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Migration and Remittances: Evidence from a Poor Province in China*

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Abstract

This paper examines patterns of remittances among migrants from Guizhou province of China. Our research is motivated by three lines of theoretical arguments, namely the new economics of migration, a translocal perspective linking remittances and development, and the culture of remittances. Taking individual, household, and village-level characteristics into account, we estimated multilevel logistic models of the decision to remit and multilevel models of the amount of remittances. Our results show that migrant remittance behaviour is responsive to family needs as well as household economic position in the village.. Migrants who come from entrepreneurial households are more likely to remit a large amount than other types of households. We find some evidence of “culture of remittances” in these villages. Consistent with our expectations, migrants who are from villages with higher amount of average remittances are likely to remit a larger amount than otherwise.

Keywords

migration; remittances; culture of remittances; entrepreneurs; poverty

Introduction

Since the early 1980s, a new demographic reality in China has attracted increasing attention in academic journals, newspapers, and magazines. The “floating population” (*liudong renkou*), refers to the massive number of migrants without local household registration (*hukou*) status. Estimates from national survey/census data suggest that the cross-county floating population was below 10 million in 1982 and has risen to 80 million by 2000 (Liang & Ma, 2004). The size of this population was about 144 million in 2000, if the intra-county

floating population was also included, clearly the largest number of migrants in human history (NBS, 2002).¹ With the rise of the migrant population in China, a large body of social science literature is also quickly emerging. So far, researchers from disciplines of sociology, demography, economics, geography, and anthropology have studied many aspects of this migration process: migration and earnings (Zhao, 1999); major patterns and characteristics of the floating population (Liang, 2001; Liang & Ma, 2004; Poston & Mao, 1998), gender and migration (Gaetano & Jacka, 2004; Fan, 2000; Huang, 2001; Roberts, Connelly, Xie, & Zheng, 2004; Wang & Shen, 2003); the role of *hukou* in migration process (Chan & Zhang, 1999; Wu & Treiman, 2004; Zhu, 2007); migration and health consequences (Smith & Yang, 2005; Yang, 2004); comparative studies of migration in China with undocumented Mexican migrants to the United States (Roberts, 1997), and migration and educational consequences for children (Liang & Chen, 2007; Ye, Murray, & Wang, 2005).

To date, these studies have significantly improved our understanding of the causes and consequences of China's massive migration population. One common characteristic of these earlier studies is that they focus primarily on migrants themselves and how they fare in places of destination and how migrants contributed to the transformation of destination communities, particularly urban China. Given the fact that migration involves both places of destination and origin, it is equally important to examine how migration has changed migrant-sending communities, i.e. rural communities in China. With a few exceptions (De Brauw & Giles, 2008; Du, Park, & Wang, 2005; Ma, 2001; Murphy, 2002; and Taylor, Rozelle, & De Brauw, 2003), social science research of how China's massive migrant flow has affected rural migrant-sending communities is rather limited. This lack of attention from the scholarly community is surprising in light of China's large rural population. According to the result from the 2005 China 1% Population Sample Survey, 57% of the Chinese population (about 741 million people) still live in the countryside. How the lives of 741 million rural Chinese residents are affected by migration and return migration is of enormous importance for the future of Chinese society.

In this paper, we address one aspect of this research agenda by focusing on the flow of remittances from migrants to their rural households. Using data from the 2003 China Rural Household Survey for one of the poorer provinces of Guizhou, we consider a variety of hypotheses based on a careful review of relevant literature. At the aggregate level, we find that remittances contribute significantly to household income in rural China. Patterns of remittances are also responsive to household needs and economic circumstances. We also advance a thesis of "the culture of remittances," which is to say that there are village-level norms and expectations that dictate patterns of remittances. Our data from China's rural Guizhou province support this argument. We conclude the paper by linking issues of migration and development in rural China.

¹The number rose to 147 million in 2005 (NBS, 2007).

