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What Keeps China's Migrant Workers Going? Expectations and Happiness Among China's Floating Population

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Abstract:

China's rural-urban migrants have been the engine room that has driven China's high rate of economic growth; however, their living and working conditions are poor. This paper addresses the question: What keeps China's migrant workers going? We seek to answer this question through examining the determinants of the happiness of China's rural-urban migrants, drawing on a large-scale survey administered across 12 cities in 2005. We find that expectations as to future income is an important determinant of happiness. This suggests that many migrants expect their financial position and, by extension, their lives more generally to get better in the future and that this is having a positive effect on their current levels of happiness. The effect of optimistic expectations outstrips any realistic increase in own income. We find that for those who expect a big increase in income over the next five years, this translates to an increase in average monthly income of 380 per cent and for those who expect a small increase in income over the next five years this translates to an increase in average monthly income of 200 per cent to obtain an equivalent increase in happiness compared with those who expect no change in income. This finding has important implications for economic growth and socio-economic stability in China given that maintaining socio-economic stability is important to maintain China's high rate of economic growth and positive expectations about future income are important for maintaining socio-economic stability during times of economic transition.

JEL codes: I32, O15

“I can't imagine going on when there are no more expectations”

Dame Edith Evans

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1. Introduction

Over the last three decades China has had one of the highest economic growth rates in the world. Much of this growth has been fuelled by rural-urban migrants, who have made China the world's factory. China's rural-urban migrants represent a floating population with much circular migration between the cities and the countryside. Hence, estimates of the number of rural-urban migrants in China's cities are imprecise. Never the less, a conservative estimate is that there are 120 million rural-urban migrants in China's cities and this figure is expected to increase to 150 million people within a few years (Knight & Gunatilaka, 2010). Rural-urban migrants lead difficult lives. Migrants face occupational and wage discrimination (see eg. Knight & Yueh, 2009; Liu, 2005). A survey administered by the All-China Federation of Trade Unions in 2006 found that 65 per cent of rural-urban migrants were working in so-called 'Three D jobs' (dirty, dangerous and demeaning) (Tao, 2006). One study of migrant workers' working hours found that nearly twice as many migrants as urban residents worked six days a week, and almost 60 per cent of migrants worked seven days a week (ILO, 2007). Another study of the working hours of rural-urban migrants in Shanghai found that the mean hours worked was 55.5 with 40 per cent working 40 to 60 hours per week; 25 per cent working 70 hours per week and 7 per cent working more than 70 hours per week (Feng *et al.*, 2002). Few rural-urban migrants participate in social insurance schemes (Nielsen & Smyth, 2008). Based on China's 1% census data, collected in 2005, the present authors calculate that 4.87 per cent of rural-urban migrants were participating in pension insurance; 5.20 per cent of rural-urban migrants were participating in social medical insurance and 4.76 per cent of rural-urban migrants were participating in unemployment insurance.

Rural-urban migrant access to urban services is limited (Li, 2006; Liu *et al.*, 2008) and rural-urban migrants are viewed as outsiders by those with an urban *hukou* (urban household

registration). Qualitative studies undertaken by Jacka (2005) and Li (2006) reported that rural-urban migrants allocate little time to leisure activities. Li (2006) interviewed 26 rural-urban migrants in Tianjin about their leisure activities. Twenty interviewees in Li's sample indicated that they never went out after work because they were exhausted and wanted to rest or did not want to spend money on socializing. Nielsen and Smyth (2007) found that when rural-urban migrants did engage in leisure activities, it involved going to a park or a library that attracted no charge. Jacka (2005) reported that despite feelings of isolation and loneliness, migrant women in Beijing had little or no time for leisure activities.

An important reason rural-urban migrants engage in few leisure activities that entail going outdoors is that urban locals do not make them welcome in public areas. The prevailing belief among rural-urban migrants is that the urban population look down on them. Li's (2006) interviews with migrant workers in Tianjin uncovered some such negative views. One respondent in Li's study claimed "People in the city....think very highly of themselves. They think they are superior to us" (p.190). Another reported that "...we get nasty abuse from the locals very often" (p.190). A survey administered by the Chongqing Municipal Agricultural Bureau found that 92 per cent of rural-urban migrants felt that local urban residents looked down on them because of the types of work they do in the cities (Li, 2005). For example, in the service sector in Chongqing, many rural-urban migrants work as hotel porters. Rural-urban migrants congregate in the streets in Chongqing and if urban residents are unable to carry their bags, they call for a migrant porter to do the job. These migrant porters are called 'Bang Bang' in the local dialect, which is actually a derogatory term referring to the pole that a migrant porter uses to carry the urbanites' belongings. One such 'Bang Bang' interviewed for a press report in the Chinese media said, "I do not care about how tiring, hard and dirty the job is [but I do not like] being looked down upon" (Li, 2005).

