LIVING ARRANGEMENTS OF MIGRANTS' LEFT-BEHIND CHILDREN IN CHINA

(Draft)

Lin Guo

Department of Sociology

State University of New York at Albany

1400 Washington Ave. AS 351

Albany, NY 12222

Email: lg647579@albany.edu

LIVING ARRANGEMENTS OF MIGRANTS' LEFT-BEHIND CHILDREN IN CHINA

Abstract

The rise of internal migration (also known as floating population) in China has greatly stimulated researchers' interest in studying trends and the characteristics of this population as well as its role in China's economic transformations. Recent estimates suggest that as many as 23 million children (under age 14) are left behind in migrant-sending regions while their parents are away working. One major reason for the large number of left behind children is that, China's household registration system makes it very difficult for parents to bring their children to cities. The absence of working parents may bring both short-term and long-term (negative) consequences for children left behind. This study, using China Health and Nutrition Survey (CHNS 2006) data, aims to provide a systematic examination of the impact of parental migration on the well-being of left-behind children by describing their current household living arrangements.

This paper focuses on the comparison of household living arrangements between two types of children: children for whom at least one parent migrated and children whose parents did not. The variables of interest for children include their demographic and household characteristics, such as age/gender, urban/rural status, regional differences, as well as socio-economic status.

LIVING ARRANGEMENTS OF MIGRANTS' LEFT-BEHIND CHILDREN IN CHINA

The "floating population" (internal migrants in China) refers to the large and increasing number of migrants without local household registration status (*hukou*) (Liang and Ma, 2004). The estimated temporary internal migrant population in China has increased from about 11 million in 1982 to 79 million in 2000, if that category is defined as migrants who moved between provinces or counties and resided at their destinations for 6 months or more. Simultaneously, intra-county floating migration contributes another 66 million to the size of the Chinese floating population (Liang, 2001, Liang & Ma, 2004). Floating migrants are much less educated than permanent migrants, and the motivation of the younger floating population is largely for "manual labor or business" (Liang and Ma, 2004).

The rise of internal migration in China has greatly stimulated researchers' interest in studying trends and the characteristics of this population as well as its role in China's economic transformations. However, what is often overlooked is how children fare as their migrant parents work in urban areas in China. The question is critical because of the large numbers of children involved (recent estimates suggest as many as 22.9 million children at age 14 or below are left behind in migrant-sending regions while their parents are away working) (Duan and Zhou, 2006). One major reason for the large number of left behind children is that, China's household registration system makes it

very difficult for parents to bring their children to cities. The question is also important since adult migrants are largely from the lower socioeconomic classes, attempting to better their own and children's life chances. However, besides striving to improve their families' economic situation, migrating parents may have negative consequences for children left behind. As a report in the Los Angeles Times described, "the left-behind children have become orphans of a transitional economy, abandoned by parents making the difficult decision to break up the family in order to better provide for it" (*Ni*, 2006).

This paper focuses on the comparison of household living arrangements between two types of children: children for whom at least one parent migrated and children whose parents did not. The variables of interest for children include their demographic and household characteristics, including age, gender, urban/rural *Hukou* status, regional differences, as well as their household socio-economic status.

LITERATURE REVIEW

Migration and the Hukou System in China

China's massive rural to urban migration began with the reform policies in the late 1970s. The reform of household farming (also known as the household production responsibility system) in 1978 has greatly increased agricultural productivity and thus decreased the need for rural laborers (Li, 1996). At the same time, the transition toward a market economy makes non-state sectors (such as joint-venture enterprises and other privately owned businesses) in great need of cheap manual labors. Migrant workers from rural areas thus started to fill those enterprises with hopes of high income, and improved

standards of living (Liang, 2001). The household registration (*hukou*) system has also begun to loosen, so that migrant workers can apply for a temporary urban resident card with a fee. Even without these cards, migrants can still live in cities as long as they can support themselves.

However, permission to enter urban areas and have a hard-working job do not necessarily guarantee migrant workers a share in the same welfare benefits as citizens with an urban *hukou*. The majority of migrant workers in cities, although receiving higher pay than agricultural work at home, usually do not have access to long-term urban residencies (or household registration status), medical insurance, decent quality of life, and importantly, their children remain behind. Despite all the disadvantages of their urban lives, the migrant tidal wave has steadily risen during the last 2-3 decades. For example, in the capital city of Beijing, there were 32% migrant households in 1997, and this percentage increased to 45% by 2000 (Liang et al., 2008).