Background and Hypotheses

With the rise of migration in China, the amount of remittances has been rising as well. Earlier report from Sichuan province—one of the provinces that has sent the largest number of migrants, suggests that remittances in 1997 were as high as 20 billion yuan (US\$1 = roughly 8 yuan in 2006) (Chen, 1997). This amounts to the total fiscal revenue of Sichuan in that year. Some Chinese economists' estimates suggest that on average migrants remit about 2000 yuan per year (Cai & Bai, 2006). If we assume the size of inter-county migration of 80 million, then the remittances per year can be as high as 160 billion yuan. The infusion of such huge amount of money to migrant-sending villages has tremendous potential for improving the standard of living of rural households as well for economic development.

Our analysis of remittance behaviour is guided by three lines of recent studies on new economics of migration, linking remittances with entrepreneurship activities in rural areas, and the culture of remittances (Durand, Kandel, Parrado, & Massey, 1996; Rozelle, Taylor, DeBrauw, 1999; Sana & Massey, 2005; Stark, 1991). Below we discuss each of them.

(1) The New Economics of Migration

The most recent development in the economics of migration is the new economics of labour migration (NELM) pioneered by Oded Stark (1991) and followed by others such as Edward Taylor et al. (2003). There are two fundamental insights from NELM. One is the idea that migration occurs not as a way to maximize the individual migrant's well-being but as a family strategy to overcome market failure and to minimize risks/uncertainties. When a family sends a migrant to work in a city, the household makes an investment that will receive a return when remittances are sent back or when the migrants return home with savings (Sana & Massey, 2005). Second, this arrangement is often made through implicit contracts between migrants and migrant-sending households. The key mechanism of reinforcement of this implicit contract is the migrant's sense of altruism toward his/her household, i.e. his/her concern of the well-being and standard of living of household members who are left behind.

We argue that the case of China is particularly suited for the application of NELM. NELM describes a rural setting where there are no well-functioning credit market institutions. In rural China such as the one for Guizhou province of our current study, most rural households do not have access to credit. Thus, migrants "can play the role of financial intermediaries, enabling rural households to overcome credit and risk constraints on their ability to achieve the transition from familial to commercial production" (Taylor et al., 2003, p. 80). However, Du, Park, and Wang (2005) suggest that the effect of remittances on household income is modest.

The idea of relating remittances behaviour to the interest of the family, though not predicted by the traditional individual level cost benefit analysis, is not foreign to students of China. Indeed, it is often the case that family members put family and household interest above individual member's interest. If migrants are concerned with the well-being of the family and household members that left behind, we expect that, other things being equal, migrants are more likely to remit to a household with a poor standard of living than otherwise. In

other words, households with lower income are more likely to receive remittances and receive a larger amount of remittances than otherwise. In addition, we also expect migrants who are either heads of the household or have spouses are more likely to remit (and remit larger amount) because they have more responsibility over the well-being of household members. Remittance behaviour also depends on the migrants' life cycle stage: age, location of spouse, and size of the household (Durand, Kandel, Parrado, & Massey, 1996). We expect that larger households are more likely to receive more remittances, with other things being equal.

Previous studies of remittance behaviour found support for NELM. Studies carried out by Massey and his colleagues using data from the Mexican Migration Project support predictions from NELM. As predicated from NELM, in the Mexican case, a cohesive patriarchal family ensures the flow of remittances as part of a household strategy of risk diversification (Sana & Massey, 2005). They also found that migrants respond to the dependent burden in their origin households and remit less as the land owned by the origin households increases (Massey & Basem, 1992). Using data from China, Taylor et al. (2003) show that remittances loosen constraints on production and increase efficiency as well.