According to a survey conducted by researchers at Fudan University and reported in the state media in China, less than 8 per cent of China's rural urban migrants are satisfied with their lives and most complain of discrimination, overwork and low wages (Agence France Press, 2008). Based on data collected as part of the 2002 China Income Project Survey (CIPS), the mean happiness levels of rural-urban migrants are lower than both those who live in the countryside and those with an urban *hukou* (Knight & Gunatilaka, 2008, 2010). This poses the question, why do Chinese rural-migrants continue to flock to the cities when their living and working conditions are so harsh? Our answer lies with expectations about future income. Economists have traditionally rejected the view that expectations have any direct effect on utility. However, recently, there has been recognition that inter-temporal spillovers of utility are possible (see eg. Frederick *et al.*, 2002). This has led to recognition that expectations are consumption goods and, as such, have a discernable effect on well-being (Senik, 2008). Using data from the China Urban Labour Survey, administered across 12 cities in 2005, we find that expectations of an increase in future income are an important predictor of the happiness of China's rural-urban migrants. In other words, it is optimistic expectations about the future that is keeping China's rural-urban migrants going. This finding has important implications for economic growth and socio-economic stability in China. Maintaining socio-economic stability, particularly among rural-urban migrants, is important to maintain China's high rate of economic growth. And positive expectations about future income are important for maintaining socio-economic stability during times of economic transition.

Our data were collected in 2005 at a time when there was a shortage of migrant labour in China. The nexus between future expectations, economic growth and social stability has been reinforced in the period since the data were collected. In the aftermath of the Global Financial

Crisis it is estimated that 20 million rural-urban migrant workers lost their jobs sparking widespread fears of social instability (MacCartney, 2009). There was a sharp increase in the number of ‘mass incidents’ in 2008 and 2009, particularly along the Chinese coastal seaboard (LaFraniere, 2009). In early 2009, Zhou Yongkang, the Chinese Communist Party’s Chief of Security was reported as stating that maintaining economic growth was essential to ensure social stability. He said: “The economy is connected to people’s livelihood, affects every family and is the basis of social stability and harmony (MacCartney, 2009). Hence, knowledge of how expectations affect happiness has implications for growth and stability.

2. Existing Literature

There is a large economics literature on the determinants of happiness (see Frey & Stutzer, 2002; Clark *et al.*, 2008; Dolan *et al.*, 2008 for reviews). This interest has emerged in the wake of several decades of research by psychologists on the topic (see Diener *et al.*, 1999). A subset of this literature has examined the determinants of happiness in China. One set of studies has focused on determinants of the happiness of specific demographic groups, such as adolescents or the elderly (Brown & Tierney, 2009; Chen, 2003; Edwards *et al.*, 2005); clinical samples (Yan & Sellick, 2004) or specific occupations (e.g. Law *et al.*, 2008; Nielsen *et al.*, 2010a). Other studies have considered happiness in rural China (Knight *et al.*, 2009; Knight & Gunatilaka 2009a, 2009b) or urban China (Appleton & Song, 2008; Cheung & Leung, 2004; Smyth & Qian, 2008; Smyth *et al.*, 2008; Smyth *et al.*, 2010).

The literature on the determinants of happiness among rural-urban migrants in China is limited. Knight & Gunatilaka (2008, 2010) seek to explain why the mean happiness score of rural-urban migrants is lower than those who remain in the countryside and those who have an urban household registration using 2002 CIPS data. Their explanation is that migrants’

aspirations rise in the cities and that their expectations exceed their achievements. Nielsen *et al.*, (2010b) employ the personal well-being index (PWI) to examine the happiness of a sample of Chinese off-farm migrants in Fujian province. The PWI is a multi-item indicator of subjective well-being that examines participants' level of life satisfaction along seven domains: standard of living, personal health, achievement in life, personal relationships, personal safety, community-connectedness and future security. While Chinese rural-urban migrants lead hard lives, Nielsen *et al.*, (2010b) found that the PWI was within the normative range predicted for Chinese societies by the 'Theory of Subjective Wellbeing Homeostasis' developed in the psychology literature (Cummins, 1998; Cummins & Nistico, 2002; Cummins *et al.*, 2002). This theory proposes that, under normal circumstances, subjective well-being is maintained within a limited positive range by neuro-psychological mechanisms analogous to the homeostatic management of body temperature. Nielsen *et al.*, (2010b) proffer that a likely explanation for their finding rests with the circular nature of migration in China. When China's rural-urban migrants find it too difficult to cope in the cities, most have the fallback position that they can return to their homes in the countryside. This option provides an external buffer to minimize the inherent challenges of life which would otherwise impinge on the life satisfaction of China's rural-urban migrants.

There is a sizable literature examining the role of expectations in predicting macroeconomic outcomes such as economic growth and inflation (see eg. Lorenzoni, 2009). However, the previous literature examining the effect of economic expectations on happiness is scant. One exception is Senik (2008) who uses the Russian Longitudinal Monitoring Survey to examine the relationship between expectations of future income and happiness over the period 1994 to 2004. She finds that expectations have a strong positive effect on happiness.

