

## **Internal migration, family living arrangements and happiness in China**

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***VERY PRELIMINARY AND INCOMPLETE – PLEASE DO NOT QUOTE***

### **Abstract:**

This paper explores the impact of institutional barriers imposed on internal migrants in China through the *hukou* system on their subjective well-being at destination by linking reported happiness to family living arrangements. Using the 2011 Dynamic Monitoring Survey of Migrant Population in Urban China, we find that constrained family living arrangements lower migrants' happiness. In particular, migrant parents separated from their child are more likely to be unhappy. If institutional barriers were to be removed, we predict that the proportion of happier migrants would be increased by 13%, and the effect is greater for women than for men. We also find that rural migrants are more likely to be impacted by family living arrangements than urban migrants and that the effect is the highest for the middle-age group of migrants.

*Keywords:* happiness, subjective well-being, migration, family arrangements, urban China.

*JEL:* I31, J1, J61, O53.

## 1. Introduction

China has been witnessing a massive internal labor transfer since the mid-1980s. The latest official figures estimate the total number of migrant workers at 158 million in 2011. Some are urban-urban migrants, but the vast majority is rural-urban migrants. As more and more migrants are coming and settling temporarily or permanently in cities, migrants will inevitably become a large population group, sometimes exceeding urban local population as it is already the case in Shenzhen. Related to this massive inflow, the question of social cohesion in destination areas is becoming an increasingly important concern for both academic interest and policy implication.

Internal migrants in China have long been confronted with considerable obstacles in their pursuit of a better life in destination cities. Upward mobility is especially difficult for poorer and less educated rural migrants who find it hard to enter the primary urban labor market (Carrillo, 2004). One important reason for the disadvantaged status of migrants in cities is closely linked with the household registration system (the *hukou* system), in particular because access to public services remains deeply tied to the household registration place. The provision of social security and welfare programs is highly decentralized in China and, given fiscal constraints, city governments are not willing to provide the same welfare to migrants as to the local residents. A direct consequence is that lots of migrants, particularly those from rural areas are treated unfairly as second class citizens in cities (Démurger *et al.*, 2009). In this context, understanding how migrants perceive and respond to identity-related inequality is essential to better understand issues related to social integration in cities and to draw appropriate policy implications for reforming the *hukou* system (Jiang *et al.*, 2012).

In this paper, we focus on a particular form of institutional barriers brought by the *hukou* system, which imposes huge constraints on family living arrangements. These constraints carry restrictions on access to urban education (and more generally to social security and public services) for migrants' children, which literally forces migrants to leave their children in their hometown while they work in cities. According to the Chinese Ministry of Education<sup>1</sup>, among school-age children of migrant workers, 12.6 million were attending schools for compulsory education in cities in 2011 while 22 million left-behinds were attending schools for compulsory education in rural areas. Among migrating children, 74% were studying in primary schools and 26% in junior high schools, against respectively 65% and 35% among left-behind children. The "left-behind children" phenomenon in China has attracted growing interest in the academic literature in recent years. Empirical analyses have shown the negative impact of parental migration on the development and well-being of the left-behinds, especially in terms of educational and health outcomes as well as psychosocial behavior (e.g. Chen *et al.*, 2009; Gao *et al.*, 2010; Gong *et al.*, 2008; Kong & Meng, 2010; Lee, 2011; Lee & Park,

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<sup>1</sup> "Statistical Communiqué on National Educational Development in 2011", Ministry of Education of the People's Republic of China ([http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe\\_2832/201210/143793.html](http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_2832/201210/143793.html)).

2010; Meng & Yamauchi, 2012). Much less attention has been paid to the impact of institutional barriers on the migrants' well-being at destination and on their willingness to integrate into cities. Our objective here is to explore these links by relating internal migrants' subjective well-being to family living arrangements. The 2011 Dynamic Monitoring Survey of Migrant Population in Urban China collected by the National Population and Family Planning Commission provides a unique database to analyze the channels through which institutional constraints affect individual well-being through family living arrangements. Moreover, as internal migrants in China do not form a homogenous group but are instead very heterogeneous along personal, socioeconomic and regional dimensions, we investigate how subjective well-being varies along these lines and we look at heterogeneous perceptions by comparing reported happiness across groups.

This paper aims at contributing to the literature in at least three ways. First, by using data from a recent and large-scale migrant population survey over all the provinces in China, it provides a unique and thorough assessment of migrants' subjective well-being. Second, by investigating the linkages between family living arrangements and happiness, this is the first study to evaluate the impact of institutional constraints imposed through the *hukou* system on the subjective well-being of migrants in urban destination areas. Third, we not only look at migrants as a homogenous group, but we also examine heterogeneous perceptions by comparing subjective well-being between groups of migrants by *hukou* status, gender and age.

The remainder of the paper proceeds as follows. Section 2 reviews the available literature relevant to our research objective. Section 3 discusses the data and the empirical approach. Section 4 shows the estimation results for the overall sample and with samples split by *hukou* status, gender and age. Section 5 concludes.

## **2. Overview of the literature on migration, children and happiness**

Our analysis is grounded in the area of the economics of happiness. Since Easterlin's seminal article (1974), the literature on subjective well-being or happiness has developed very rapidly in many directions, and in recent years, empirical research on subjective well-being in China has been taking off (e.g. Akay *et al.*, 2012, 2013; Appleton & Song, 2008; Easterlin *et al.*, 2012; Jiang *et al.*, 2012; Knight & Gunatilaka, 2010, 2011; Liu & Shang, 2012). The bulk of the research aims at measuring happiness (or life satisfaction) and identifying its determinants. Among others, the empirical research intends to relate happiness to absolute income and relative income, to expectations, to employment situation or to health and education (e.g. Clark *et al.*, 2008 and Dolan *et al.*, 2008 for reviews).

Regarding the trend in life satisfaction during China's transition, Appleton and Song (2008) argue that life satisfaction in urban China is rather low compared to other countries and report an inverse U-shape evolution between 1990 and 2000 with the maximum happiness reached in 1995. On a longer period of time, Easterlin *et al.* (2012) find a U-shape pattern for life satisfaction from 1990 to

2010. More specifically, they find that the higher income and better educated segments of the population have benefited from the transition with an increased life satisfaction, whereas the lower segments of the socio-economic distribution have experienced a substantial decline in life satisfaction.

Easterlin *et al.* (2012) suggest that the emergence and rise of substantial unemployment and the dissolution of the social safety net are factors shaping China's life satisfaction patterns. Moreover, self-reported subjective well-being depends not only on absolute income (Liu & Shang, 2012), but also on the income relative to others. The income of a reference group may negatively affect subjective well-being if people feel relatively deprived (Akay *et al.* 2012). Some studies find that relative income comparisons and rising material aspirations tend to compensate the effect of rising income, generating a negative effect on life satisfaction (Appleton & Song, 2008; Liu & Shang, 2012). Individual well-being is also found to be positively driven by income expectations (Knight & Gunatilaka, 2011; Liu & Shang, 2012).

Within the large literature on the economics of happiness, there are two main areas that are relevant to our objective here: papers that link migration and happiness on one hand, and those that link children and happiness on the other hand.

### *Migration and happiness*

In her review of the various channels through which migration and happiness interact, Simpson (2013) points to the rather unexplored relationship in the economics literature. Being a component of the utility function, happiness may be one of the drivers of migration decision. Conversely, migration may also affect happiness of both migrants and natives in the destination. In particular, if we focus on migrants only (with no reference to natives or other population groups), the impact of migration on happiness is theoretically unclear, and critically depends on dynamic effects and on the definition of the reference group. On one hand, by bringing higher income compared to the place of origin, migration may increase the migrant's utility and then bring happiness to migrants at destination. On the other hand, once at destination, migrants may adjust their expectations (so that happiness may actually fall when income increases) or face additional or expected hurdles that reduce their overall happiness.

As far as China is concerned, there are a few recent papers examining the determinants of happiness or job satisfaction for rural-urban migrants. Akay *et al.* (2012, 2013) use data from the 2007 wave of the Rural-to-Urban Migration in China (RUMIC) project that covers 10 largest emigrant and immigrant provinces. Akay *et al.* (2012) focus on the impact of relative income on migrants' subjective well-being and they show that the reference group matters: migrant welfare is negatively influenced by the relative income of other migrants in urban areas and rural workers of home regions ('status' effect) whereas it is positively influenced by local urban income ('signal' effect). Akay *et al.* (2013) study the relationship between remittance sending behavior and the subjective well-being of migrants in China and show that migrants experience welfare gains by sending remittances. They find

evidence of both altruistic and contractual motivations underlying remittance sending behavior, with the former being the dominant one.