Liang and White (1997) found that, for the years of 1983-1988, people aged 20-29 and better educated (compared to their countrymen) are more likely to migrate. At the same time, people are more likely to move out of provinces that are populous and less developed. Furthermore, the socioeconomic characteristics show that floating migrants are much less educated than permanent migrants, and that the motivation of the younger floating population is largely for “manual labor or business” (Liang and Ma, 2004). Zhao (2003) suggested that migrants are more likely to be single, young, and male from families with more laborers, less arable land and having fewer dependents.

Literature on China's migrant population has been focusing on adult migrants, and it is not until recently that scholars began to pay attention to their children.

Estimations and Studies about Left-behind Children

At the initial stage of the migration process, young adult males are more likely to be selected from rural to urban areas. As migrants secure their employment status and settle down relatively, they begin to bring other family members, including their spouses or/and children.

However, the vast majority of migrants' children are left in their hometowns. Left-behind children are defined as children with one or more parents went out seeking employment elsewhere (Duan and Zhou, 2006). There are different estimates about exactly how many children are left behind by migrant workers. The most conservative estimation of left-behind children are at least 10 million (Ye, 2005); a recent report by the All-China Women's Federation says up to one-third of rural children are left behind when their parents migrate to cities in search of better job opportunities, and the report found more than half of the left-behind children do not live with either parent (Zheng, 2008). The Police Department of China gives a much higher number. They estimate that 30 million left behind children are in 9-year compulsive education stage (CPD, 2008).

The most reliable estimation is based on the 2000 China census data. It shows that 8.05% of all Chinese children are left behind, and the number of left-behind children is a little bit more than 22.9 million. Among left-behind children, 86.5% are from rural areas, and 65.28% of them are 6 years or older (Duan and Zhou, 2006). Left-behind

children are concentrated in provinces such as Sichuan, Guangdong, Jiangxi, Anhui, Hunan and Hainan. In Jiangxi province, Sichuan province and Chongqing municipality, nearly 20% of all children are left behind. Those places are economically lagging behind, and have large relatively poor, rural areas.

At the same time, the amount of children who are taken along with their migrant parents in destination cities is relatively lower, which is about 14 million (Liang et al., 2008), and among those migrant children, 7 million are aged 6-14 (the age for compulsory education) (Huang and Xu, 2006). Migrants with children often face great difficulties in urban areas. Education is among the most important barriers (Li, 2006), since the educational resources are unevenly distributed, the education of migrant children is discontinuous, and the abilities of supervision from migrant parents are very weak (Huang and Xu, 2006).

Specifically, to be admitted in local schools, students must reside within school district in the city and students must be registered (as far as *hukou* is concerned) in the school district as well, because the national education budget is allocated according to the size of registered children in cities, and the non-registered children will increase the fiscal burden of both the local government and schools. Public schools usually charge a high amount of entrance fee because migrant children are not registered residents of that area (Cao, 1997), and most of adult migrants cannot afford to send their children to those schools because they are concentrated in occupations involves manual labor, which means their socioeconomic status is much lower than local residents in cities. At the same

time, migrant sponsored schools cannot promise a good educational environment since the quality of teachers are questionable and the conditions of these schools are rather poor (Liu et al, 1998). What is worse, those schools always face the possibilities of being shut down by local governments (Irwin, 2000).

Migrant children are also vulnerable to health-related risks because they are in lack of the equal access to the insurance policy and vaccination programs as local children in cities. Since migrant workers do not have either enough money or energy to take care of their families, parental supervisions and emotional support for children are also serious problems (Liang et al., 2008). Often, the only choice for them is to leave their children behind in their hometowns.

Family Structure, SES Status and Children's Well-being

Migrant labors are mostly in disadvantaged places of the society. While lacking professional skills, they cannot secure their jobs and receive stable savings. Reports about delayed salary of migrant workers are not rare. Their living situations are far from comfortable. They can only afford temporary dwellings; some of them have to share one small dorm with many co-workers. Socially and economically disadvantaged, their children are (probably the only) hopes for changing the polarizing situation between the two worlds, which makes education and other well-being factors of migrant children overwhelmingly important.