3. Data

The data we use in this study comes from the China Urban Labour Survey, which was administered by the Institute of Population and Labour Economics at the Chinese Academy of Social Sciences in conjunction with provincial and municipal offices of the National Bureau of Statistics of China. The survey was administered in five provincial capital cities (Shanghai, Wuhan, Shenyang, Fuzhou, Xi'an) and seven municipal cities (Wuxi, Yichang, Benxi, Zhuhai, Shenzhen, Baoji and Daqing) in May 2005. Using a proportional population sampling approach, 500 migrant households were investigated in each of the five provincial cities and 400 migrant households were investigated in each of the seven municipal cities. In each household, all family members who were aged 16 or above and who were in paid employment were interviewed individually. In total about 6200 rural-urban migrants participated in the survey; of which, just over one half were males. The number falls to approximately 2100 individuals, for which we have complete information on happiness, expectations as to future income and the other usual predictors of happiness.

Respondents reported their happiness level on a four point scale. The four categories of happiness were 'not at all happy', 'not happy', 'happy' and 'very happy'. Table 1 shows the percentage of respondents in each of the categories of happiness for the full sample. Overall, just under two-thirds (63 per cent) of respondents reported being either 'happy' or 'very happy'. The mean happiness level for the full sample was 2.64, which is slightly higher than the mean happiness score of 2.37 for rural-urban migrants from the 2002 CIPS (Knight & Gunatilaka 2008, 2010). Table 1 also shows happiness levels of respondents according to income categories. There appears to be a positive correlation between happiness and own income. Among low income earners (0-600 RMB/month) 58 per cent of respondents reported

being either 'happy' or 'very happy', while among high income earners (1000 plus RMB/month) 70 per cent of respondents reported being either 'happy' or 'very happy'

Table 2 provides descriptive statistics for the full sample including expectations as to income during the five year period following the survey. In total, 51.44 per cent of respondents were male, 88.5 per cent were married, 87.4 per cent reported being in good health, 64.5 per cent had one or more child studying in the city, 5-6 per cent of respondents had joined medical insurance and pension insurance schemes and 2 per cent reported being members of the Communist Party. The rural-urban migrants in the sample were not newcomers to the city. The average urban stay of respondents was 7.2 years, which is similar to the average urban stay of 7.5 years in the 2002 CIPS (Knight & Gunatilaka 2008, 2010). Respondents spent long hours at work. The average working week for respondents was 69 hours and the monthly wage rate was 1033 RMB per month. Respondents were asked about their expected future income during the five years following the survey. Overall, 18.4 per cent expected a big increase in income over the next five years; 67.4 per cent expected a small increase in income over the next five years, 10.9 per cent expected no change in income over the next five years and 3.3 per cent expected a decrease in income over the next five years. Chinese rural-urban migrants seem to have high income growth expectations compared with findings for income expectations in other countries. For example, Das and Soest (1999) found that for the Netherlands during a recession 11 per cent of respondents thought income would increase over the next 12 months, while in an economic boom this figure increased to one-third of respondents. When considering future expectations as to income, it is worth remembering that the data analysed in this study were collected in 2005 when there was an acute shortage of migrant workers, which had seen rural-urban migrant wages increase sharply in the preceding 12 months. Hence, it is reasonable to conclude that respondents might have

expected further sharp increases in income over the next five years. In this sense, the rural-urban migrants surveyed could not have foreseen the Global Financial Crisis in 2008.

4. Empirical Specification and Methodology

We employ a specification in which we express *HAPPINESS* as a function of the respondents' expectations of future income (*EXP*), personal characteristics of the respondent (*P*) and human capital characteristics (*HC*) of the respondent. This relationship can be expressed as follows where ε is the error term, reflecting unobserved random factors.

$$HAPPINESS = f(EXP, P, HC, \varepsilon) \quad (1)$$

To measure happiness we use respondents' answers to the question: 'How happy are you these days?' Respondents can answer on a scale of 1 to 4 where 1 denotes 'not at all happy' and 4 denotes 'very happy'. To measure expectations of future income we use respondents' answers to the question: 'How do you expect your income to change over the next five years?' Respondents can answer on a four-point scale ranging from 1 ('Expect a decrease in income over the next five years') to 4 ('Expect a big increase in income over the next five years'). To measure the personal characteristics of the respondent we use variables denoting duration in the city, gender, marital status, membership of the Chinese Communist Party, living area, number of relatives in the city, number of individuals in the city from the respondent's hometown, having a child studying in the city and health status. To measure the human capital characteristics of the respondent we use variables denoting own income, reference group income, education, experience, hours worked, job satisfaction and membership of medical and pension social insurance schemes. We also control for the respondent's occupation, employer, industry and city in which he or she works and lives.

In a methodological paper, Ferrer-i-Carbonnel and Fritjers (2004) examine whether it makes any difference to the results if happiness levels are treated as cardinal (as psychologists generally do) or ordinal (as economists generally do). Their conclusion was that the results are not sensitive to the choice of ordinary least squares (OLS) or latent variable methods. In the results reported below we present estimates using both ordered probit and OLS models. We find that the results of the OLS and ordered probit estimates are quantitatively similar. Hence, because the OLS results are easier to interpret, we focus on the OLS estimates.