Focusing specially on the welfare gap between migrants and urban and rural people, Knight and Gunatilaka (2010) report that migrants have a lower mean happiness score than both rural and urban residents and that both relative income position and income expectation are important factors of the reverse direction of happiness of migrants. Finally, Jiang *et al.* (2012) study the impact of *hukou* identity on happiness and show that people living in Chinese cities feel unhappy if inequality relates to their *hukou* identity, irrespective of their own *Hukou* status. Moreover, compared with local residents, migrants are found to be more averse to identity-related inequality because they belong to the disadvantaged group.

### *Children and happiness*

Among the different determinants of happiness usually considered in the empirical literature, the number of children enters the happiness function as one socio-demographic driver (Banchflower 1998, Becchetti *et al.* 2013). As reviewed by Banchflower (2008), the main finding from the happiness literature across countries and time is that having children lowers subjective well-being (or at most has no significant impact). An explanation for this result is that children bring additional costs to their parents, and these monetary expenses reduce the parents' utility.

In the context of China and internal migration, children may influence parents' well-being in a number of ways that need to be accounted for and that could mitigate the negative relationship found in the literature. The usual linkage of monetary costs is undoubtedly one of the channels. This is notably the case for migrants with school-age children: for this population, children education can be associated with a significant financial cost because the urban education system discriminates between migrant children and residents. Another linkage is related to specific intra-familial living arrangements that may impose an additional non-monetary psychological cost to the migrant parent. As mentioned above, the *hukou* system imposes strong constraints on migrants and frequently leads to split families, with one or two parents in the city and children left in the countryside under the care of grand-parents or relatives. Altruistic parents who care about their offspring's well-being and education and work prospects are likely to suffer from such separation and incur a loss of utility. In this context, exploring differences in happiness across different types of family living arrangements will help disentangle the children effects at stake.

## **3. Data and empirical approach**

### *Data*

The database used in the paper is drawn from the "Dynamic monitoring survey of migrant population in urban China 2011" collected by the National Population and Family Planning

Commission (hereafter called NPFPC Migrant Survey 2011). The survey covers all 31 provinces of China, 326 cities and 5,850 communities or villages. Migrant households drawn for the survey are those who have been living in a city for one month and more, and who do not hold a local *hukou*. The total number of migrant households surveyed is 128,000, but only one member aged between 16 and 59 from each household was chosen as a respondent to answer the questions. The distribution of households surveyed across provinces ranges from 2,000 in the least populous provinces (Ningxia, Qinghai, Tibet, Jilin) to 10,000 in Guangdong province. The sampling technique used for the survey is the probability proportional to size (PPS). From each of the 5,850 communities/villages drawn from the sampling framework, 20 migrant households were chosen randomly.

The NPFPC Migrant Survey 2011 includes a series of questions about migrants' social participation and psychological feelings, among which a question on happiness relative to their hometown situation. The question asks each respondent: "Compared to your hometown (register place), how is your happiness in this city?". The answer choice is "unhappy", "almost the same" or "happier"<sup>2</sup>.

To get a preliminary sense of the level of reported happiness of migrants, Table 1 shows a tabulation of the proportion of migrants by answer. In the right-hand side part of the table, we divide migrants into those who have a rural *hukou* and those who hold an urban *hukou*. The vast majority of migrant workers report a higher or a similar level of happiness in the current living place compared to their hometown. More than a third feel happier and about half feel the same. Interestingly, rural migrants appear more satisfied with their current living place than urban migrants as the percentage that report to be happier is significantly higher by 2 percentage points. One should note that these figures are likely to be upward-biased if unhappy migrants are more likely to go back to their hometown. This highly probable selection process cannot be ruled out, though we do not have any mean to control for it. Table 2 provides additional information about children, living arrangements and happiness. Interestingly, the incidence of reporting happiness increases with the number of children: hence, in terms of raw statistics, children are associated with a higher level of well-being. Another important fact that emerges from summary statistics displayed in Table 2 is the huge gap in happiness between migrants who live apart from their children (whatever the age or gender of the child) and migrants who live with at least some of their children. Hence, the unhappy proportion of migrants who live with at least a child in the city is 4% lower and the proportion of happier migrants is 11% higher than migrants who live apart from their children. The pattern is consistently observed whatever the age or gender of the child.

Table 3 summarizes means and standard deviations of key variables for both the whole sample of migrants and by *hukou* status (rural *versus* urban). Individual characteristics are consistent with

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<sup>2</sup> The original dataset also includes a fourth choice labeled "it is hard to say". To treat the variable as an ordinal response, we put "hard to say" answers together with "unhappy". As a robustness check, we also run the analysis with dropping these answers from the sample. The estimation results (not reported here) remain remarkably stable.

usual findings on migrants in China: they are predominantly men (53.2% on average), young (33 years old on average), with an education level largely within the compulsory nine-year schooling (71.5% of migrants received an education at or below junior high school) and married (77.5%). Whereas the rural *versus* urban groups exhibit no major difference for age and gender, rural migrants are significantly more married than urban migrants. And most importantly, there are huge differences in terms of education between the 2 groups: the average number of years of education for urban migrants is 3 years higher than for rural migrants, with 64% of urban migrants having an education level above the compulsory nine-year schooling.

Migrants have on average a bit more than one child. Here again, the difference between rural migrants and urban migrants is significant, the latter having less than one child on average. Just above one-third of urban migrants have no child whereas only one-quarter of rural migrants have no child. Moreover, 28.9% of rural migrants have 2 children whereas the corresponding figure for urban migrants is only 12.3%. Figure 1 plots the number of children by age and by *hukou* status. It not only confirms that rural migrants have more children than urban migrants for each age cohort, but it also shows that rural migrants in their 20s tend to have children at a younger age than their counterparts in the urban migrant population. Among migrants who have children, 72% have at least one child living with them in the city, which means that about one quarter of migrant parents do not live with their children who are left behind in their hometown. Interestingly, the comparison between rural migrants and urban migrants shows that rural migrants leave their children behind systematically (and significantly) more than urban migrants, whatever the child's age or gender. A comparison across children's age-group reveals that migrant parents take pre-school children (infants) more often with them in cities than they do with school-age children. Indeed, among parents of infants, 74.7% live with their child in the city, whereas 68.8% of parents of school-age children live with their child in the city.

To sum up, the two populations of migrant (rural *versus* urban) exhibit some key differences in terms of education as well as in terms of family composition and living arrangements: urban migrants are more educated, have fewer children and live more systematically with in the destination city.

### *Empirical approach*

Our general strategy is to relate migrants' level of well-being to institutional constraints and family arrangements in China. Here, the latent individual migrant utility depends not only on expected gains and costs in cities but also on institutional constraints and the migrant's altruism to her offspring. The institutional constraint that creates additional "family concerns" is the *hukou* system, which literally forces migrants to leave their children behind. Hence, our objective is to analyze how individual well-being is affected by family living arrangements that are themselves deeply constrained by public policy (the *hukou*).

As the happiness variable is measured in an ordinal scale (with three discrete response outcomes), we run an ordered Probit regression of the form:

$$H_{ihd}^g = \alpha^g F_{ihd} + \beta^g X_{ihd} + \eta_h + \mu_d + \varepsilon_{ihd}$$

where  $H_{ihd}^g$  is the utility (happiness) of migrant  $i$  originating from province  $h$  and living in province  $d$ . The superscript  $g$  stands for the fact that we divide the sample on the basis of the migrants' *hukou* status ( $g = \text{rural versus urban migrants}$ ), gender ( $g = \text{male versus female}$ ) and age ( $g = 16\text{-}25; 26\text{-}35; 36\text{-}45$  or  $46\text{-}59$ ). The parameters of interest are the  $\alpha$ s, which will give us estimates of the marginal utility of various family condition and living arrangements. The vector  $F_{ihd}$  includes children and living arrangements related characteristics as follows: the number of children below 16, the number of children below 16 living in cities, having a school-age child, having an infant, having a son, having a daughter, having any child living in city (and the same by age and gender of the child). The vector  $X_{ihd}$  refers to a set of individual characteristics usually found to affect individual happiness. They include demographic characteristics (gender, age, education level, ethnic group, marital status, *hukou* status), migration characteristics (inter or intra-province migration, duration in city, number of returns per year, amount of remittances), employment characteristics (type of employment, industrial sector, duration in job, type of insurance provided), household income and assets (household monthly income per capita, community average monthly income per capita, housing type), and location characteristics (local share of migrants, share of male in local migrant population). To these sets of variables, we add dummies for the province of origin ( $\eta_h$ ) and the province of destination ( $\mu_d$ ) and an error term  $\varepsilon_{ihd}$ .