(2) Translocal Perspective and Migrant Entrepreneurial Activities

Much of previous studies on internal migration tend to classify migration process as either in migrant destination or return migration to the origin. However, in recent years, many migrants live a life that involves both migrant origin and destination. Fan (2011) and Zhu (2007) documented that a substantial number of migrant households are split between migrant origins and destinations. This phenomenon has also been observed by scholars who study international migration, commonly known as “transnationalism”, a term that is linked to international migrants whose lives depend on both places of origin and destination (Levitt, 2001). Lohnert and Steinbrink (2005) have developed the translocal perspective to capture the interdependence between rural and urban locations in the context of South Africa. This concept captures the lives of an increasingly important segment of rural households that are dependent on both locations. We argue that many of China's internal migrants increasingly follow this pattern. There are at least three main factors that contribute to this emerging trend. First, just as in the case of international migration, modern technology (communication and transportation) makes it increasingly possible to live in both worlds. A non-stop flight from the capital city Guiyang in Guizhou province to Guangzhou in Guangdong province (one major destination for migrant workers) is only about one hour and 45 minutes. Although migrant entrepreneurs are likely to travel by air, there are many other more affordable choices of transportation (long-distance buses and trains) that easily link migrant origins and destinations for modest-income migrants. Another important factor is the institutional barrier in China that makes it difficult for rural migrants to settle permanently in cities. The household registration (*hukou*) system, though significantly weakened in recent years, nevertheless continues to function in such a way that makes the long-term settlement of rural migrants difficult. For example, migrant children without local *hukou* are required to pay high “endorsement fees” to be enrolled in public schools in cities and as a result, large number of migrant children are enrolled in migrant-sponsored schools and other children are left behind in rural China (Liang & Chen, 2007).

The third factor is that some of the more successful migrants return to do business in their hometowns or nearby towns. This is the case with many migrant entrepreneurs who rely on connections in both places of origin and destination. The typical example is that of migrant entrepreneurs who operate factories in their hometowns or the nearest county to those hometowns but often have to ship raw materials (i.e. for shoes and garment) from coastal regions. In most cases, the final product also needs to be dispatched to coastal regions for exporting as well. This discussion suggests that rural entrepreneur households may receive more money than other households because they need to have the capital for business operation and expansion. This is a new way that remittances are linked to businesses in migrant-sending communities. We note that this is different from the concept of “circulation” that has been a long standing topic in the migration literature (Standing, 1981). The “circulation” in that context is mainly concerned with peasants who go back and force to work in the cities; they are often simply labourers, not entrepreneurs. The focus in the current discussion is that remittances are linked to business formation and entrepreneurial activities in rural areas.

(3) From the Culture of Migration to the Culture of Remittances

Much of previous literature on remittances tends to theorise remittances as determined by individual behaviour responding to household needs. With few exceptions (Durand et al., 1996), village-level factors are often not taken into account. In this paper, we consider several village-level factors. One important factor is the norm of remittances, or the culture of remittances, which refers to expectations and expected amount of remittances that are perceived to be appropriate in each village, depending on the village’s migration history. Students of international migration have long recognised the “culture of migration” thesis that characterises many Mexican communities. In these communities, international migration is prevalent, foreign remittances are part of economic resources that support the household as well as potential for investment. Migration is perceived as a means, if not the only means, towards socioeconomic mobility. The culture of migration especially has a major impact on young people, because migration is said to be “normative” in these communities such that migration has become a “rite of passage for these people” (Kandel & Massey, 2002; Mines, 1981). In important ways, the culture of migration is responsible for the transmission of norms of international migration across generations.

Just as in the case of the culture of migration, we argue that in many migrant-sending villages in China, there is a culture of remittances, which reflects the history and patterns of migration in these villages. The culture of remittances sets the norm of remittances in terms of who is expected to remit and what is the appropriate amount to remit. The culture of remittances is formed through three possible mechanisms. One such mechanism is the consumption pattern of migrant households in migrant-sending communities. The consumption patterns may include the purchase of TVs, appliances, and improvements made to the home. Once these items become regular household necessities, amount of remittances must allow migrant households to purchase them. Another factor is village discussion/gossip networks. Parents are often proud of the fact that their children and family members are migrating out and are likely to share the information on remittances to boost their sense of pride. These discussion networks help diffuse information on remittance behaviour at the

village level. Third, the nature of migration networks determines that migrants from the same village often settle in same destinations. Although migrants may not necessarily share the information on the exact amount of remittances they send, they often share information on the ballpark figure of what is considered to be the appropriate amount of remittances as well as on how to send remittances (e.g. through the post office, or banks) and the service charge associated with each service. Thus we expect that migrants who are from villages with historically high levels of remittances tend to send a larger amount of remittances, with other things being equal.