Ferrer-i-Carbonnel and Fritjers (2004) also find that the results for the determinants of happiness are sensitive to standardization for individual fixed effects in datasets which lack variables controlling for personality. Standardization tends to reduce the size of the positive coefficients on income, health and marital status because having a personality, which is conducive to happiness, is also associated with having a higher income, better health or being married. As we have cross-sectional data, this finding implies that we should control for personality and attempt to instrument for the problematic variables, in particular income.

In the results below we consider alternative instruments for income, but we do not control for personality. We follow this approach not because we do not think it is not important to control for personality, but rather that we do not have any psychometrically valid measures of personality in the dataset. Economists have typically controlled for personality traits by including variables to measure attitudes on social issues (Smyth *et al.*, 2008), mood (Knight *et al.*, 2009) or mental health indicators (Ferrer-i-Carbonell & Gowdy, 2007). However, none of these variables accurately depict personality traits as they are conceptualized in the psychology literature and, in our view, controlling for personality using proxies such as these does not add value over not controlling for personality at all. To adequately take account of personality, one needs to control for stable aspects of the personality, such as the locus of

control and dispositional optimism. Locus of control, defined by Rotter (1966) as a person's perception of their control over event outcomes, has been found to impact on personal well-being in a range of cultural contexts (see eg., Garcia *et al.*, 2002; Kulshrestha & Sen, 2006; Spector *et al.*, 2001). Dispositional optimism, defined by Scheier and Carver (1985) as the propensity to generally expect favourable outcomes over unfavourable ones, has also been demonstrated to co-vary with perceived well-being (see eg., Isaacowitz, 2004). To adequately control for personality, and take the concerns of Ferrer-i-Carbonnel and Fritjers (2004) seriously, one needs to either design a special survey and include psychometrically valid measures of personality or have such questions added to a general large-scale survey. They cannot be properly addressed through utilizing very rough proxies from a large-scale survey such as the present one or CIPS as economists have attempted to do in the past.

5. Results

The ordered probit results are reported in Table 3 and the OLS results are reported in Table 4. In each case, in Model 1, we do not control for reference group income. In Model 2, we treat the log of average rural income in the province of origin as reference group income. In Model 3 we treat the log of average urban income in the city of current residence as reference group income. In Model 4 we include average rural income in the province of origin and average urban income in the city of current residence in the same specification. The ordered probit and OLS results are the same in terms of the sign and statistical significance of the variables. Hence, below we focus on the OLS results as they are easier to interpret.

In Table 5 we consider the validity of alternative instrumental variables (IVs) for income. Specifically, we consider mother's education, father's education and spouse's education as instruments for own income. Parental or spousal education is commonly used to control for unobserved ability (Card, 1995; Ashenfelter & Zimmerman, 1997; Chen & Hamori, 2009),

and have been used as IVs for income in studies of the determinants of happiness (Knight *et al.*, 2009). The first component of IV validity is relevance. Results from an F-test indicate that each instrument leads to a significant improvement in the first stage model determining income at the 10 per cent level or better. The second component of IV validity is that the instruments are exogenous. Since our IV model is over-identified with the number of exogenous instruments exceeding the number of endogenous variables, we compute the Sargan chi-square statistic to test instrument exogeneity. The results, reported in Table 5, suggest that the instruments are endogenous and, as such, are not valid instruments.

The results reported in Table 5 utilize all three instruments, but we also experimented with other combinations using two of these variables and in each case the Sargan chi square statistic was significant. As noted by Bound *et al.* (1993, 1995), when the IVs are not valid, “the cure can be worse than the disease”. The problem of invalid instruments is discussed in detail by Hahn and Hausman (2003) who note that IV estimates may be even more biased than OLS estimates when instruments are correlated with the error term. Hence, in the absence of alternative potentially valid IVs in our dataset, we stick with reporting the OLS estimates, while recognising that the coefficient on income may be upward biased. Having said this, it is to be noted that Knight *et al.*, (2009) found no significant difference between the OLS and IV estimates of the determinants of happiness in rural China and Knight and Gunatilaka (2010) found that apart from the coefficient on income itself, the OLS and IV estimates of the determinants of happiness among rural-urban migrants were almost identical.

We begin by discussing the variables other than future expectations. The log of monthly wage is positive and significant in each model in Table 4, suggesting that there is a positive correlation between own income and happiness, consistent with the existing literature (Clark *et al.*, 2008). The effect of own income on happiness, though, is weak. Doubling average

monthly income increases happiness scores by about 0.05 points. Models 2 and 3 follow the approach adopted in Luttmer (2005) and Graham and Felton (2006), using alternative reference groups. The expected relationship between reference group income and happiness is not clear. Most studies have found that happiness falls as reference group income rises ('jealousy effect') (see eg. Graham & Felton, 2006). However, some studies have found that happiness increases as reference group increases ('signalling effect') (see eg. Senik, 2004). The latter is consistent with the Hirschman (1973) tunnelling effect – it might be reassuring to know others are doing well because you might be in their shoes in the near future. The coefficient on destination income is negative and significant, while the coefficient on origin income is not statistically different from zero. This finding suggests that following migration the reference group changes from others in the countryside to those in the city and that the fall in perceived status generates a jealousy effect or feeling of relative deprivation.