When migrant parents decide to leave their children, their desire is to improve the welfare of the whole family by increasing income for the household. However,

children have more needs than just economic support. Parental supervision and emotional backup are also very important factors that contribute to children's development. Numerous reports[1] on the lives of left-behind children reflect their great needs of attention from their own parents. Unhealthy personality developments, poor school performances, moral crises and behavioral problems are reported in popular media for left-behind children, which are detrimental to the already fragile economic well-being of most floating population families (Li, 2006).

THEORIES AND HYPOTHESES

The macro neoclassical model states that, if the difference between incomes expected in urban and rural sectors exceeds the costs of movement, people tend to migrate to cities to reap higher lifetime earnings (Todaro, 1969). While the micro theories emphasis that individual rational actors decide to migrate because a cost-benefit calculation leads them to expect a positive net return, usually monetary, from movement (Massey, 1988). The new economic model posits that, rather than an individual decision, migration actually is a household decision process by making the allocation of the household human capital maximized in profits and minimize in risks (e.g. Massey, 1998). For a household, adults seeking employment elsewhere by leaving their children behind is supposed to be a balanced decision by measuring expected economic profits and the emotional sacrifice for both migrant parents and their children, and this decision may also depend on the

1 For example, see Wenzhou Metropolitan Daily. 2005. "Empty-netted emotionally—from the perspective of left-behind children" http://news.sina.com/c/2005-06-09/00006125102s.shtml accessed on June 21 08

current household structures such as how many adults are available to provide supports and how many children are in need of attention in the household.

Thus, I hypothesize that migrant households with children are selected of those with more adult members, such as grandparents, uncles or aunts of children. What is more, according to empirical findings, fathers of children are more likely to be selected as migrants than mothers. For the situation that both of the children's parents are seeking employment elsewhere, it is highly possible that children's grandparents or other adult relatives are currently in households.

This study explores the living arrangements of children by their left-behind status. Firstly, the profiles of migrants whose households have children are given; second, comparisons are made between children whose households are headed by their parents and those whose grandparents are currently householders. Finally, children's living arrangements are compared according to their left-behind status.

DATA AND METHODS

This study uses the most recent wave of China Health and Nutrition Survey (2006) data, and provides a detailed examination of the impact of parental migration on the living arrangements of left-behind children. The data are especially appropriate for this project because they contain rich information on the well-being of children, as well as migration and household characteristics.

Migrant parents are identified by the information from household rosters. If children's parents are householders, migrant parents are identified when the householder

or the spouse of householder is currently seeking employment elsewhere. If children's grandparents are householders, we suppose a child's mother is migrated out when householder's daughter(s) (or in-law) is (are) migrated out and at the same time, no other female adults are currently in household, and similarly, a child's father is supposed to be a migrant when householder's son(s) (or in-law) is (are) migrated out and no other male adults are currently in household.

Dependent variable: children's left-behind status, coded 0 if there is no parents seeking employment elsewhere, 1 if children are left-behind by either (or both) parent(s). Left-behind children are also subdivided by which of the parent(s) is (are) migrants: father only, mother only, or both.

Independent variables: Age (in years) of the child, gender (coded 1 if male), province (Guizhou is the reference province, other provinces are Liaoning, Heilongjiang, Jiangsu, Shandong, Henan, Hubei, Hunan and Guangxi), *Hukou* status (coded 1 if rural), household per capita income (in RMB *yuan*), household size (total number of household members), number of grandparents (children with no grandparents are as the reference group), number of other adults in household, and number of siblings in household.

RESULTS

Profile of Migrants in Households with Children

There are 1,548 households with children in CHNS 2006 sample, with a total of 7,302 household members. From Table 1 we can see that, among those household members, 672 are currently seeking employment elsewhere (9.20%). And males are the majority in

migrants (417, or 62.05%). Male migrants are concentrated in age 25-39, while the age distribution of female migrants is more spread and concentrates in relatively younger age group of 15-34. Guizhou province in this sample has more migrants than other provinces (23.81%), follows by Hubei, Guangxi, and Henan province. Those places have more rural areas as well as out-migrating populations which are shown in the analysis of 2000 census data by Duan and Zhou in 2006. Not surprisingly, most of the migrants are from rural survey sites (86.46%).