#### 4. Family living arrangements and subjective well-being

##### *Socio-economic determinants of migrants' happiness*

Table 4 provides the baseline results for the estimation of the ordered Probit model on the whole sample. First of all, the estimated  $\beta$  parameters related to individual characteristics provide sensible estimates that are broadly consistent with the literature on happiness and with the specific case of Chinese migrants. Column (1) reports estimates for a specification that includes the vector  $X_{ihd}$  but does not control for family living arrangements variables ( $F_{ihd}$ ). As documented in the literature on subjective well-being, women seem happier than men. There is a U-shaped relationship between age and happiness: migrants at their late 20s/early30s seem to be the least happy. Perhaps, this finding can be related to the fact that a substantial portion of internal migrants in China tends to return to the countryside around this age, either to set up local businesses or for family reasons, and this could be a peak in stress for both professional and family reasons. On the other hand, married individuals show higher levels of happiness. Interestingly, belonging to an ethnic minority is also associated with more happiness.



Consistent with standard findings in the literature, a higher household income per capita is associated with happiness. In contrast, the relative income position within the migrant's neighborhood (defined through the average household income per capita in the community) is found to affect negatively individual reported happiness, controlling for the migrant's own income. This finding corroborates Akay *et al.* (2012)'s results on the importance of relative concerns for Chinese migrants' satisfaction level: migrants form aspirations based on social comparisons. Related to these findings, living conditions significantly matter for migrants' level of happiness. Migrants who own their house tend to be the happiest in the city. In contrast, migrants who rent housing from the employer, live in a free housing provided by the employer or live in dormitory in the workplace -all housing arrangements related to work- report a level of happiness significantly lower than migrants who rent housing from the market, the reference group. Interestingly, these results suggest that on one hand, home ownership raises satisfaction, but on the other hand, renting migrants are happier if they do not depend on their work unit for housing.

Education brings relative unhappiness, above and beyond an income effect: this is consistent with the discrimination that migrants face in cities. More educated migrants may have higher expectation and are more reluctant to accept harsh living conditions and discriminating situations and inequality brought by the *hukou* status. There is a clear gap between migrants who received the 9-year compulsory schooling (or less) and those who received a higher education, and coefficient estimates indicate that the disutility increases markedly with the education level from high school.

As far as employment characteristics are concerned, employers and self-employed report higher happiness levels than others (including employees), which indicates that autonomy on the job is valued by migrants. Compared to the manufacturing sector (the reference category), migrants working in construction are significantly less happy, whereas migrants working in Party and government organs and social organizations are much happier. On the other hand, the level of happiness does not seem to be much affected by insurance coverage. Indeed, only health insurance seems to positively affect reported happiness of migrants. A similar positive relationship between medical insurance and subjective well-being has been highlighted by Appleton and Song (2008) for urban residents in China, who interpret this as reflecting anxiety about the risk of illness.

Migrants of rural origin report higher levels of happiness. Stability seems to favor happiness since the longer they stayed in a city, the happier migrants are. Also, migrants with longer duration in the current job tend to be happier as well. On the other hand, distance to hometown brings disutility, as do more frequent returns to hometown within a year. Nevertheless, the financial connection matters positively on migrants' level of happiness since an individual who sends more remittances back is more likely to be happier in the city. This finding corroborates Akay *et al.* (2013).

Finally, location characteristics in the form of the composition of the population at the community level seem to matter a lot. Indeed, migrants living in neighborhood with a larger share of

migrants report lower levels of happiness. And the disutility of living in a “migrant” environment is reinforced when the share of males in the migrant population increases.

#### *How do family living arrangements affect happiness?*

Columns (2) to (4) in Table 4 introduce various sets of family living arrangements variables included in  $F_{ihd}$ . First, adding  $F_{ihd}$  in the specification basically leaves our estimates of the  $\beta$ s unchanged. The results show clear evidence of an impact of family living arrangements related to children on the level of migrants’ happiness. Children in general tend to impact negatively the level of happiness of their migrant parent in the city. Column (2) shows that a migrant’s level of happiness decreases as the number of children increases and column (3) confirms this finding with dummy variables on the number of children (from 0 to 3 and above). Children’s age also matters. Column (4) indicates that while having a school-age child does not significantly impact migrants’ happiness, having an infant decreases migrants’ happiness significantly. Finally, both sons and daughters equivalently impact negatively the level of happiness. While children in general impact negatively their migrant parents’ level of happiness in the city, migrants’ happiness increases when they are living with their children. Estimates consistently show that migrants report a higher level of happiness when they are living with their children, whatever the child’s age and gender.

The above estimations results clearly show that family living arrangements are constrained and that they lower migrants’ happiness. To further explore this relationship, we compute predicted probabilities for various scenarios designed to highlight the magnitude of the effects at stake. Starting with model (3) (Table 4), Table 5 shows how the probabilities of reporting each degree of happiness change as the variable “having a child in city” varies (holding the other variables at their mean), for the total sample as well as for the male and the female samples. The first two panels of the table display the actual distribution of happiness levels and the predicted distribution at the mean of all the explanatory variables. The comparison between the actual and the predicted distribution shows that the ordered Probit model gives a prediction fairly close to the actual distribution, which indicates a good fit for the model. The next two panels report predictions for two opposite scenarios. Scenario 1 represents a situation where migrants would not be living with their children (“having a child in city”=0). In contrast, scenario 2 assumes no family separation for all migrants (“having a child in city”=1). Scenario 2 would broadly correspond to a situation where institutional restrictions imposed on migrants would be totally released so that children can migrate with their parents. The policy change could be a reform/abolition of the *hukou* system or simply a full access to urban public services (including education and health) granted to migrants and their family. Predictions reported in Table 5 show that not being separated from their offspring would clearly increase migrants’ happiness (by reducing unhappiness rather than “similar feelings”). Indeed, the predicted probability of being happier is 0.40 with a child living in city against an observed proportion at 0.36, a 13% increase. As

indicated in the male and female columns, the effect of removing institutional barriers would be slightly greater for women for whom the happier group would increase by 15% (against 11% for men).

To further gauge the importance of family living arrangements in happiness, Figure 2 plots the predicted probability of being happier in city than in the hometown when age and infant-related variables vary, holding the other variables at their means. As age varies, we observe the U-shape relationship highlighted above. The figure clearly illustrates the disutility associated with family living arrangements: the probability of being happier is similar between migrants who have no infant and migrants who have infant living with them in the city. In contrast, the probability of being happier for migrants who have infants but do not live with them is below, the gap being the largest when migrants are in their late 20s – early 30s. Figures 3 and 4 provide similar predictions for sons and daughters.

#### *Across groups heterogeneity*

To further examine how the impact of family living arrangements differs for migrants of different origin, gender and age, we run separate estimations for sub-groups of rural and urban migrants, male and female migrants as well as migrants of different age groups.

Table 6 shows that compared to urban migrants, rural migrants are more likely to be impacted by family living arrangements. For rural migrants, having an infant decreases significantly their level of happiness, whereas it has no impact on urban migrants. Likewise, living with children in the city has a positive and significant impact on rural migrants' level of happiness whereas such living arrangements do not seem to significantly impact the urban migrants' well-being. Both sons and daughters reduce the migrant parents' happiness in city, but they are a valuable source of utility when living with their parents in city. Interestingly, only daughters seem to matter for urban migrants.

Columns (3) and (4) investigate differences between male migrants and female migrants in terms of the impact of family living arrangement on their happiness in the city. While the level of happiness of both male and female migrants is negatively affected by having sons, male migrants are also negatively affected by having daughters. Regarding the effect of living with children in the city, the results show that while both male and female migrants are happier living with either their sons or their daughters together in the city, female migrants are much happier living with their school-age children in the city and male migrants are much happier living with their infant in the city.