The negative coefficient on average urban income is more than double the positive coefficient on own income. Appleton and Song (2008) and Smyth and Qian (2008) found that happiness decreases as reference group increases for a sample of Chinese urban residents, while Knight *et al.* (2009) and Knight and Gunatilaka (2010) reached the same conclusion for rural Chinese and Chinese rural-urban migrants respectively. If rural-urban migrants compare their income with their urban cousins – ie. those with an urban *hukou* - there is likely to be a signalling or tunnelling effect only if rural-urban migrants can reasonably see themselves in the shoes of those with an urban *hukou* in the near future. Given widespread occupational and wage discrimination against migrants, though, this is unlikely; hence, finding evidence of a jealousy effect makes sense.

The length of time spent in the city and its square are both statistically significant – the former with a positive coefficient and the latter with a negative coefficient. The coefficients

imply that happiness peaks after 23-24 years in the city and then declines. The peak of 23-24 years is somewhat later than Knight and Gunatilaka's (2010) finding that the happiness of rural-urban migrants peak after 14 years. This result suggests that *ceteris paribus* migrants' happiness increases after several years of living in the city. Having relatives in the city who can be turned to seek help has a significant positive effect on happiness, although having others in the city from the same home locale has no significant positive effect on happiness. Having a child studying in the city has a significant negative effect on happiness. Knight and Gunatilaka (2010) also found that having a child living in the city had a significant negative effect on the happiness of rural-urban migrants. There is some evidence that having children increases happiness (Dolan *et al.*, 2008) and Appleton and Song (2008) find that urban Chinese with children are happier. However, if circumstances surrounding the child are negative, such as the child is sick or needs above average care, children have been shown to have a negative effect on well-being (Dolan *et al.*, 2008). One explanation for the finding here is that due to their relatively low income it's a big economic burden for rural-urban migrants to support their children studying in Chinese cities. Moreover, many migrant children face myriad of fees, which could represent a challenge to parental well-being.

We find that participating in medical social insurance increases happiness by 0.15 points, while participating in pension social insurance lowers happiness by 0.11 points. The result for participation in medical social insurance is consistent with Appleton and Song's (2008) finding for urban Chinese and is likely to reflect anxiety over the risk of illness. In addition to the direct effect of illness, ill health may also generate economic hardship by lowering earnings and requiring large outlays for medical treatment (Appleton & Song, 2008). The results for pension social insurance could reflect several problems with the design of pension insurance schemes in China and their perceived appropriateness for rural-urban migrants (see Yang & Guo, 2006; Li, 2008). First, pension schemes work best with long stable

contributions, but the floating population are highly mobile. Second, neither migrant workers nor employers are keen to contribute. According to one survey of seven provinces and one large city in 2005, 80 per cent of enterprises and 83.2 per cent of migrant workers were not willing to contribute to pension insurance (Xiao & Liu, 2005). Third, there are sizable gaps between regional contribution rates and entitlements and the pension pooling schemes are highly localized, making it difficult for migrant workers to transfer their entitlements from one locale to another. Fourth, information sharing among local authorities is poorly coordinated, which makes it difficult for local authorities to keep good records of the contribution history of migrants as they move between locales. Fifth, there is a perception among rural-urban migrants, who tend to be relatively young, that old age is well into the future and that when it does come time to retire they can rely on children or return home. Li (2008) interviewed several rural-urban migrants in Tianjin about their perceptions of pension insurance. She concluded (at p. 107) that rural-urban migrants “tend to laugh at the idea of worrying about old age. They felt that retirement had nothing to do with them”.

Having good health (as opposed to having health that is reported as being so-so or poor) increases happiness 0.08 to 0.09 points. Our findings for job satisfaction support the spillover hypothesis which states that there is a positive relationship between job satisfaction and personal well-being because satisfaction (or dissatisfaction) at work spills over into life more broadly (Spector, 1997). An increase in job satisfaction by one point increases happiness by 0.61 points. This finding is not surprising given the long hours migrants spend at work. The other variables (schooling, experience, gender, marital status, membership of the Communist Party and hours spent at work) were statistically insignificant determinants of happiness.

We now turn to expectations of future income. Relative to those who expect no change in future income, those who expect a big increase in income over the next five years report 0.19

points higher happiness levels, while those who expect a small increase in income over the next five years report 0.10 points higher happiness levels. For those who expect a big increase in income over the next five years, this translates to an increase in average monthly income of 380 per cent and for those who expect a small increase in income over the next five years this translates to an increase in average monthly income of 200 per cent to obtain an equivalent increase in happiness compared with those who expect no change in income. This suggests that the effect of expectations on happiness is well in excess of the possible effect of higher income. Meng and Bai (2007) found that, on average, real monthly total earnings of rural-urban migrants in seven factories in Guangdong increased 3.3 per cent per annum between 2000 and 2004. It is possible that since 2004, migrants' wages have been growing at a faster pace; however, even in the period of shortage of migrant labour in China in 2004 and 2005, growth rates in average monthly earnings such as those needed to generate an increase in happiness equivalent to having optimistic expectations were not realistic.