In addition to predictions from the three theories that we have just discussed, remittances are of course also influenced by migration experiences. Here we consider several categories of migration experience. Migrants who come from households with more than one migrant outside of community are less likely to remit than others, reflecting a household strategy of sharing the risks as well as financial responsibility among household members. Early studies (e.g. Durand et al., 1996) also show that migrants with less attachment to the migrant-sending community, as measured by duration of migration, are less likely to remit.

Of course, remittance behaviour is also positively related to the migrant's ability to remit (can be measured by migrant earnings and living expenses in migrant destinations). Moreover, migrants who work in China's coastal regions are more likely to remit because those regions have long been destinations for migrants with higher salaries and have better services available for sending money home. Migrants who work in large cities tend to receive higher salaries as compared to those in small cities or towns. To the extent that migrants earn higher salaries, they are likely to remit a higher amount.

Data and Methods

The 2003 China Rural Household Survey (CRHHS) was conducted by China National Bureau of Statistics (NBS) and is the rural portion of the NBS' annual household survey (NBS, 2004). It is a multi-stage probability sample survey of rural households. Data from rural and urban household surveys have been used in several important studies of household income in China (Khan, Griffin, Riskin, & Zhao, 1992; Khan, Griffin, & Riskin, 1998; Riskin, Zhao, & Li, 2001). For this paper, we use rural household survey data for Guizhou province in southwest China (see Map 1). Guizhou is considered to be one of the poorest provinces in China and rural household income is considerably behind that of the rest of rural China. In 2003, the rural household income per capita in Guizhou was 21565 yuan, as compared to 2622 yuan for China as a whole. Moreover, the rural poverty rate in 2003 was 9.95% (NBS, 2003). One of the reasons for focusing on Guizhou is to explore links between migration and development and develop strategies in the future for poor provinces in China and in other developing countries.

Aside from rich information on income and its sources, the 2003 CRHHS added a module of the rural labour force. Some scholars have remarked that large national studies based on massive samples gathered by official state agencies such as the Chinese Household Income Project (by NBS) permit detailed analysis of incomes of rural households, but have limited information for other characteristics (Walder & Zhao, 2006). This changed in 2002 with the

addition of the labour force module. Three parts of the survey are particularly relevant (individual, household, and village). Basic socio-demographic information is collected for each member of the household.

The labour force population (contained in the Labour Force Module) is divided into two groups: one group is the labour force population who remain in the village and the other group refers to the labour force population who are currently working outside of the township or town. For the first group, questions asked include: current and previous year's occupation, whether employed through town enterprises and duration of work, and whether the individual migrated during the survey year or in the previous year. For the second group, 14 questions were asked about their migration experience: whether the migration was arranged by the local government (or relatives and friends), type of migrant destination, duration of migration, total earnings, and the amount of remittances received by each migrant household. Migration is defined as any household member who moved out of the town to work (*waichu congye*) in the year of survey. With respect to the duration of migration, similar to other surveys conducted by NBS, duration is measured by the number of months. It should be noted that this is the duration of most recent migration, not the duration of migration since first migration. Information on migration is mainly collected from migrants themselves by telephone or during migrants' return visits to hometown villages and in some cases the information is collected from relatives.

