to the amount of money received by the elderly while emotional well-being of the elderly does not seem to be significantly affected. More careful analysis will be conducted.

China has experienced a dramatic decline in fertility due to the one-child policy and the unprecedented speed of socioeconomic development since the economic reform in the late 1970s. As a result, the Chinese population is aging at a rate faster than those in many developed countries. China's 2010 Population Census reported the proportion of those 65 and above increased from 6.96 percent in 2000 to 8.87 percent in 2010 (National Bureau of Statistics of China 2010). It is forecasted to be 17 percent in 2030, and 27 percent in 2050 (Chinese Ministry of Civil Affairs Report 2010). The proportion of the oldest-old (80 years and older) among the elderly (65 years and older) in particular is growing at an unprecedented speed, expected to climb to 114 million accounting for 34.4 percent in 2050 (Zeng and George 2000). At the same time, the most recent statistics show that the number of urban-rural migration has continued to increased to more than 200 millions (Chinese Bureau of Statistics, 2010). This demographic

landscape presents a tremendous challenge for the Chinese society to support and care for the elderly because both private and public assistance for the elderly have weakened in China in the past few decades.

Researchers have examined the association between children's outmigration and support of rural older parents (Du, Ding, Li, & Gui, 2004; Knodel & Saengtienchai, 2005; Kuhn, 2005). These studies yield conflicting results, some shows children's out-migration has benefited the economic situation for elderly while others show the opposite. Most of the existing research relied on cross-sectional data or a selective sample. It is not clear whether children's out-migration affects the support of parents, or whether parents' resources or health affect children's out-migration. This study uses data from a nationally representative longitudinal study to examine the impact of adult children's out-migration on three forms of intergenerational support (i.e., monetary, instrumental, and emotional support) of Chinese rural older parents.

Modernization and aging theory posits that the process of urbanization and industrialization is accompanied by the transformation of the family structure from extended to nuclear family, the spatial dispersion of family, and reduced support for elderly family members.

Competing predictions are posited by labor migration theory and the modified extended family model about the relationship between children's out-migration and support of older parents left behind. The economics of labor migration theory views migration as a household decision jointly made by movers and stayers to improve household well-being together. Accordingly, the migrant and family members left behind share the costs and returns of migration (Stark & Bloom, 1985). Through remittances, migrants often can increase the financial support to families back at the sending community, thus improving the well-being of elderly parents left in rural areas. In addition, the modified extended family model (Litwak, 1960a,

1960b) posits that extended family relations between migrants and family members can be maintained due to advances in transportation and communication. Thus, these theories predict that the children's out-migration has a positive effect on older parents through continued economic and emotional ties with migrant children.

We test these theories with longitudinal data in the Chinese context in this paper.

### **Preliminary Results**

We present some preliminary statistics here based on the 2005 CLHLS data. According to these data, about a quarter of the Chinese rural elderly have at least a child living away from the county that the elderly resided in. 16% have one child and 9% have two or more children living away.