Table 7 investigates how the impact of family living arrangements varies with the migrants' age. We separate the migrants into four age groups as follows: migrants between 16 and 25, migrants between 26 and 35, migrants between 36 and 45 and migrants between 46 and 59. The results show that children related factors impact differently migrants of different age groups. In particular, the level of happiness of migrants between 26 and 35, and migrants between 36 and 45 are more likely to be affected by children factors. Those migrants are less happy having sons and daughters; however, they are happier living with sons and daughters in the city together. For migrants between 36 and 45, they are also happier having school-age child in the city with them. On the contrary, and unsurprisingly,

none of the children related factors have any impact on migrants between 46 and 59. Since migrants between 16 and 25 are more likely to have infant children, it is also not surprising to find that having infant children matters for them.

## 5. Conclusion

(to be included)

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**Table 1 - Happiness and migration**

Happiness level	Total	Rural-urban migrant	Urban-urban migrant
Unhappy	13.12	12.81	14.84
Almost the same	51.25	51.23	51.36
Happier	35.63	35.96	33.79
# obs.	127,899	108,514	19,385

Source: NPFPC Migrant Survey 2011.

Note: the origin (rural versus urban) of migrants is defined by their *hukou*.

**Table 2 - Children, living arrangements and parents' happiness**

Happiness level	Unhappy	Almost the same	Happier
Total	13.12	51.25	35.63
No child	14.01	51.27	34.71
One child	12.61	51.04	36.35
Two children	11.90	52.01	36.09
Three children and more	11.63	47.74	40.63
No school-age child	13.77	51.51	34.71
At least a school-age child	11.91	50.74	37.35
No infant	13.19	50.97	35.84
At least an infant	12.92	51.96	35.12
No son	13.54	51.17	35.28
At least a son	12.39	51.35	36.25
No daughter	13.46	51.25	35.29
At least a daughter	12.27	51.23	36.50
<i>Among migrants who have children (and by category)</i>			
No child in city	15.84	55.82	28.35
At least a child in city	11.08	49.45	39.47
No school-age child in city	15.45	55.21	29.34
School-age child	10.31	48.71	40.98
No infant in city	16.17	56.59	27.23
At least an infant in city	11.82	50.40	37.78
No son in city	15.89	55.51	28.60
At least a son in city	10.94	49.62	39.44
No daughter in city	15.77	55.96	28.28
At least a daughter in city	10.84	49.31	39.85

Source: NPFPC Migrant Survey 2011.

**Table 3 - Summary statistics**

	<b>Total</b>		<b>Rural-urban migrant</b>		<b>Urban-urban migrant</b>	
	<i>mean</i>	<i>s. d.</i>	<i>mean</i>	<i>s. d.</i>	<i>mean</i>	<i>s. d.</i>
Male	0.532	0.499	0.531	0.499	0.534	0.499
Age	33.42	9.169	33.31	9.142	34.08	9.291
Han	0.931	0.254	0.929	0.256	0.938	0.241
Below primary	0.0183	0.134	0.0208	0.143	0.00449	0.0668
Primary	0.147	0.354	0.166	0.372	0.0408	0.198
Junior high	0.550	0.497	0.592	0.491	0.314	0.464
High school	0.151	0.358	0.139	0.346	0.217	0.412
Tech-Prof	0.0555	0.229	0.0455	0.208	0.111	0.315
Junior college	0.0529	0.224	0.0290	0.168	0.187	0.390
University	0.0254	0.157	0.00753	0.0864	0.126	0.331
# years of education	9.623	2.892	9.187	2.636	12.06	3.047
Above 9-year comp. educ.	0.285	0.451	0.221	0.415	0.640	0.480
Married	0.775	0.417	0.783	0.412	0.730	0.444
Duration in this city	4.638	4.961	4.610	4.952	4.791	5.009
Duration in current job	3.982	4.542	3.889	4.431	4.512	5.091
# returns to hometown this year	1.830	1.939	1.783	1.887	2.094	2.187
Inter-province migration	0.506	0.500	0.513	0.500	0.468	0.499
Inter-city in a province	0.312	0.463	0.309	0.462	0.330	0.470
Inter-county in a city	0.181	0.385	0.178	0.382	0.202	0.401
Employer	0.0753	0.264	0.0723	0.259	0.0924	0.290
Self-employed	0.359	0.480	0.375	0.484	0.269	0.443
Housework	0.0189	0.136	0.0197	0.139	0.0140	0.118
Employee	0.547	0.498	0.533	0.499	0.625	0.484
Yearly remittances	3105.9	5838.0	3066.6	5635.7	3325.8	6857.2
Monthly household income	4169.5	4814.4	4027.8	4452.7	4962.7	6418.7
Local share of migrants	0.338	0.282	0.345	0.283	0.298	0.272
% of male in local migrant pop	0.553	0.107	0.553	0.107	0.549	0.110
# children	1.081	0.849	1.128	0.864	0.814	0.704
No child	0.270	0.444	0.257	0.437	0.340	0.474
One child	0.427	0.495	0.410	0.492	0.522	0.500
Two children	0.264	0.441	0.289	0.453	0.123	0.329
Three children and more	0.0400	0.196	0.0446	0.206	0.0142	0.118
Any school-age child	0.379	0.485	0.396	0.489	0.285	0.452
Any infant	0.275	0.447	0.280	0.449	0.245	0.430
Any son	0.373	0.483	0.387	0.487	0.289	0.453
Any daughter	0.290	0.454	0.301	0.459	0.229	0.420
<i>Among migrants who have children (and by category)</i>						
Any child in city	0.722	0.448	0.719	0.450	0.747	0.435
Any school-age child in city	0.688	0.463	0.685	0.464	0.709	0.454
Any infant in city	0.747	0.435	0.743	0.437	0.775	0.418
Any son in city	0.706	0.456	0.702	0.457	0.731	0.443
Any daughter in city	0.711	0.453	0.706	0.456	0.747	0.435
N	127,899		108,514		19,385	

Source: NPFPC Migrant Survey 2011.

Note: the origin (rural versus urban) of migrants is defined by their *hukou*. The total monthly household income (in Yuan) includes wages, business income, rent, transfer payments, etc. Remittances in Yuan are the total amount of money transferred to the family in hometown over the past year.

**Table 4 - Ordered probit estimates of happiness in city compared to hometown**

	(1) With no child variable	(2) With child variables (number)	(3) With child variables (dummy)	(4) Child age and gender
Rural origin of migrants	0.0823*** (0.0118)	0.0822*** (0.0118)	0.0824*** (0.0118)	0.0823*** (0.0118)
Male	-0.0223*** (0.00786)	-0.0252*** (0.00787)	-0.0248*** (0.00787)	-0.0243*** (0.00790)
Age	-0.00746** (0.00333)	-0.00970*** (0.00351)	-0.00918*** (0.00354)	-0.0102*** (0.00363)
Age square	0.000125*** (0.0000454)	0.000170*** (0.0000486)	0.000162*** (0.0000492)	0.000173*** (0.0000498)
Han	-0.0563*** (0.0172)	-0.0539*** (0.0172)	-0.0539*** (0.0172)	-0.0543*** (0.0172)
Primary	0.0209 (0.0317)	0.0189 (0.0318)	0.0189 (0.0317)	0.0179 (0.0318)
Junior high	-0.0163 (0.0311)	-0.0191 (0.0311)	-0.0187 (0.0311)	-0.0204 (0.0311)
High school	-0.0528 (0.0324)	-0.0576* (0.0325)	-0.0572* (0.0325)	-0.0587* (0.0325)
Tech-Prof	-0.121*** (0.0350)	-0.129*** (0.0350)	-0.130*** (0.0350)	-0.131*** (0.0350)
Junior college	-0.157*** (0.0359)	-0.170*** (0.0359)	-0.170*** (0.0359)	-0.171*** (0.0359)
College and above	-0.198*** (0.0404)	-0.217*** (0.0404)	-0.218*** (0.0404)	-0.218*** (0.0404)
Married	0.0721*** (0.0122)	0.0678*** (0.0131)	0.0701*** (0.0141)	0.0743*** (0.0141)
# children less than 16		-0.0824*** (0.00826)		
# children living in city		0.160*** (0.00850)		
One child			-0.127*** (0.0131)	
Two children			-0.117*** (0.0158)	
Three children and more			-0.0596* (0.0357)	
Any child in city			0.220*** (0.0116)	
Any school-age child				-0.0254 (0.0243)
Any infant				-0.0456* (0.0234)
Any son				-0.0674*** (0.0227)
Any daughter				-0.0717*** (0.0216)
Any school-age child in city				0.0592** (0.0302)
Any infant in city				0.0646* (0.0290)
Any son in city				0.121*** (0.0284)
Any daughter in city				0.138*** (0.0276)
Inter-province migration	-0.0843***	-0.0755***	-0.0750***	-0.0747***