The survey contains important household-level information for the purposes of our research. Besides household income (reported with or without remittances), the most relevant information is if the household owns business (*geti gongshang hu*) and if the household contains any village cadre. The survey uses the following criteria to define business ownership of households: (1) the household business must have a regular production facility and equipment as well as employees, (2) it must be in operation the whole year and for businesses that are only in operation during certain seasons, it must operate for a minimum of 3 months; (3) the business must employ at least 7 workers. We realize that this is a rather strict definition of business ownership that it excludes all businesses that employ only family members or fewer than 7 workers.

During CRHHS, the NBS also collected much information at the village level—a total of 31 questions. The most relevant questions for our purposes are access to paved roads, distance to the nearest elementary/middle school, distance to nearest medical clinic, distance to the post office, and number of township and village enterprises (TVEs). For this paper, we decided to use two village-level variables. One is the distance from the village to the nearest county seat location. Previous research suggests remittances are related to transportation and infrastructure because they indicate potential conditions for non-agricultural activities and entrepreneurial activities (Durand et al., 1996). We also include the variable “distance from the village to the nearest middle school.” A longer distance from the village to a middle school is likely to prompt migrants to send more remittances to cover the additional cost of education for school-age children. For each province, roughly about 27 to 30 counties were selected and within each county about 5 to 10 villages were surveyed. This survey design generated about 135 to 300 villages for each province, which would allow us to conduct

multi-level modelling. This paper will use a sub-sample from household survey data in Guizhou along with village level data attached to each individual record.

Our analysis consists of two steps. The survey contains remittance information for each migrant. This also means in some households there may be more than one migrant. To meet the typical regression analysis assumption, we randomly selected one migrant from each household as our sample for analysis. This results in a sample of 831 migrants. Our analysis begins with description of the sample on a variety of socio-demographic characteristics between migrants who remitted and migrants who did not. This will be followed by regression analysis using a multilevel modelling approach. The first part of the regression analysis deals with the decision to remit or not. The second part of the analysis focuses on migrants who remitted and attempts to model the determinants of the amount of remittances. In both statistical models, we take a multilevel modelling approach. The multilevel model is appropriate because we have migrants who are nested within each village. The multilevel model is most appropriate for data with this structure because it can accurately estimate standard errors that other approaches tend to underestimate (Guo & Zhao, 2000; Raudenbush & Bryk, 2002). To model the decision to remit or not, we apply a multi-level logistic regression model. For modelling the amount of remittances sent by migrants, we first transform remittances using a log function and then use a multilevel regression model. Our estimations of models were implemented using Stata procedures xtlogit and xtreg.

Results

Table 1 compares the socio-demographic characteristics between two groups. One major finding with respect to remittances among migrants in China is that a very high proportion of migrants in China sent money back. For example, 82% of male migrants and 73% of female migrants in our sample remitted in the year of survey. This is much higher than migrants in other countries. For example, data from Thailand in 1994 show 53% male migrants and 66% of female migrants remitted (VanWey, 2004). Similarly, data on international migrants from Mexico to the United States show 47% of male household heads remitted (Durand et al., 1996). Although this is not a place to conduct a thorough analysis of different patterns of remittances across countries, it is worth noting that the high rate of remittances among Chinese migrant workers in itself holds potential for major impact on rural China.

Table 1 also shows that migrants who remit tend to be relatively older and more likely to be household head or spouse. Household heads or spouses tend to have more responsibility for family and household. Educational profiles between migrants who remitted and migrants who did not show any notable difference. As we expected, mean income for remitted migrants (5006 yuan) is significantly higher than the mean income of migrants who did not remit (4191 yuan). We suspect it is related to the fact that a large share of migrants who remit are working in the eastern regions which provide more opportunity for income growth. Household income for households with remittances seems to be lower than households with no remittances, providing initial evidence that migrants remit in order to improve household welfare.