6. Conclusion

China's rural urban migrants have been the engine room driving China's high rate of growth. Most commentators recognise that rural-urban migrants do not receive their fair share of the economic pie. Previous research has discussed the fact that happiness levels among rural-urban migrants are lower than both those in the countryside and those with an urban *hukou* (Knight & Gunatilaka, 2008, 2010). Hence, a natural question to ask is: What is it that keeps China's rural migrants going? In this paper we have sought to answer this question through examining the determinants of the happiness of rural-urban migrants. We find that expectations as to future income is an important determinant of happiness. This suggests that many migrants expect their financial position and, by extension, their lives more generally to get better in the future and that this is having a positive effect on their current levels of

happiness, which far outstrips any realistic increase in own income. While this approach contrasts with the traditional economic approach which has assumed that expectations have no direct effect on utility, it is consistent with recent studies in economics, and certainly many studies in psychology, which treat expectations as a consumption good (Senik, 2008).

To conclude that expectations about future income has a positive effect on the current happiness of rural-urban migrants does not make any judgments about the pure welfare effect of expectations, for which it would be necessary to have panel data. As Senik (2008) notes, aspirations, adaptation and expectations are intertwined. Hence, my current positive expectations about the future may make me happier today, but create higher aspirations that may make it more difficult for me to satisfy tomorrow. There is evidence that this is the case among rural-urban migrants in our sample. Having migrated to the city, our results suggest that rural-urban migrants benchmark themselves against urbanites, rather than those in the countryside and that the fall in perceived status generates relative deprivation. However, irrespective of whether future expectations are ultimately realized or become subsumed by higher aspirations, it remains that they are a very important predictor of happiness.

This result is consistent with the conjecture that the Chinese government is trading on the expectations of rural-urban migrants to maintain a relatively low-wage, placid workforce who are willing to work under conditions than urbanites would generally not tolerate. This result suggests that if the Chinese government wants to keep its migrant workforce happy, it needs to ensure that the majority of migrants have positive expectations about the future. In this respect, it is important to note that future expectations about one's economic future depend on one's economic situation in the recent past (Senik, 2008). It is not surprising that rural-urban migrants in our sample had mainly positive expectations about future income because

the survey was collected at a time of strong labour demand. More challenging to the Chinese government is to ensure rural-urban migrants continue to have positive expectations in times of economic down turn, such as following the Global Financial Crisis when there has been a surplus of migrant labour. While it is difficult to rigorously show that expectations and well-being are linked to socio-economic stability, there is much casual evidence that this is the case with an increase in labour unrest among rural-urban migrants since the Global Financial Crisis. And through the notion of a 'harmonious society' the Chinese leadership team of Hu Jintao and Wen Jiabao have sought to promote the idea that socioeconomic and political stability are essential for China to maintain its high rate of economic growth.

The present study has some limitations. One limitation is that we do not control for personality traits. While we have argued that the proxies employed to control for personality in the existing economics literature do not adequately control for personality, future studies could employ psychometrically valid measures of personality to control for personality traits. Another limitation is that we do not have a valid instrument for income; hence, the OLS estimates of income may be upward biased. A third limitation is that similar to existing Chinese studies of the determinants of happiness we lack panel data. Using panel data would not only address the issue of unobserved personality traits, but with the appropriate questions on expectations would allow for disentanglement of aspirations, adaption and expectations and, as such, permit exploration of the pure welfare effect of expectations (see Senik, 2008).

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Table 1 Percentage of respondents by level of overall happiness and by wage groups

	Overall	Monthly wage groups (RMB/month)		
		0-600	601-1000	1000+
Very happy	3.81	2.43	3.92	4.81
Happy	59.02	55.12	59.87	65.24
Unhappy	34.57	38.92	33.91	28.52
Not at all happy	2.60	3.52	2.30	1.42
Mean happiness	2.64	2.56	2.65	2.73
Standard deviation of happiness	0.60	0.60	0.59	0.57
Observation number	6223	1957	1941	1484

Table 2 Descriptive Statistics for the Sample

	Mean or proportion
Monthly Wage (RMB/month)	1033.55
Years of Schooling (years)	8.22
Experience (years)	19.88
Duration in the City (years)	7.20
Male (%)	51.44
Married (%)	88.50
Member of Communist Party (%)	2.04
Time spent at work (Hours/week)	69.22
Job Satisfaction Level (very unsatisfied=1, unsatisfied=2, satisfied=3, very satisfied=4)	2.65
House Area per Head (m ²)	13.72
Number of People from Home Locale in the City	12.98
Number of Relatives in the City	2.98
In Good Health (%)	87.38
Expect Big Increase in Income over next 5 Years (%)	18.39
Expect Small Increase in Income over next 5 Years (%)	67.40
Expect Decrease in Income over next 5 Years (%)	3.33
Joined Medical Social Insurance (%)	5.23
Joined Pension Social Insurance (%)	5.45
Have a Child Studying in the City (%)	64.53
Average Rural Income in Province of Origin (RMB/month)	295.27
Average Urban Income in the City of Current Residence (RMB/month)	1758.23
Occupation (%)	
Professional and Technical Personnel	6.61
Production Transport and Related Workers	2.86
Business Service Personnel	72.79
Equipment Operators and Related Workers	17.74