	(0.0134)	(0.0134)	(0.0134)	(0.0134)
Inter-city in a province	0.00636	0.0104	0.0109	0.0111
	(0.0122)	(0.0122)	(0.0122)	(0.0122)
Duration in this city	0.0111***	0.0101***	0.0101***	0.0100***
	(0.000996)	(0.000997)	(0.000997)	(0.000998)
# returns to hometown this year	-0.00852***	-0.00757***	-0.00752***	-0.00753***
	(0.00215)	(0.00216)	(0.00216)	(0.00216)
Log(remittances)	0.00706***	0.00801***	0.00797***	0.00800***
	(0.00105)	(0.00106)	(0.00106)	(0.00106)
Log(monthly household income per capita)	0.0299***	0.0722***	0.0716***	0.0726***
	(0.00751)	(0.00790)	(0.00789)	(0.00789)
Log(average per capita household income)	-0.0898***	-0.0995***	-0.0990***	-0.0993***
	(0.0111)	(0.0111)	(0.0111)	(0.0111)
Rental housing from employer	-0.0346**	-0.0304*	-0.0296*	-0.0305*
	(0.0161)	(0.0161)	(0.0161)	(0.0161)
Low-rent housing supplied by government	-0.191**	-0.188**	-0.187**	-0.186**
	(0.0838)	(0.0837)	(0.0837)	(0.0837)
Borrowed housing	-0.0187	-0.0130	-0.0120	-0.0117
	(0.0298)	(0.0299)	(0.0299)	(0.0299)
Free housing provided by unit/employer	-0.122***	-0.109***	-0.107***	-0.108***
	(0.0124)	(0.0124)	(0.0124)	(0.0124)
Own house/Self-building housing	0.287***	0.271***	0.269***	0.270***
	(0.0128)	(0.0129)	(0.0129)	(0.0129)
Dormitory in workplace	-0.0481***	-0.0425**	-0.0424**	-0.0424**
	(0.0181)	(0.0181)	(0.0181)	(0.0181)
Other irregular living place	-0.0912	-0.0846	-0.0873	-0.0849
	(0.0622)	(0.0623)	(0.0623)	(0.0623)
Duration in current job	0.00274**	0.00213**	0.00217**	0.00209*
	(0.00108)	(0.00108)	(0.00108)	(0.00108)
Employer	0.0870***	0.0724**	0.0734**	0.0729**
	(0.0296)	(0.0297)	(0.0297)	(0.0297)
Self-employed	0.0551**	0.0483*	0.0489*	0.0488*
	(0.0270)	(0.0271)	(0.0271)	(0.0271)
Employee	-0.00473	0.00430	0.00595	0.00549
	(0.0272)	(0.0272)	(0.0272)	(0.0272)
Mining	0.00153	-0.0126	-0.0125	-0.0133
	(0.0349)	(0.0349)	(0.0349)	(0.0349)
Animal husbandry and fishery	0.113***	0.110***	0.111***	0.111***
	(0.0267)	(0.0267)	(0.0267)	(0.0267)
Construction	-0.0342**	-0.0451***	-0.0455***	-0.0452***
	(0.0154)	(0.0154)	(0.0154)	(0.0154)
Electricity/coal/water	0.109**	0.102**	0.104**	0.102**
	(0.0485)	(0.0485)	(0.0485)	(0.0485)
Wholesale and retail	-0.00125	-0.00788	-0.00873	-0.00859
	(0.0138)	(0.0138)	(0.0139)	(0.0139)
Hotel and catering	0.00150	0.00457	0.00406	0.00387
	(0.0145)	(0.0145)	(0.0145)	(0.0145)
Social services	0.00290	0.00121	0.000378	0.000484
	(0.0147)	(0.0148)	(0.0148)	(0.0148)
Finance/Insurance/Real estate	0.0537	0.0411	0.0390	0.0397
	(0.0359)	(0.0359)	(0.0359)	(0.0359)
Transport, storage and communication	0.0590***	0.0456**	0.0456**	0.0447**
	(0.0200)	(0.0200)	(0.0200)	(0.0200)
Health, sports and social welfare	0.0288	0.0250	0.0242	0.0243
	(0.0390)	(0.0390)	(0.0390)	(0.0390)
Education, Culture, Film and Television	0.0766**	0.0668*	0.0651*	0.0659*
	(0.0387)	(0.0387)	(0.0387)	(0.0387)
Research and technical services	0.0470	0.0361	0.0353	0.0348
	(0.0368)	(0.0368)	(0.0368)	(0.0368)
Party and Government organs and social	0.180***	0.180***	0.180***	0.180***

organizations	(0.0655)	(0.0656)	(0.0656)	(0.0656)
Other	-0.0441 <sup>***</sup>	-0.0486 <sup>***</sup>	-0.0490 <sup>***</sup>	-0.0490 <sup>***</sup>
	(0.0163)	(0.0163)	(0.0163)	(0.0163)
Urban pension insurance	0.0197	0.0157	0.0156	0.0156
	(0.0173)	(0.0173)	(0.0173)	(0.0173)
Health insurance	0.0377 <sup>**</sup>	0.0356 <sup>**</sup>	0.0358 <sup>**</sup>	0.0354 <sup>**</sup>
	(0.0150)	(0.0150)	(0.0150)	(0.0150)
Injury insurance	-0.0000261	0.00374	0.00385	0.00404
	(0.0137)	(0.0137)	(0.0137)	(0.0137)
Unemployment insurance	0.0215	0.0185	0.0176	0.0178
	(0.0185)	(0.0185)	(0.0185)	(0.0185)
Local share of migrants	-0.103 <sup>***</sup>	-0.109 <sup>***</sup>	-0.108 <sup>***</sup>	-0.108 <sup>***</sup>
	(0.0161)	(0.0161)	(0.0161)	(0.0161)
% of male in local migrant pop	-0.236 <sup>***</sup>	-0.222 <sup>***</sup>	-0.222 <sup>***</sup>	-0.221 <sup>***</sup>
	(0.0353)	(0.0353)	(0.0353)	(0.0353)
Observations	97,981	97,981	97,981	97,981
Pseudo-R <sup>2</sup>	0.0297	0.0316	0.0317	0.0317
Log likelihood	-92,941	-92,761	-92,758	-92,751

*Source:* NPFPC Migrant Survey 2011.

*Note:* All regressions also contain dummies for the province of origin and the province of destination, not reported here for brevity. Reference categories are the following: female, ethnic minority, no education, inter-county in a city migration, rental housing from the market, other type of employment (occupation), manufacturing sector.

Standard errors in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Table 5 – Actual and predicted distribution of happiness for changes in family living arrangement**

	<b>Total sample</b>	<b>Male</b>	<b>Female</b>
<b>Actual distribution:</b>			
Unhappy	0.1319	0.1311	0.1325
Same as in hometown	0.5121	0.5102	0.5133
Happier	0.356	0.3587	0.3542
<b>Predicted probabilities (at mean)</b>			
Unhappy	0.1321	0.1247	0.1197
Same as in hometown	0.5115	0.5277	0.5236
Happier	0.3564	0.3475	0.3567
<b>Predicted probabilities (at mean) if no child living in city</b>			
Unhappy	0.1406	0.1429	0.1374
Same as in hometown	0.5388	0.5402	0.5368
Happier	0.3205	0.317	0.3259
<b>Predicted probabilities (at mean) if at least one child living in city</b>			
Unhappy	0.0973	0.0997	0.0947
Same as in hometown	0.5	0.5022	0.4968
Happier	0.4027	0.3988	0.4084