To get a sense of the impact of remittances on household annual income in migrant-sending communities, we look at Figure 1. Figure 1 contains 4 bar charts that describe the mean income for four types of households: (from left to right) mean household income for households without migrants, mean household income for household with migrants but did not receive remittances, mean household income for households with migrant remittances, and mean household income for migrant households with remittances removed from total household income. The first finding is that households with no migrants seem to enjoy favourable household income. This suggests that migrants may come from not so well to do households. If we compare the middle two bar charts, they reveal that households with migrants but do not receive remittances tend to do better than households with remittances. This suggests that the households that receive remittances tend to be the households that are in need. The last two bar charts on the right show the impact of remittances on these migrant households, remittances increase the household income by 34% $[(9119-6802/6802)*100\%]$! This is a significant improvement in the household income for these households. The result is also consistent with other surveys in China. Figure 2 shows that the amount of remittances is closely related to migrant income: as migrant income rises, the amount of remittances steadily increases as well.

In Table 2, we present results from models of decision to remit. Model A contains selected individual level and household level characteristics. Model B contains results from multilevel logistic regression of decision to remit. We focus on Model B that contains individual, household, and village level characteristics. We see that age is positively associated with the decision to remit, but the relationship is not linear, i.e. propensity to remit will reach a peak and then decline. This is consistent with previous studies (Durand et al., 1996). The decision to remit is closely related to the household well-being in migrant sending communities: migrants are more likely to remit to households that have low income (see the negative coefficient for household income). This is consistent with prediction from the new economics of migration. As expected, the decision to remit is strongly influenced by migrant income as well as cost of living for migrants.

Migrant destination also matters: migrants who work in the Eastern region in China are more likely to remit.² The eastern region of China is the most dynamic economic region in China where job opportunities are abundant and salary is higher. As the eastern part of China has been at the forefront of China's tidal wave of migration, it also has good infrastructure to facilitate money transfer from migrants to home villages. We also note that migrants are less likely to remit to entrepreneur households. This is in some way consistent with earlier findings presented in Figure 1. Entrepreneur households are usually in good economic health and probably do not need remittances to support basic day-to-day living.

We entered three village level variables in our multi-level logistic regression model: average remittances (measured in previous year, 2002), distance from village to the central town of the county, and distance from village to the nearest middle school. Following our previous discussion on the culture of remittances, we expect that the higher the average remittances in the village, the more likely migrants are to remit. The result is in the predicted direction, but

²Eastern China includes Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, and Hainan.

is not statistically significant. The most important variable is the distance from the village to the nearest middle school. We suggest that the longer the distance from village to middle school, the higher the cost is likely to be in terms of travel. For many middle schools in rural China, students are required to sleep in student dormitories. Thus the decision to remit in this context helps households with a financial burden for children's education.

Table 3 reveals results from multilevel regression of log (amount of remittances). Again, migrants who are household head or spouse are more likely to remit a larger amount than other type of household members (sons or daughters). Migrants also remit a larger amount when household size is larger as larger households tend to have a larger consumption need. As expected, higher migrant income results in larger remittances. The impact of duration of migration on remittances is consistent with results from China (Li, 2004): the longer migrants stay in the place of destination, the larger the amount of remittances. In the literature on remittances, the most consistent result has been that the longer migrants stay in destinations, the more likely they are to take root in the new location, and the less likely they will remit or remit a larger amount (Liang & Morooka, 2008; Sana, 2008). We offer two possible explanations here. It should be noted that we are using the duration of migration during the survey year and at the most, migrants can report 12 months (one year). Within the short period of one year, it may not be long enough to detect the effect of attachment to the home community on remittance behaviour. Thus the impact of migrant duration of residence on remittances may be different if we had a longer interval of observation. Another factor is that because of China's rigid *hukou* system, it is hard for migrants to think about settling down unless they have stayed in destination for a longer period of time. Also related to the migration experience is that migrants from households with more than one migrant tend to send smaller amount of remittances. This reflects the household strategy of sharing responsibility/obligation as well as risk.