Type of Employer (%)

Government/Institutional Units	3.33
State/Collective Owned	5.25
Private Enterprise	13.70
Foreign/Taiwan/HK JV	2.05
Small Business	73.13
Other	2.53

Industry (%)

Manufacturing Industry	8.21
Construction Industry	5.50
Transportation/Communication	3.20
Wholesale/Retail/Catering	44.70
Social Service	24.20
Government/Institution	0.49
Others	13.71

City (%)

Shanghai	9.31
Wuhan	11.01
Shenyang	8.66
Fuzhou	11.55
Xi'an	10.82
Daqing	6.06
Wuxi	8.03
Yichang	6.93
Benxi	8.28
Zhuhai	7.76
Baoji	5.09
Shenzhen	6.47

Table 3 Determinants of Happiness (Ordered Probit Regression)

	Model 1	Model 2	Model 3	Model 4
Log Monthly Wage	0.1529*** (0.0573)	0.1568*** (0.0576)	0.1529*** (0.0573)	0.1568*** (0.0576)
Years of Schooling (years)	-0.0085 (0.0137)	-0.0088 (0.0137)	-0.0085 (0.0137)	-0.0088 (0.0137)
Experience (years)	-0.0037 (0.0060)	-0.0038 (0.0060)	-0.0037 (0.0060)	-0.0038 (0.0060)
Duration in the City (years)	0.0479*** (0.0184)	0.0470*** (0.0184)	0.0479*** (0.0184)	0.0470*** (0.0184)
Duration in the City Squared	-0.0020** (0.0009)	-0.0019** (0.0009)	-0.0020** (0.0009)	-0.0019** (0.0009)
Male	-0.0428 (0.0633)	-0.0442 (0.0634)	-0.0428 (0.0633)	-0.0442 (0.0634)
Married	0.6098 (0.8947)	0.6088 (0.8957)	0.6098 (0.8947)	0.6088 (0.8957)
Member of Communist Party	0.3837 (0.2776)	0.3829 (0.2775)	0.3837 (0.2776)	0.3829 (0.2775)
Time Spent at Work (Hours/Week)	-0.0002 (0.0016)	-0.0002 (0.0016)	-0.0002 (0.0016)	-0.0002 (0.0016)
Job Satisfaction Level (1-4)	1.6048*** (0.0604)	1.6072*** (0.0605)	1.6048*** (0.0604)	1.6072*** (0.0605)
House Area per Head (m ²)	0.0038 (0.0028)	0.0038 (0.0028)	0.0038 (0.0028)	0.0038 (0.0028)
Number of People from Home Locale in the City	-0.0015 (0.0010)	-0.0015 (0.0010)	-0.0015 (0.0010)	-0.0015 (0.0010)
Number of Relatives in the City	0.0134**	0.0134**	0.0134**	0.0134**

	(0.0060)	(0.0060)	(0.0060)	(0.0060)
In Good Health	0.2583***	0.2592***	0.2583***	0.2592***
	(0.0924)	(0.0925)	(0.0924)	(0.0925)
Expect Big Increase in Income over next 5 Years	0.6524***	0.6530***	0.6524***	0.6530***
	(0.1210)	(0.1212)	(0.1210)	(0.1212)
Expect Small Increase in Income over next 5 Years	0.2800***	0.2783***	0.2800***	0.2783***
	(0.0899)	(0.0899)	(0.0899)	(0.0899)
Expect Decrease in Income over next 5 Years	0.1332	0.1315	0.1332	0.1315
	(0.1611)	(0.1612)	(0.1611)	(0.1612)
Joined Medical Social Insurance	0.4845**	0.4850**	0.4845**	0.4850**
	(0.1982)	(0.1997)	(0.1982)	(0.1997)
Joined Pension Social Insurance	-0.3796**	-0.3802**	-0.3796**	-0.3802**
	(0.1717)	(0.1724)	(0.1717)	(0.1724)
Have Child Studying in the City	-0.3435***	-0.3442***	-0.3435***	-0.3442***
	(0.0657)	(0.0660)	(0.0657)	(0.0660)
Log of Average Rural Monthly Income in Province of Origin	-	-0.0256	-	-0.0256
		(0.1150)		(0.1150)
Log of Average Urban Monthly Income in the City of Current Residence	-	-	-0.3880***	-0.3948***
			(0.1473)	(0.1496)
Occupation	Controlled	Controlled	Controlled	Controlled
Type of Employer	Controlled	Controlled	Controlled	Controlled
Industry	Controlled	Controlled	Controlled	Controlled
City	Controlled	Controlled	Controlled	Controlled
Number of Observations	2133	2128	2133	2128
Pseudo R2	0.3307	0.3305	0.3307	0.3305

Notes: Figures in parenthesis are standard errors. ***(**)(*) denotes statistical significance at 1%(5%)(10%).