**Table 6 – Family living arrangements and happiness in city, by hukou status and by gender**

	(1) Rural migrants	(2) Urban migrants	(3) Male	(4) Female
Any school-age child	-0.0378 (0.0254)	0.107 (0.0926)	-0.0104 (0.0316)	-0.0479 (0.0381)
Any infant	-0.0447* (0.0244)	0.00829 (0.0917)	-0.0496 (0.0307)	-0.0397 (0.0365)
Any son	-0.0670*** (0.0236)	-0.120 (0.0893)	-0.0692** (0.0296)	-0.0617* (0.0355)
Any daughter	-0.0615*** (0.0224)	-0.201** (0.0876)	-0.0870*** (0.0282)	-0.0499 (0.0337)
Any school-age child in city	0.0651** (0.0314)	-0.0236 (0.115)	0.0410 (0.0389)	0.0884* (0.0480)
Any infant in city	0.0616** (0.0302)	0.0438 (0.113)	0.0627* (0.0375)	0.0688 (0.0460)
Any son in city	0.125*** (0.0296)	0.154 (0.111)	0.121*** (0.0366)	0.119*** (0.0452)
Any daughter in city	0.131*** (0.0286)	0.257** (0.109)	0.167*** (0.0356)	0.0963** (0.0436)
Rural origin of migrants			0.0770*** (0.0153)	0.0944*** (0.0184)
Male	-0.0237*** (0.00861)	-0.0249 (0.0201)		
Age	-0.0104*** (0.00397)	-0.0126 (0.00942)	-0.0157*** (0.00451)	-0.00283 (0.00662)
Age square	0.000182*** (0.0000547)	0.000178 (0.000127)	0.000237*** (0.0000608)	0.0000921 (0.0000947)
Han	-0.0644*** (0.0190)	0.00434 (0.0431)	-0.0353 (0.0222)	-0.0796*** (0.0276)
Primary	0.0144 (0.0324)	0.139 (0.169)	-0.0464 (0.0495)	0.0678 (0.0419)
Junior high	-0.0224 (0.0318)	0.132 (0.163)	-0.0810* (0.0486)	0.0265 (0.0410)
High school	-0.0569* (0.0335)	0.0684 (0.163)	-0.125** (0.0499)	-0.00628 (0.0441)
Tech-Prof	-0.151*** (0.0370)	0.0548 (0.165)	-0.192*** (0.0532)	-0.0825* (0.0478)
Junior college	-0.191*** (0.0400)	0.0155 (0.164)	-0.241*** (0.0539)	-0.114** (0.0499)
College and above	-0.277*** (0.0567)	-0.00438 (0.165)	-0.268*** (0.0587)	-0.188*** (0.0587)
Married	0.0733*** (0.0158)	0.0732** (0.0314)	0.0824*** (0.0185)	0.0637*** (0.0219)
Inter-province migration	-0.0735*** (0.0148)	-0.0860*** (0.0332)	-0.0701*** (0.0172)	-0.0860*** (0.0215)
Inter-city in a province	0.0161 (0.0133)	-0.000201 (0.0306)	0.0140 (0.0158)	0.00621 (0.0193)
Duration in this city	0.0105*** (0.00111)	0.00724*** (0.00236)	0.0108*** (0.00124)	0.00786*** (0.00171)
# returns to hometown this year	-0.00384 (0.00243)	-0.0214*** (0.00478)	-0.00839*** (0.00279)	-0.00689** (0.00341)
Log(remittances)	0.00810*** (0.00116)	0.00698*** (0.00262)	0.00844*** (0.00136)	0.00751*** (0.00169)
Log(monthly hh income per capita)	0.0756*** (0.00869)	0.0634*** (0.0190)	0.0590*** (0.0101)	0.0961*** (0.0127)
Log(average per capita household income)	-0.0920*** (0.0122)	-0.127*** (0.0270)	-0.0801*** (0.0143)	-0.125*** (0.0177)
Rental housing from employer	-0.0181	-0.0999**	-0.0105	-0.0541**

	(0.0174)	(0.0432)	(0.0212)	(0.0248)
Low-rent housing supplied by government	-0.179**	-0.224	-0.326***	0.0675
	(0.0907)	(0.221)	(0.105)	(0.140)
Borrowed housing	-0.0442	0.0943	-0.0400	0.0273
	(0.0344)	(0.0610)	(0.0398)	(0.0454)
Free housing provided by unit/employer	-0.108***	-0.108***	-0.101***	-0.109***
	(0.0135)	(0.0323)	(0.0161)	(0.0196)
Own house/Self-building housing	0.276***	0.258***	0.269***	0.274***
	(0.0151)	(0.0257)	(0.0166)	(0.0204)
Dormitory in workplace	-0.0497***	0.00451	-0.0572**	-0.0200
	(0.0192)	(0.0541)	(0.0238)	(0.0280)
Other irregular living place	-0.110*	0.270	-0.0790	-0.0903
	(0.0643)	(0.256)	(0.0804)	(0.0987)
Duration in current job	0.00203*	0.00269	0.00153	0.00386*
	(0.00123)	(0.00233)	(0.00129)	(0.00198)
Employer	0.0563*	0.159*	0.0755*	0.0668
	(0.0317)	(0.0859)	(0.0447)	(0.0407)
Self-employed	0.0338	0.148*	0.0478	0.0463
	(0.0287)	(0.0817)	(0.0419)	(0.0357)
Employee	0.00164	0.0236	-0.0133	0.0327
	(0.0290)	(0.0814)	(0.0420)	(0.0363)
Mining	-0.0488	0.143*	-0.0106	0.0543
	(0.0384)	(0.0849)	(0.0375)	(0.114)
Animal husbandry and fishery	0.0993**	0.226***	0.147***	0.0442
	(0.0284)	(0.0831)	(0.0340)	(0.0436)
Construction	-0.0494***	-0.0173	-0.0352**	-0.0370
	(0.0166)	(0.0436)	(0.0179)	(0.0361)
Electricity/coal/water	0.155***	-0.0223	0.124**	0.0358
	(0.0579)	(0.0910)	(0.0548)	(0.106)
Wholesale and retail	-0.0130	0.0296	-0.0144	-0.000346
	(0.0150)	(0.0364)	(0.0183)	(0.0214)
Hotel and catering	-0.00321	0.0645	0.0167	-0.0104
	(0.0156)	(0.0400)	(0.0197)	(0.0217)
Social services	-0.00603	0.0507	-0.00941	0.0102
	(0.0160)	(0.0387)	(0.0199)	(0.0223)
Finance/Insurance/Real estate	0.0484	0.0782	0.00987	0.0729
	(0.0483)	(0.0568)	(0.0487)	(0.0533)
Transport, storage and communication	0.0276	0.149***	0.0422*	0.0813
	(0.0220)	(0.0492)	(0.0225)	(0.0522)
Health, sports and social welfare	0.0344	0.0426	-0.0632	0.0844
	(0.0484)	(0.0680)	(0.0598)	(0.0521)
Education, Culture, Film and Television	0.105*	0.0644	0.0560	0.0754
	(0.0551)	(0.0581)	(0.0590)	(0.0522)
Research and technical services	0.0697	0.0543	0.00968	0.0927
	(0.0491)	(0.0588)	(0.0434)	(0.0706)
Party and Government organs and social organizations	0.143	0.233***	0.288***	0.0156
	(0.107)	(0.0866)	(0.0847)	(0.104)
Other	-0.0552***	0.00558	-0.0628***	-0.0280
	(0.0178)	(0.0426)	(0.0209)	(0.0263)
Urban pension insurance	0.0135	0.0232	0.0104	0.0212
	(0.0194)	(0.0395)	(0.0226)	(0.0271)
Health insurance	0.0275*	0.0634*	0.0469**	0.0178
	(0.0165)	(0.0371)	(0.0193)	(0.0240)
Injury insurance	-0.00619	0.0630*	0.00445	0.0150
	(0.0150)	(0.0347)	(0.0171)	(0.0233)
Unemployment insurance	0.0371*	-0.0300	0.0258	0.00364
	(0.0217)	(0.0380)	(0.0243)	(0.0290)
Local share of migrants	-0.110***	-0.126***	-0.0933***	-0.133***
	(0.0174)	(0.0431)	(0.0207)	(0.0258)
% of male in local migrant pop	-0.234***	-0.166*	-0.306***	-0.0817

	(0.0386)	(0.0894)	(0.0452)	(0.0575)
Observations	83,165	14,816	58,593	39,388
Pseudo-R <sup>2</sup>	0.0309	0.0420	0.0325	0.0326
Log likelihood	-78564.6	-14080.8	-55424.2	-37244.6

*Source:* NPFPC Migrant Survey 2011.

*Note:* See Table 4.