Very closely related to our main argument is the coefficient for entrepreneur households. We find that migrants who come from entrepreneur households (which hire a minimum of 7 workers) tend to remit a larger amount than migrants from other kinds of households. This is a significant finding. Although these migrants with businesses at home tend not to remit, if they remit, they are likely to remit a larger amount. The larger amount of remittances sent by these migrants is likely to support the needs of the household business and thus maintain a connection between migrants outside of the household and household business operations. We need to note that migrant themselves are not necessarily participating in these household entrepreneurial activities directly.³

Perhaps the most interesting result coming from the village-level variables is the impact of mean remittances at the village level on the remittance behaviour of individual migrants. The results show that the higher the remittances at the village level in the previous year⁴, the higher the amount of remittances migrants will send a year later. This is another important finding. Previous literature has identified a phenomenon as "the culture of migration." The

³See additional information linking migration with household income by household entrepreneur status in Appendix 1 and 2.

⁴We obtained information on remittances of previous year (2002) for each village with the help of staff of the National Statistical Bureau of China.

idea is that as migration becomes increasingly accessible as a strategy of economic advancement and as migration prevalence ratio in a community rises, a norm of migration is emerging in these communities. In such communities, migration is seen as a rite of passage and is very much expected for young people (Massey, Goldring, & Durand, 1994). In our case, we suggest that a new culture of remittances is emerging in China's migrant-sending villages. As more peasants join the army of migrant labourers and as more migrants send remittances to their families back in the villages, a norm of remittances is emerging that is driving up the expected amount of remittances. A higher amount of remittances not only helps household economic status in the village, but also elevates the household's social status in the village. A household with high level of remittances can be manifested in terms of newly remoulded houses, newly purchased farming equipment, and new appliances, all items that make migrant households proud and perhaps others envious.

Summary and Conclusions

In this paper, we have systematically studied the two decision processes involved in remittances: one is the decision to remit and the second is the amount of remittances.

One main finding is that remittances have a major impact on household income distribution and contribute as much as 30% of household income to migrant households. In this sense, migration and remittances hold major promise for alleviation of poverty in poor provinces such as Guizhou in our study. In this regard, the previous study by Du et al. (2005) may be unduly pessimistic in that they believe the impact of migration on poverty alleviation may be modest because poor people tend not to participate in migration. Our results give more support for the idea that it is the relatively poor households that tend to receive remittances. Therefore, remittances have considerable potential to alleviate rural poverty.

Our core empirical exercise has been guided by three lines of theoretical arguments: the new economics of migration using a translocal perspective, the impact of migration on business formation and community development, and the culture of remittances. Our results provide support for hypotheses generated from these three lines of theoretical reasoning.

Our results are consistent with a prediction from the new economics of migration: that household and household strategies are important in affecting remittance behaviour. Migrants who are household heads and spouses are naturally taking more responsibilities for the care of children and elderly in the household and as a result, they are more likely to remit larger amount than others. Likewise, migrants who come from larger households also are found to send a larger amount of remittances. Migrants who are from poor households (measured by household income) are more likely to remit. Thus, family economic circumstances drive remittance behaviour.

Much of the extant literature on migration and development has failed to find a consistent pattern of linking migration to development. In fact most studies find remittances are used for purposes of consumption instead of being used for production such as for business formation in migrant-sending villages. Although this may still be true in the case of China for a variety of reasons (i.e. lack of infrastructure and human capital), as argued by Chinese scholars such as Bai and Song (2002), to an extent, it is also important to identify potential

linkages between migration and development in rural communities. In this regard, our paper points to a new direction of research that links entrepreneur households with remittance behaviour. Migrants from these entrepreneurial households tend to send a larger amount of remittances. We speculate that another likely scenario is that these migrants may not only send money back to help household business operations at home but perhaps also feedback information on new technology, business opportunities, and relevant markets. To obtain evidence on this, future research should examine the destination choices, occupational choices, and educational background of these migrants.