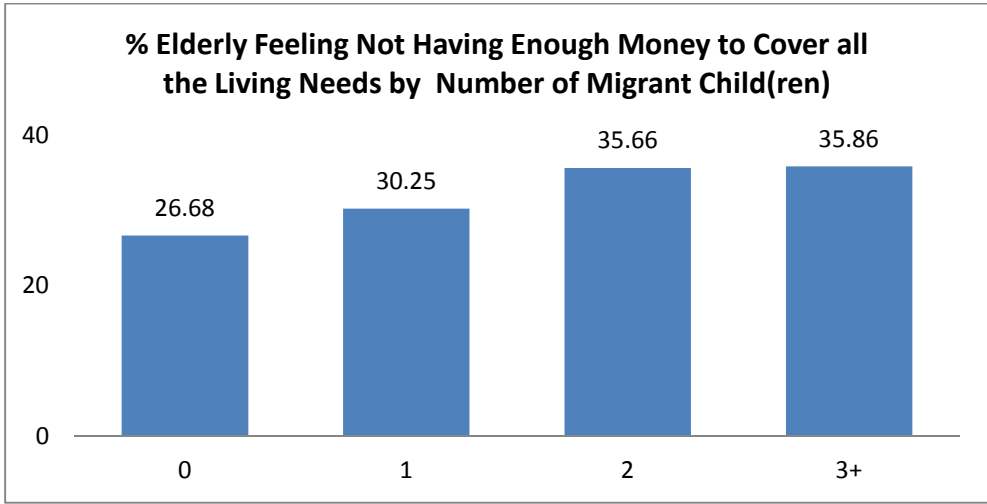
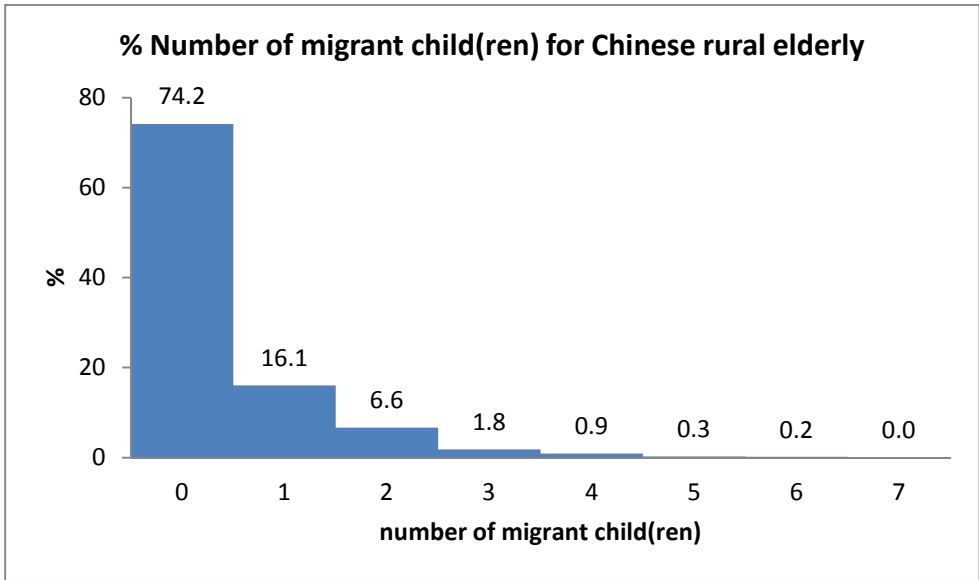
The public safety nets for Chinese elderly are weak, particularly in rural area. In 2005, almost three quarters of rural elderly and a third of urban elderly did not have any form of public assistance or insurance such as pension, retirement wages, or any kind of health or life insurances. A majority of the elderly, therefore, relied on their children. Almost all elderly (90% of the sample) received some money from their children. The mean amount is about 1,600RMB (median is 900RMB). About 1,200RMB (median is 600RMB) from son and daughter-in-law, and 700RMB (median is 400RMB) from daughter and son-in-law. Only 10% of the elderly had given money to their children with the mean of that amount is 951RMB (median is 400RMB). These tend to be elderly with higher education and occupations with higher prestige.

Descriptive statistics show that the number of migrant children is positively related to the total amount of money an elderly received from their children, controlling for basic demographic characteristics of the elderly and family circumstances. However, having children away is also

related to the odds that an elderly feels they are under economic strain (measured by “not having enough money to cover all living expenses). More multivariate analysis will be conducted with longitudinal data to tease out the temporal order of migration of adult children and the well-being of the elderly.

Table 1 Characteristics of Chinese Elderly Sample

Variables	N	Mean	SD
<u>Socio-demographic variable</u>			
Age	8,499	72.62	6.03
Male (%)	8,499	0.48	0.50
years of schooling	8,473	2.15	3.05
Married (%)	8,499	0.61	0.49
Living alone (%)	8,497	0.13	0.35
Family size	8,499	3.19	1.87
Number of living children	8,499	4.03	1.76
<u>Number of male migrant children</u>			
% none	8,008	0.88	0.34
% 1 child	8,008	0.09	0.02
% 2 children	8,008	0.03	0.04
<u>Number of female migrant children</u>			
% none	8,008	0.81	0.34
% 1 child	8,008	0.13	0.02
% 2 children	8,008	0.06	0.04
<u>Intergenerational support</u>			
Receive money from children (RMB)	7,289	1,637.19	3361.44
Give money to children (RMB)	652	951.07	1896.34
<u>Health status</u>			
Self rated health	7,837	1.64	0.75
Activities of Daily Living (ADL)	8,495	0.03	0.17