Also, Table 1 shows the duration of stay for current migrants. Most of them have been in the destination for less than one year (65.57%), but there is also a significant proportion of them have been out for about 2 years (13.86%), or more than 4 years (9.97%). There is no significant difference between male and female migrants in their duration in destination areas.

Most of the migrants are sons or daughters (in-law) of householders (73.36%), and only 22.02% of them are either householders or spouses of the householders. Since most of current migrants are adults (18 or older), it looks like migrants are more likely to be living in extended families rather than nuclear ones.

Children's Living Arrangements

The 2006 wave of CHNS data collected information for 1,954 children. Among them, 1,138 are sons or daughters of householders, and 800 are grandsons or granddaughters (including in-laws) of their householders. To simplify the analysis, 16 children who are living with neither parents nor grandparents are excluded in this study. Here children who

are sons or daughters of householders are called “Type I” children, and those whose grandparents are householders are called “Type II” children. Table 2 compares the characteristics of two types of children.

Apparently, “Type II” children are younger than their counterparts. Only 17.31% of children whose parents are householders are in 0-5 age group, while there are a little less than half (45.38%) of “Type II” children are in the same age group, which indicates that parents of “Type II” children are also younger, and not (capable or willing to) separated from their parents yet.

The distribution of two types of children also varies across region. Children in Heilongjiang province are more likely to be living in households led by their parents, while children in Jiangsu, Guangxi, Guizhou and Henan provinces are more likely to be in the “Type II” group. Since Heilongjiang is also the province with smallest number of migrants in this sample, it seems that regions with more migrants are also having more children living in household led by their grandparents.

Not surprisingly, “Type II” children are living in larger households. The average household size of “Type II” children is 5.59, in contrast to 3.80 for “Type I” children. At the same time, “Type II” children are unlikely to be living with their own parents. There are 16.88% of “Type II” children living in households without their parents present. Only very few (1.41%) of “Type I” children are living with no parents in their households. But if children are living with only one parent, they are much more likely to be living with their mothers (10.22%) rather than with fathers (3.46%). Given the low proportion of

children having only their fathers in household, “Type II” children are having a higher probability (4.88%) of this situation, which approximately doubles the probability of their counterparts (2.46%).

The distribution of grandparents in households is also within our expectation. About half (47.00%) of “Type II” children are living with both of their grandparents, this may be due to the reason that grandparents for “Type II” children is relatively younger, because of the younger age of “Type II” children. Thus it is unlikely that one of the grandparents is passed away. And since the life expectations of elderly women are higher than that of men, and women tend to marry at a younger age, it is also expected that more children are living with their grandmas (15.63%) rather than grandpas (2.68%), if there is only one grandparent in the household.

“Type II” children are also more likely to be living with their uncles or aunts. 75% of them have at least one uncle in the household, and more than 88% of them have at least an aunt in the household. For “Type I” children, this chance of having uncles or aunts is very slim (less than 4%). Although “Type II” children are more likely to have other adults in their households, the probability that they have siblings in households is lower than that of “Type I” children. Only about 50% of “Type II” children have one or more siblings in household, while there are more than 60% of “Type I” children have one or more brothers or sisters. Again, this may result from the fact that parents of “Type II” children are in relatively younger age groups, so many of “Type II” children may be their first children.

Table 3 groups all children by their left-behind status: not left behind, left by father, left by mother, or left by both parents. Children left by father or both parents are more concentrated in a very young age group (0-5), while children left by mothers are more likely to be 6-11 years old. Guizhou province, which has the largest proportion of migrants in this sample, also contributes the highest percentage of children who are either left by their mothers (44.90%) or by both parents (32.56%). Next to Guizhou, children left behind by both parents are largely from Hubei (23.26%) and Guangxi (16.28%) provinces. Children left by their mothers are more likely from Hunan (16.33%) and Guangxi (14.29%) province.

Generally speaking, left-behind children are living in larger households compared to children who are not. The household size of children left behind by both parents is even larger, with an average of 5.14 person (Std. Deviation: 1.73), which confirms the hypothesis that households of migrants are larger, so that more adults are available to take care of the family, particularly the left-behind children. Also, left-behind children are less likely to living in households headed by their parents. More than 60% of non-left-behind children are in households with their parents as householders, while this percentage is less than 50% for all left-behind children. For children who are left-behind by both of their parents, this percentage is only 27.91%. If we take a look at other relatives in household, it is clear that children left-behind by both parents are more likely to be living with grandparents. About 40% of them are living with both grandparents, and another 25% are living with their grandmas.