**Table 7 – Family living arrangements and happiness in city, by age group**

	(1)	(2)	(3)	(4)
	16-25	26-35	36-45	46-59
Any school-age child	-0.165 (0.195)	0.0270 (0.0352)	-0.0488 (0.0377)	-0.151 (0.203)
Any infant	-0.229* (0.134)	-0.0266 (0.0333)	-0.0141 (0.0420)	-0.356 (0.273)
Any son	0.152 (0.128)	-0.0645* (0.0332)	-0.0690** (0.0349)	0.0692 (0.196)
Any daughter	0.121 (0.126)	-0.0683** (0.0322)	-0.0721** (0.0316)	0.0129 (0.191)
Any school-age child in city	0.127 (0.247)	0.0387 (0.0433)	0.100** (0.0452)	0.183 (0.245)
Any infant in city	0.154 (0.170)	0.0604 (0.0416)	0.0217 (0.0503)	0.398 (0.309)
Any son in city	-0.00140 (0.167)	0.140*** (0.0414)	0.110*** (0.0427)	-0.00892 (0.236)
Any daughter in city	0.0809 (0.164)	0.149*** (0.0409)	0.130*** (0.0400)	0.00125 (0.233)
Rural origin of migrants	0.0767*** (0.0264)	0.0809*** (0.0193)	0.0583*** (0.0215)	0.163*** (0.0360)
Male	0.00536 (0.0165)	-0.0227* (0.0132)	-0.0494*** (0.0142)	0.00112 (0.0290)
Age	0.0295 (0.0588)	0.00528 (0.0519)	-0.0931 (0.0742)	0.127 (0.0954)
Age square	-0.000875 (0.00138)	-0.000119 (0.000849)	0.00124 (0.000920)	-0.00122 (0.000926)
Han	-0.0161 (0.0360)	-0.0680** (0.0281)	-0.0787** (0.0319)	-0.0221 (0.0574)
Primary	-0.0316 (0.141)	-0.0184 (0.0766)	0.0313 (0.0449)	0.0358 (0.0627)
Junior high	-0.0711 (0.137)	-0.0263 (0.0752)	-0.00239 (0.0443)	-0.0225 (0.0620)
High school	-0.101 (0.138)	-0.0562 (0.0767)	-0.0573 (0.0481)	-0.0482 (0.0686)
Tech-Prof	-0.192 (0.139)	-0.102 (0.0790)	-0.135** (0.0647)	-0.0303 (0.121)
Junior college	-0.215 (0.140)	-0.139* (0.0797)	-0.209*** (0.0632)	-0.182* (0.110)
College and above	-0.267* (0.147)	-0.180** (0.0832)	-0.267*** (0.0791)	-0.213 (0.147)
Married	0.0776** (0.0314)	0.0507** (0.0235)	0.0583* (0.0327)	0.129** (0.0519)
Inter-province migration	-0.135*** (0.0302)	-0.0680*** (0.0225)	-0.0665*** (0.0236)	0.00789 (0.0409)
Inter-city in a province	-0.0143 (0.0270)	0.00442 (0.0202)	0.0117 (0.0215)	0.0794** (0.0383)
Duration in this city	0.0246*** (0.00332)	0.00422** (0.00196)	0.00767*** (0.00151)	0.0110*** (0.00231)
# returns to hometown this year	-0.00495 (0.00460)	-0.0105*** (0.00355)	-0.00794** (0.00388)	-0.00616 (0.00707)
Log(remittances)	0.0121*** (0.00215)	0.00696*** (0.00178)	0.00643*** (0.00195)	0.00653** (0.00333)
Log(monthly hh income per capita)	0.0568** (0.0188)	0.0781*** (0.0133)	0.0777*** (0.0137)	0.0680*** (0.0234)
Log(average per capita household income)	-0.130*** (0.0253)	-0.0996*** (0.0184)	-0.0822*** (0.0193)	-0.0659* (0.0341)
Rental housing from employer	-0.113***	-0.00793	-0.0160	0.0530

	(0.0329)	(0.0279)	(0.0283)	(0.0532)
Low-rent housing supplied by government	-0.114	-0.188	-0.227	-0.121
	(0.222)	(0.148)	(0.144)	(0.193)
Borrowed housing	-0.0426	0.00647	-0.0227	0.0227
	(0.0587)	(0.0532)	(0.0544)	(0.0880)
Free housing provided by unit/employer	-0.0896 <sup>***</sup>	-0.0936 <sup>***</sup>	-0.126 <sup>***</sup>	-0.172 <sup>***</sup>
	(0.0205)	(0.0232)	(0.0260)	(0.0427)
Own house/Self-building housing	0.376 <sup>***</sup>	0.266 <sup>***</sup>	0.273 <sup>***</sup>	0.213 <sup>***</sup>
	(0.0423)	(0.0208)	(0.0209)	(0.0369)
Dormitory in workplace	-0.102 <sup>**</sup>	-0.0400	-0.0411	0.0197
	(0.0432)	(0.0300)	(0.0304)	(0.0576)
Other irregular living place	-0.140	0.0283	0.0123	-0.374 <sup>**</sup>
	(0.150)	(0.123)	(0.0994)	(0.152)
Duration in current job	0.00774	0.00563 <sup>**</sup>	0.00324 <sup>**</sup>	0.000277
	(0.00532)	(0.00224)	(0.00162)	(0.00220)
Employer	0.0653	0.0921 <sup>*</sup>	0.164 <sup>***</sup>	-0.0126
	(0.0659)	(0.0527)	(0.0529)	(0.0969)
Self-employed	-0.0347	0.0735	0.160 <sup>***</sup>	-0.0795
	(0.0517)	(0.0491)	(0.0491)	(0.0896)
Employee	-0.0521	0.0273	0.102 <sup>**</sup>	-0.0756
	(0.0501)	(0.0496)	(0.0499)	(0.0911)
Mining	0.0172	0.0110	-0.0379	-0.0381
	(0.101)	(0.0637)	(0.0549)	(0.0903)
Animal husbandry and fishery	0.0716	0.141 <sup>***</sup>	0.0268	0.195 <sup>***</sup>
	(0.0818)	(0.0516)	(0.0421)	(0.0671)
Construction	-0.0620 <sup>*</sup>	-0.0213	-0.0627 <sup>**</sup>	-0.0769 <sup>*</sup>
	(0.0372)	(0.0266)	(0.0265)	(0.0464)
Electricity/coal/water	0.00411	0.0631	0.239 <sup>***</sup>	-0.0752
	(0.125)	(0.0811)	(0.0844)	(0.128)
Wholesale and retail	-0.00381	0.0370	-0.0689 <sup>***</sup>	-0.0482
	(0.0294)	(0.0229)	(0.0253)	(0.0485)
Hotel and catering	-0.0102	0.0190	-0.0410	0.0700
	(0.0274)	(0.0247)	(0.0273)	(0.0535)
Social services	0.0308	0.0113	-0.0495 <sup>*</sup>	-0.0386
	(0.0280)	(0.0249)	(0.0281)	(0.0530)
Finance/Insurance/Real estate	-0.000714	0.130 <sup>**</sup>	-0.0577	-0.251
	(0.0660)	(0.0516)	(0.0914)	(0.159)
Transport, storage and communication	0.0379	0.119 <sup>***</sup>	-0.0470	0.0415
	(0.0506)	(0.0319)	(0.0346)	(0.0680)
Health, sports and social welfare	0.0728	0.0852	-0.0773	-0.0810
	(0.0848)	(0.0604)	(0.0783)	(0.116)
Education, Culture, Film and Television	0.109	0.0728	0.0110	0.169
	(0.0752)	(0.0569)	(0.0854)	(0.164)
Research and technical services	0.0523	0.0190	0.00721	0.515 <sup>**</sup>
	(0.0765)	(0.0509)	(0.0836)	(0.205)
Party and Government organs and social organizations	0.411 <sup>***</sup>	0.196 <sup>*</sup>	-0.0101	0.0619
	(0.140)	(0.107)	(0.129)	(0.183)
Other	-0.0324	-0.00254	-0.0999 <sup>***</sup>	-0.103 <sup>**</sup>
	(0.0360)	(0.0276)	(0.0291)	(0.0519)
Urban pension insurance	-0.0855 <sup>**</sup>	-0.0160	0.0921 <sup>***</sup>	0.105 <sup>*</sup>
	(0.0370)	(0.0287)	(0.0308)	(0.0592)
Health insurance	0.0790 <sup>**</sup>	0.0474 <sup>*</sup>	0.00207	0.0462
	(0.0320)	(0.0253)	(0.0263)	(0.0490)
Injury insurance	0.0149	0.0445 <sup>*</sup>	-0.0344	-0.0296
	(0.0263)	(0.0235)	(0.0259)	(0.0460)
Unemployment insurance	0.0967 <sup>***</sup>	-0.0209	0.0119	0.0000549
	(0.0369)	(0.0290)	(0.0364)	(0.0751)
Local share of migrants	-0.127 <sup>***</sup>	-0.121 <sup>***</sup>	-0.0722 <sup>**</sup>	-0.0814
	(0.0342)	(0.0268)	(0.0288)	(0.0531)
% of male in local migrant pop	-0.145 <sup>**</sup>	-0.120 <sup>**</sup>	-0.289 <sup>***</sup>	-0.547 <sup>***</sup>