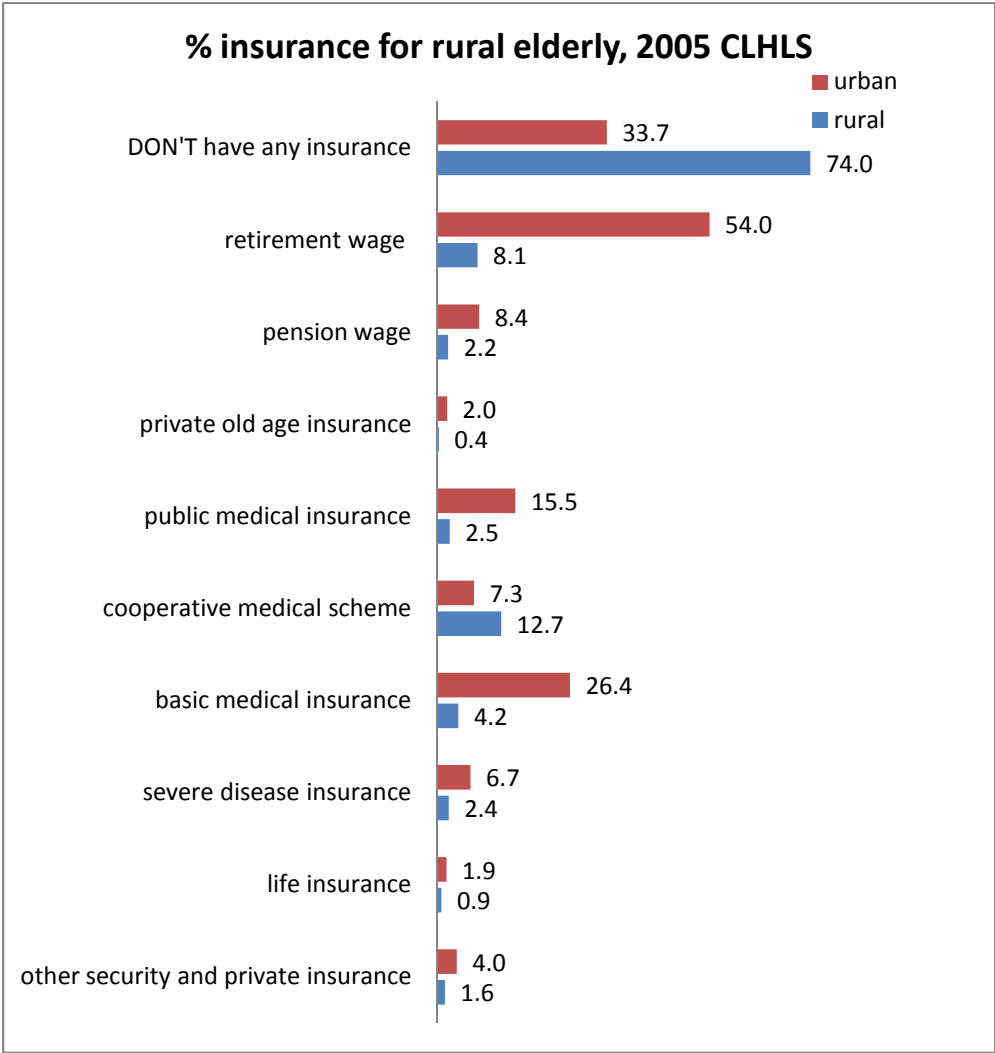
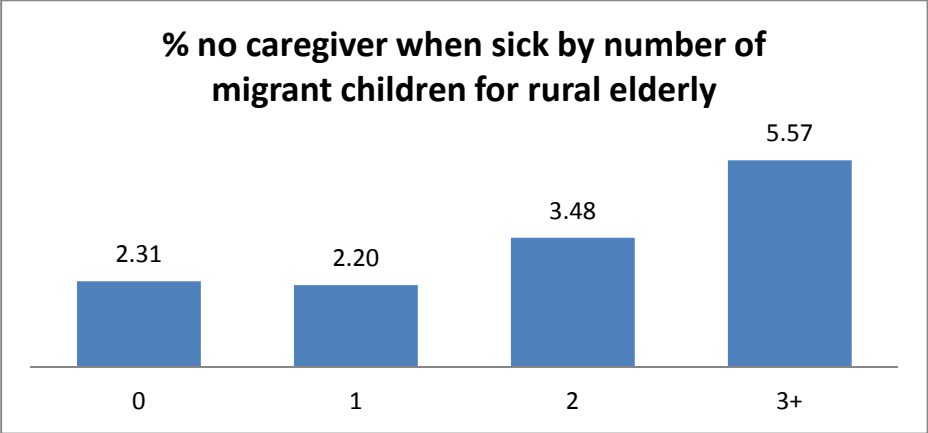