Although children with both parents migrated out are more likely to be living with at least one of their grandparents, the chance that they have other adults in household are very low, if any. Among the 43 children who are left behind by both parents, no one are living with any other adults besides their grandparents, which means there is a certain amount of children living on their own. At the same time, 51.6% of children left-behind by both parents do not have any siblings. Although this percentage is higher than children from other left-behind statuses, the difference is not statistically significant.

Are households with left-behind children different from other ones in their economic situations? Table 3 also examines the household per capita income in the past year. Although households with left-behind children have higher median per capita income than other households, the difference is not significant.

Affects of Household Structure on Children's Left-behind Status

Table 4 uses logistic regressions to further examine whether children in larger households are more likely to be left-behind, by controlling other variables. Model 1 uses the variable household size only, and Model 2 subdivided household structure into number of grandparents, other adults, and siblings. Both of the two models show that younger children are more likely to be left-behind, and provinces other than Guangxi and Hunan are significantly less likely to have left-behind children, compared to Guizhou province. At the same time, children with rural *Hukou* are more likely to get left-behind than children with urban *Hukou*.

Other things equal, one more person in the household will increase the odds of children being left-behind by more than 10 percent, which confirms our hypothesis that left-behind children are generally from larger households (see model 1). While does any increase of relatives in the household increase the chance that a child is left-behind? Model 2 shows that, with grandma or both grandparents present, children's chances of being left-behind are significantly increased, but the number of other adults in household negatively affects the probability that a child is left-behind by their parents. The number of children's siblings does not differ by their left-behind status.

Table 5 takes one more step by dividing children by their specific left-behind status: left by father only, by mother only or by both parents. Multinominal regression is used here, and children who are not left-behind are set as reference group. We can see from table 5 that age of the child is negatively related to being left by father only or by both parents. Having one or more grandparents significantly increases the odds that the child is left-behind by their parents, particularly by both parents. However, having other adults in household negatively affects the chance that the child is left by a parent. Again, rural household registration positively relates to the odds that the child is left behind by their fathers or by both parents, but does not influence the possibility of being left by mothers only.

CONCLUSIONS

This study investigates living arrangements of children using 2006 CHNS data, with particular attention to migrants' left-behind children. The results support the hypothesis

that migration is a rational decision made by the household, as the new economic migration theories posit. Left-behind children with one or more parents seeking employment elsewhere are more likely to be living in larger and extended households, with one or more grandparents present. At the same time, this may also due to the fact that migrants in the households are younger adults and have not separated from their own parents yet. In extended households, grandparents of children may serve as both the backup economic supporters for young adult migrants and the guardians of their grandchildren. But in such extended households, other young adults who are not seeking employment elsewhere do not seem to serve same roles as those grandparents of children.

Children's demographic characteristics are also examined in this study. Left-behind children are more likely to be infants or younger children, concentrate in the age group of 0-5, especially those who are left by both parents. The geographic distribution of left-behind children also draws our attention. Since migrants are largely from rural areas in China, the majority of left-behind children are also with rural *Hukou*. Migrant sending provinces such as Guizhou, Guangxi and Hunan have more left-behind children than other places, which makes the chances of children left by their mothers or both parents higher. Although the probability is also higher that children left-behind are being taken care of by their grandparents, the well-being of both grandparents and children is questionable, since we do not find that other young adults are available for households with migrant parents. What is more, number of other young adult relatives is not found to affect the migration decision for children's parents.

Although this study contributes to the literature in the analysis of detailed living arrangements of children by their left-behind status, it has not yet taken full considerations for the socioeconomic status of households, particularly for migrant parents. Household per capita income is the only economic indicator for all households, thus insufficient attention is paid to other indicators, such as migrant parents' educational attainment and occupation before migration, upon which migration decisions are made. In other words, the study does not have enough support for the neo-classical theories for internal migration. Moreover, this study only bases on observations of one recent point of time, which ignores the changes of household living arrangements and migration processes overtime. More research is needed in examinations of household changes due to migration, and more importantly, children's well-being, both in economic situation and in health status, can be further explored, upon the findings of this study.