Table 4 Determinants of Happiness (OLS Regression)

	Model 1	Model 2	Model 3	Model 4
Log Monthly Wage	0.0511*** (0.0185)	0.0523*** (0.0187)	0.0511*** (0.0185)	0.0523*** (0.0187)
Years of Schooling (years)	-0.0022 (0.0044)	-0.0024 (0.0045)	-0.0022 (0.0044)	-0.0024 (0.0045)
Experience (years)	-0.0010 (0.0019)	-0.0011 (0.0020)	-0.0010 (0.0019)	-0.0011 (0.0020)
Duration in the City (years)	0.0146** (0.0060)	0.0142** (0.0060)	0.0146** (0.0060)	0.0142** (0.0060)
Duration in the City Squared	-0.0006** (0.0003)	-0.0006** (0.0003)	-0.0006** (0.0003)	-0.0006** (0.0003)
Male	-0.0135 (0.0206)	-0.0142 (0.0207)	-0.0135 (0.0206)	-0.0142 (0.0207)
Married	0.2223 (0.3146)	0.2255 (0.3150)	0.2223 (0.3146)	0.2255 (0.3150)
Member of Communist Party	0.1107 (0.0869)	0.1106 (0.0870)	0.1107 (0.0869)	0.1106 (0.0870)
Time Spent at Work (Hours/Week)	-0.0001 (0.0005)	-0.0001 (0.0005)	-0.0001 (0.0005)	-0.0001 (0.0005)
Job Satisfaction Level (1-4)	0.6093*** (0.0182)	0.6106*** (0.0183)	0.6093*** (0.0182)	0.6106*** (0.0183)
House Area per Head (m ²)	0.0010 (0.0009)	0.0010 (0.0009)	0.0010 (0.0009)	0.0010 (0.0009)
Number of People from Home Locale in the City	-0.0005 (0.0003)	-0.0005 (0.0003)	-0.0005 (0.0003)	-0.0005 (0.0003)
Number of Relatives in the City	0.0040** (0.0019)	0.0040** (0.0019)	0.0040** (0.0019)	0.0040** (0.0019)
In Good Health	0.0899***	0.0901***	0.0899***	0.0901***

	(0.0308)	(0.0309)	(0.0308)	(0.0309)
Expect Big Increase in Income over next 5 Years	0.1851***	0.1865***	0.1851***	0.1865***
	(0.0389)	(0.0390)	(0.0389)	(0.0390)
Expect Small Increase in Income over next 5 Years	0.0990***	0.0985***	0.0990***	0.0985***
	(0.0301)	(0.0301)	(0.0301)	(0.0301)
Expect Decrease in Income over next 5 Years	0.0393	0.0392	0.0393	0.0392
	(0.0559)	(0.0560)	(0.0559)	(0.0560)
Joined Medical Social Insurance	0.1474**	0.1475**	0.1474**	0.1475**
	(0.0634)	(0.0642)	(0.0634)	(0.0642)
Joined Pension Social Insurance	-0.1123**	-0.1131**	-0.1123**	-0.1131**
	(0.0554)	(0.0558)	(0.0554)	(0.0558)
Have Child Studying in the City	-0.1081***	-0.1090***	-0.1081***	-0.1090***
	(0.0210)	(0.0211)	(0.0210)	(0.0211)
Log of Average Rural Monthly Income in Province of Origin	-	0.0004	-	0.0004
		(0.0375)		(0.0375)
Log of Average Urban Monthly Income in the City of Current Residence	-	-	-0.1270***	-0.1324***
			(0.0470)	(0.0479)
Occupation	Controlled	Controlled	Controlled	Controlled
Type of Employer	Controlled	Controlled	Controlled	Controlled
Industry	Controlled	Controlled	Controlled	Controlled
City	Controlled	Controlled	Controlled	Controlled
Constant	0.3482	0.3317	1.3593***	1.3852***
	(0.3570)	(0.4134)	(0.4816)	(0.5032)
Number of Observations	2133	2128	2133	2128
F($\beta=0$)	39.44***	38.50***	39.44***	38.50***
Adj-R ²	0.4480	0.4478	0.4480	0.4478

Notes: Figures in parenthesis are standard errors. ***(**)(*) denotes statistical significance at 1%(5%)(10%).

Table 5 Validity of Instrumental Variables (OLS)

	Model 1	Model 2	Model 3	Model 4
	Mother's Education Years	Mother's Education Years	Mother's Education Years	Mother's Education Years
Instruments	Father's Education Years	Father's Education Years	Father's Education Years	Father's Education Years
	Spouse's Education Years	Spouse's Education Years	Spouse's Education Years	Spouse's Education Years
Significance of Instruments in First Stage Equation				
Mother's Education Years	*	*	*	*
Father's Education Years				
Spouse's Education Years				
F-test of Excluding Instruments (P-value)	0.0664	0.1000	0.0664	0.1000
Sargan Test for Over Identification of All IVs (P-value)	0.0252	0.0223	0.0252	0.0223

Notes: * denotes statistical significance at 10%.