Table 2:Estimates for the impact of migrant children on Loneliness for rural elderly,2005 CLHLS

VARIABLES	(1) Loneliness (coef.)	(2) loneliness (coef.)	(3) Loneliness (coef.)	(4) Loneliness (coef.)
1 migrant child	-0.015 (0.029)	-0.012 (0.028)	0.003 (0.028)	0.001 (0.027)
2 migrant children	0.023 (0.036)	0.030 (0.034)	0.061 (0.035)	<b>0.072*</b> (0.034)
age		0.006*** (0.002)	0.007*** (0.002)	0.004* (0.002)
gender		-0.040 (0.024)	-0.047* (0.024)	-0.035 (0.023)
minority		0.107** (0.040)	0.115** (0.040)	0.179*** (0.039)
divorced		1.504*** (0.257)	1.448*** (0.257)	1.245*** (0.252)
widowed		0.465*** (0.023)	0.458*** (0.023)	0.466*** (0.022)
never married		1.087 (4.637)	1.009 (4.631)	0.967 (4.519)
years of schooling (1year)		-0.030 (0.025)	-0.034 (0.025)	-0.027 (0.025)
years of schooling(6+year)		-0.051 (0.032)	-0.059 (0.032)	-0.047 (0.031)
number of living children			-0.031*** (0.006)	-0.038*** (0.006)
ADL index				0.165* (0.073)
self-rated health (1=good,3=worse)				0.273*** (0.014)
Constant	1.957*** (0.012)	1.358*** (0.133)	1.454*** (0.134)	1.213*** (0.133)
Observations	8,713	8,702	8,702	8,694
R-squared	0.000	0.070	0.073	<b>0.117</b>

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05



Table 3 Estimates for the impact of the migrant children on the monetary support for rural elderly, 2005 CLHLS

VARIABLES	(1) Log(Money) (coef.)	(2) Log(Money) (coef.)	(3) Log(Money) (coef.)	(4) Log(Money) (coef.)
1 migrant child	0.282*** (0.067)	0.309*** (0.067)	0.218** (0.067)	0.209** (0.067)
2 migrant children	0.435*** (0.084)	0.471*** (0.083)	0.283*** (0.084)	0.273** (0.084)
age		0.014** (0.004)	0.012** (0.004)	0.012** (0.004)
male		-0.287*** (0.057)	-0.246*** (0.057)	-0.264*** (0.057)
minority		-1.139*** (0.096)	-1.158*** (0.096)	-1.228*** (0.096)
divorced		-3.564*** (0.619)	-3.242*** (0.615)	-3.248*** (0.614)
widowed		0.022 (0.055)	0.064 (0.055)	0.056 (0.055)
never married		-6.687 (11.160)	-6.287 (11.070)	-6.198 (11.016)
years of schooling (1 year)		0.147* (0.060)	0.167** (0.060)	0.185** (0.060)
years of schooling(6+year)		-0.267*** (0.077)	-0.223** (0.077)	-0.226** (0.077)
number of living children			0.182*** (0.015)	0.193*** (0.015)
family size			-0.020 (0.013)	-0.026 (0.013)
ADL index				0.549** (0.169)
self-rated health (1=good,3=worse)				-0.250*** (0.033)
Constant	6.030*** (0.029)	5.198*** (0.315)	4.664*** (0.318)	5.057*** (0.327)
Observations	8,777	8,765	8,765	8,657
R-squared	0.004	0.034	0.049	0.058

Standard errors in parentheses

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05