REFERENCES

Cao, Haili. 1997. "Where to put their school desks?"*China News Digest* 315:3-6

China Police Department Website. 2008."Left-behind children" http://www.cpd.com.cn/gb/newspaper/2008-03/17/content_927127.htm Mar, 17 accessed on June 21 08.

Duan, Chengrong and Fulin Zhou 2006. "我国留守儿童状况研究" ("A study of left-behind children in China"). 人口研究 (*Population Research*) 28: 29-36

Huang, Zuhui and Kunpeng Xu. 2006. Education of migrant workers and their children and its solutions. *Journal of Zhejiang University (Humanities and Social Sciences)*. 36:108-114

Irwin, James 2000. "China's migrant children fall through the cracks". *The UNESCO Courier* September 13-14

Li, Beifang 2006. "What can government do?" *Nanfengchuang* Apr 19. http://news.sina.com.cn/c/2006-04-19/11119661843.shtml accessed on June 21 08

Li, Cheng. 1996. "Surplus rural laborers and internal migration in China: Current status and future prospects." *Asian Survey* 36: 1122-1145.

Liang, Zai and Michael J. White. 1997. "Market Transition, Government Policies, and Interprovincial Migration in China: 1983-88." *Economic Development and Cultural Change* 45: 321-66.

Liang, Zai. 2001. The Age of Migration in China. *Population and Development Review*.

27 (3):499-524

Liang, Zai and Lin Guo. 2008. "Migration and the well-being of children in China." *Presented at the Annual Meeting of Population Association of America. New Orleans, LA.*

Liang, Zai & Zhongdong Ma. 2004. "China's Floating Population: New Evidence from the 2000 Census." *Population and Development Review* 30 (3): 467-488

Liu, Cuilai, Haibin Li and Jun Li. 1998. "A case study of migrant sponsored schools in western Shanghai." P162-181 in Zhang, Weihua et al. (eds.) *The Floating Population in Shanghai: Current Situation and Future Prospects.* Shanghai, East China Normal University Press.

Massey, Douglas S. 1988. "International Migration and Economic Development in Comparative Perspective." *Population and Development Review* 14:383-414.

Massey, Douglas S. et al. 1998. *The World in Motion: Understanding International Migration at the End of the Millennium.* New York: Oxford University Press.

Ni, Chingching and Qingshen. 2006. "Orphans of the Chinese economy."*Los Angeles Times*, July 5.

Todaro, Michael P. 1969. "A Model of Labor Migration and Urban Unemployment in Less Developed Countries." *American Economic Review* 59:138-148.

Wenzhou Metropolitan Daily. 2005. "Empty-netted emotionally—from the perspective of left-behind children" http://news.sina.com/c/2005-06-09/00006125102s.shtml accessed on June 21 08

Ye, Jingzhong et al. eds. 2005. “关注留守儿童：中国中西部农村地区劳动力外出务工对留守儿童的影响” (“*Left-behind Children in Rural China*”) Social Sciences Academic Press (China).

Zhang, Shenghua (eds.). 1998. *The current situation and future prospects of Shanghai's floating population: Shanghai's 6th floating population sample survey*. East Normal University Press.

Zhao, Yaohui. 2003 “The Role of Migrant Networks in Labor Migration: the Case of China.” *Contemporary Economic Policy* 21: 500-511

Zheng, Chenguang. 2008. “China calls for more care for left-behind children in rural areas” http://english.cri.cn/4026/2008/03/01/1481@328692.htm Mar, 1. Accessed on June 21, 08.

Table 1 Profile of Migrants with Children in Households, by Sex (%)