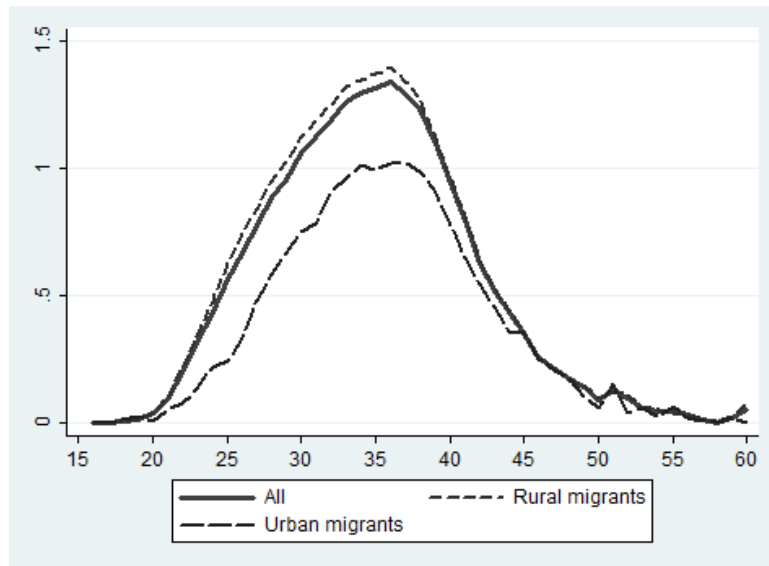


	(0.0707)	(0.0611)	(0.0639)	(0.114)
Observations	21323	34877	31904	9877
Pseudo-R <sup>2</sup>	0.0316	0.0306	0.0311	0.0393
Log likelihood	-20356.0	-33127.5	-29899.1	-9069.4

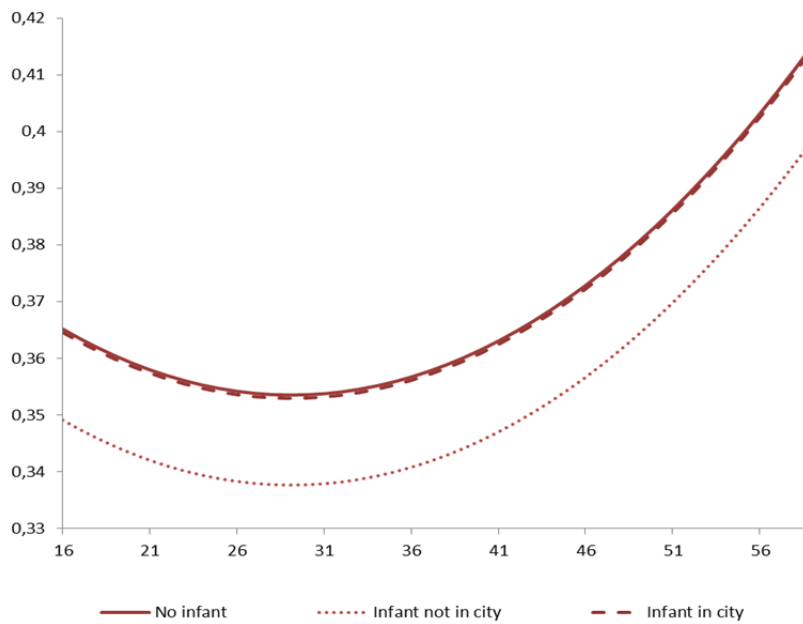
*Source:* NPFPC Migrant Survey 2011.

*Note:* See Table 4.

**Figure 1 – Average number of children by age and hukou status**



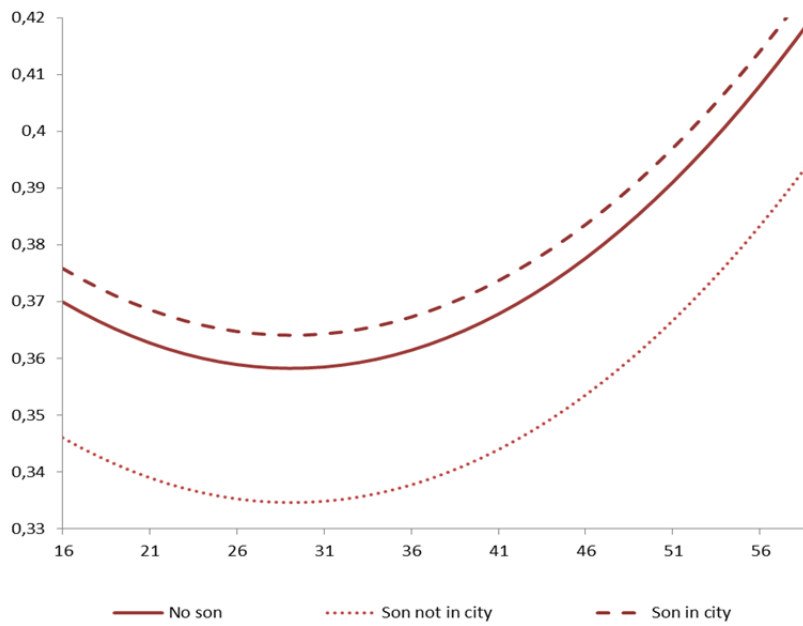
**Figure 2 – Predicted probability of happiness by age and infant**



Source: NPFPC Migrant Survey 2011.

Note: Predicted probability of “being happier” by age for migrants who have respectively no infant (“no infant”), at least one infant, but none living with the migrant parent in city (“infant not in city”) and at least one infant living with the migrant parent in city (“infant in city”). Age and its square vary; all other variables are taken are their mean.

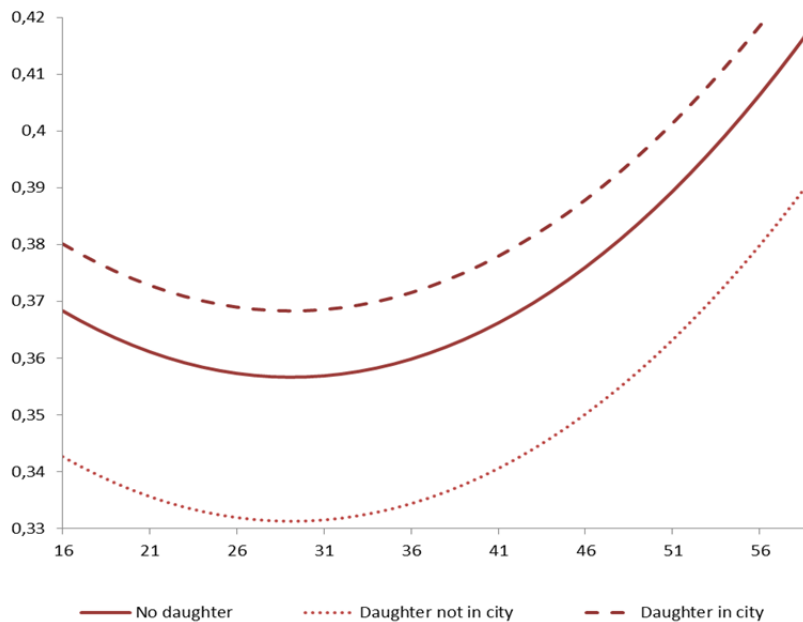
**Figure 3 – Sons and predicted probability of happiness by age**



Source: NPFPC Migrant Survey 2011.

Note: Predicted probability of “being happier” by age for migrants who have respectively no son (“no son”), at least one son, but none living with the migrant parent in city (“son not in city”) and at least one son living with the migrant parent in city (“son in city”). Age and its square vary; all other variables are taken are their mean.

**Figure 4 – Daughters and predicted probability of happiness by age**



Source: NPFPC Migrant Survey 2011.

Note: Predicted probability of “being happier” by age for migrants who have respectively no daughter (“no daughter”), at least one daughter, but none living with the migrant parent in city (“daughter not in city”) and at least one daughter living with the migrant parent in city (“daughter in city”). Age and its square vary; all other variables are taken are their mean.