		Male	Female	Total
Age ***	14-	0.24	0.39	0.30
	15-19	7.67	19.61	12.20
	20-24	9.59	17.25	12.50
	25-29	18.23	24.31	20.54
	30-34	25.66	20.78	23.81
	35-39	20.62	10.59	16.82
	40-44	10.07	3.14	7.44
	45-49	2.16	0.39	1.49
	50+	5.76	3.53	4.91
Province *	Liaoning	5.52	3.92	4.91
	Heilongjiang	3.84	1.96	3.13
	Jiangsu	12.23	8.63	10.86
	Shandong	2.16	2.75	2.38
	Henan	10.31	13.73	11.61
	Hubei	16.07	18.43	16.96
	Hunan	11.75	7.84	10.27
	Guangxi	17.51	13.73	16.07
	Guizhou	20.62	29.02	23.81
Rural site		86.57	86.27	86.46
Ethnicity (Han)		80.05	75.29	78.24
Duration at destination (in months)	0-5	26.95	18.78	23.83
	6-11	41.31	42.45	41.74
	12-23	11.84	17.14	13.86
	24-35	5.54	6.94	6.07
	36-47	4.28	4.90	4.52
	48+	10.08	9.80	9.97
Relationship to householder ***	HHder or spouse	27.58	12.94	22.02
	Son/Daughter	65.95	40.00	56.10
	Son/Daughter-in-law	3.36	40.00	17.26
	Other relatives	3.12	7.06	4.61
N		417	255	672

***significant at a 0.001 level; **significant at a 0.05 level; * significant at a 0.1 level

Table 2 Living Arrangements of Children by Household Type (%)

		Type I	Type II	Total
Age group ***	0-5	17.31	45.38	28.90
	6-11	36.03	38.38	37.00
	12-14	22.23	9.88	17.13
	15+	24.43	6.38	16.98
Male		52.99	54.13	53.46
Province ***	Liaoning	8.79	7.00	8.05
	Heilongjiang	15.64	3.13	10.47
	Jiangsu	6.06	12.13	8.57
	Shandong	6.68	7.38	6.97
	Henan	12.04	14.50	13.05
	Hubei	10.02	8.63	9.44
	Hunan	11.34	10.13	10.84
	Guangxi	13.27	18.88	15.58
	Guizhou	16.17	18.25	17.03
Rural site		71.62	72.38	71.93
Household registered as rural		67.84	65.25	66.77
Household size ***	Mean	3.80	5.59	4.54
	(Std. Deviation)	(0.975)	(1.608)	(1.549)
Parents in household ***	No	1.41	16.88	7.79
	Mother only	10.11	10.38	10.22
	Father only	2.46	4.88	3.46
Grandparents in household ***	Both	3.08	47.00	21.21
	Grandma only	7.29	27.50	15.63
	Grandpa only	1.23	4.75	2.68
Uncles in household ***	0	97.28	25.00	67.44
	1	2.46	57.25	25.08
	2+	0.26	17.75	7.48
Aunts in household ***	0	96.05	11.38	61.09
	1	2.99	41.50	18.89
	2+	0.97	47.13	20.02
Siblings in household ***	0	39.72	50.50	44.17
	1	45.78	34.50	41.12
	2	10.02	12.38	10.99
	3+	4.48	2.63	3.72
N		1138	800	1938

Table 3 Profile and Living Arrangements of Children by Left-behind Status (%)

		No parents left	Father	Mother	Both
Age group ***	0-5	27.65	35.00	20.41	51.16
	6-11	36.49	37.50	53.06	34.88
	12-14	17.25	19.17	8.16	11.63
	15+	18.62	8.33	18.37	2.33
Male		53.18	54.17	59.18	53.49
Province ***	Liaoning	8.41	8.75		
	Heilongjiang	11.77	4.58		6.98
	Jiangsu	8.09	12.08	4.08	11.63
	Shandong	7.91	2.50	2.04	2.33
	Henan	13.89	11.25	6.12	
	Hubei	8.16	15.00	12.24	23.26
	Hunan	10.83	10.42	16.33	6.98
	Guangxi	15.13	18.75	14.29	16.28
	Guizhou	15.82	16.67	44.90	32.56
Rural site		68.37	89.17	87.76	90.70
Household registered as rural		63.01	85.00	79.59	90.70
Household size ***	Mean	4.47	4.90	4.78	5.14
	(Std. Deviation)	1.48	1.81	1.92	1.73
Parents are householders ***		61.08	50.83	46.94	27.91
Grandparents in household **	Both	20.42	22.50	24.49	39.53
	Grandma only	14.76	20.00	14.29	25.58
	Grandpa only	2.68	3.33		2.33
Uncles in household ***	0	62.52	97.08	55.10	100.00
	1	28.64	1.67	44.90	
	2+	8.84	1.25		
Aunts in household ***	0	60.09	52.92	100.00	100.00
	1	19.80	20.00		
	2+	20.11	27.08		
Siblings in household	0	44.96	38.75	38.78	51.16
	1	41.03	42.92	42.86	32.56
	2	10.71	12.08	10.20	16.28
	3+	3.30	6.25	8.16	
Income last year (Per capita)	Median (*yuan*)	500	625	650	770
	(Std. Deviation)	2618.73	2136.45	1211.11	1164.42
N		1606	240	49	43

Table 4 Logistic Regression Coefficients for Children's Left-behind Status (left=1)

	Model 1				Model 2			
	B	Sig.	S.E.	Exp(B)	B	Sig.	S.E.	Exp(B)
Age	-0.036	**	0.015	0.965	-0.076	***	0.016	0.927
Male	-0.019		0.138	0.981	-0.039		0.143	0.961
Province (Ref: Guizhou)								
Liaoning	-0.235		0.308	0.790	-0.361		0.321	0.697
Heilongjiang	-1.477	***	0.363	0.228	-1.729	***	0.374	0.177
Jiangsu	0.399		0.261	1.491	0.515	*	0.276	1.673
Shandong	-1.227	**	0.400	0.293	-1.129	**	0.415	0.323
Henan	-0.722	**	0.249	0.486	-0.604	**	0.258	0.547
Hubei	0.445	*	0.236	1.560	0.529	**	0.249	1.698
Hunan	-0.211		0.256	0.810	-0.202		0.271	0.817
Guangxi	0.045		0.223	1.046	0.173		0.230	1.188
Rural	1.135	***	0.197	0.322	1.225	***	0.208	0.294
HH per capita income (LN)	0.048		0.055	1.049	0.008		0.056	1.008
HH size	0.123	**	0.046	1.131				
Number of grandparents (Ref:0)						***		
Grandpa only					0.451		0.500	1.569
Grandma only					1.208	***	0.210	3.348
Both					1.207	***	0.218	3.344
Number of Other adults in HH					-0.634	***	0.076	0.530
Number of Siblings					0.065		0.088	1.067
Constant	-1.615	**	0.508	0.199	-0.382	**	0.447	0.683
Cox & Snell R^2	0.085				0.136			
Nagelkerke R^2	0.138				0.222			
N	1,938				1,938			

Table 5 Multinomial Logistic Regression Coefficients for Left-behind Status of Children

	Father only			Mother only			Both		
	B	S E	Exp(B)	B	S E	Exp(B)	B	S E	Exp(B)
Intercept	-2.210***	0.502		-2.612**	0.950		-3.768**	1.565	
p/c Inc (LN)	0.030	0.062	1.031	-0.053	0.125	0.949	-0.063	0.180	0.939
Age	-0.075***	0.018	0.927	-0.021	0.036	0.979	-0.173**	0.050	0.841
Grandparents	0.452***	0.120	1.571	0.756**	0.260	2.130	2.221***	0.288	9.216
Other adults	-0.423***	0.079	0.655	-0.895***	0.227	0.409	-19.236	1251.507	0.000
Siblings	0.076	0.098	1.079	0.217	0.177	1.243	-0.305	0.306	0.737
Male	-0.045	0.157	0.956	0.085	0.328	1.089	-0.056	0.436	0.946
Province (Ref: Guizhou)									
Liaoning	0.207	0.335	1.231	-20.796	0.000	0.000	-20.367	8220.244	0.000
Heilongjiang	-1.370**	0.419	0.254	-21.092	0.000	0.000	-2.349**	0.955	0.095
Jiangsu	0.788**	0.304	2.198	-1.651	1.061	0.192	1.001	0.885	2.720
Shandong	-0.844*	0.467	0.430	-1.831*	1.050	0.160	-1.779	1.131	0.169
Henan	-0.248	0.283	0.781	-1.600**	0.649	0.202	-19.937	4903.676	0.000
Hubei	0.761**	0.280	2.141	-0.386	0.540	0.680	-0.242	0.643	0.785
Hunan	-0.109	0.322	0.896	-0.144	0.475	0.866	-1.926**	0.874	0.146
Guangxi	0.395	0.264	1.485	-0.447**	0.475	0.640	-0.078	0.632	0.925
Rural	1.173***	0.230	3.231	0.665	0.455	1.944	3.134**	1.074	22.965
Cox & Snell R^2	0.208								
Nagelkerke R^2	0.294								
N	1,938								