Borrowing the idea of “the culture of migration” in the migration literature, we develop our argument of “the culture of remittances”, referring to the fact that expectations and norms for remittances that are developed in these migrant-sending communities over time define and govern patterns of remittance behaviour. Although a more satisfactory testing of the formation of these norms would need ethnographic research in these communities, our statistical models do provide strong evidence that is consistent with the culture of remittances thesis. This culture of remittances will help these households involved, but for it to play a more important role for community development, more work is needed. With respect to this, we could learn some lessons from the case of international migration from China’s Fujian province. In Fujian province, for example, a large number of international migrants in the last 25 years or so have resulted in many changes in hometown communities (Liang, Chunyu, Zhuang, & Ye, 2008). Chief among them is the role played by these international migrants and their remittances in building local infrastructure (road, dam projects), local schools, and nursing homes. People who donated money for these purposes are honoured by the village in the way of inscribing their names in a public place in these villages. This is an honour not only for individual migrants but also for the family. This process actually stimulated other migrants to emulate the same behaviour. Thus a culture of remittances for the welfare of the local community is quickly emerging. This strategy may not be realistic in communities for which migration is just underway, but for communities that have a relatively long history; it certainly has a lot of potential.

Finally, China’s eastern coast has been well-known to the world in many ways. In the context of migration, the east coast provinces are the locations of the “world factory” that employs millions of migrant workers. Migrants have contributed to the economic miracle that is dominated by the east coast regions. Our paper suggests that migrants in China’s eastern region are more likely to remit. This indicates that the eastern region of China is already linked to the development of the migrant-sending province of Guizhou. Although this is a linkage through the flow of hard-earned migrant money, the potential seems to go beyond that. In the current period of global economic crisis, demand for Chinese goods has declined. This is coupled with the fact that the Chinese government puts increasingly high pressure on factory owners to give workers higher wages with benefits. These global and domestic forces have pushed many factories out of business in the coastal region. This leads to a large wave of return migration to rural Chinese communities. Under such circumstances, this linkage between China’s eastern region and migrant communities in rural China can be further fostered to benefit return migrants as well as their hometown rural communities.

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Figure 1.
Impact of Remittances on Household (HH) Income in Guizhou Province, 2003

Figure 2.
Amount of Remittances by Migrant Income, Guizhou in 2003

Appendix 1.
Household Income by Entrepreneurial Status

Appendix 2.

Mean Household Income by Migration and Entrepreneurial Status

Map 1.
Location of Guizhou province in China

Table 1

Comparison of Socio-demographic Characteristics of Two Groups (whether to remit or not)

	Remit	Not remit
Average age	29.27	26.75
Relation to HH Head		
HH head or spouse	282(41.6)	47(30.6)
Son	249(36.7)	55(35.7)
Daughter	135(19.9)	49(31.8)
Sibling	12(1.8)	3(1.9)
Education		
Elementary school or below	265(39.1)	60 (39.0)
Junior Middle school	381(56.2)	82 (53.2)
High School or above	32(4.7)	12 (7.8)
Receive skill training		
Yes	38 (5.6)	6 (3.9)
No	640 (94.4)	148 (96.1)
Average length of migration (month)	8.27	8.12
Average income of migrant work (yuan)	5065.79	4191.43
Average living expenses during migration (yuan)	2474.16	2505.68
Migration Initiating Approach		
Introduced by relatives	244 (36.0)	60 (39.0)
Self-motivated	434 (64.0)	94 (61.0)
Migration destination		
East area	436 (64.3)	76 (49.4)
Non-east area	242 (35.7)	78 (50.6)
Household size	4.72	4.62
Household Type		
Village cadre	32 (4.7)	5 (3.2)
Individually-owned business	11(1.6)	9 (5.8)
Others	635(93.7)	140 (90.9)
Rank of household income in the village	4.5	5.0
More than 1 migrant in the household		
Yes	210(31.0)	56 (36.4)
No	468(69.0)	98 (63.6)
Average remittance of the village(2002)	1565.75	1620.11
Average Distance from village to the central town of the county	35.66	34.69
Average Distance from village to the nearest middle school	5.26	3.84
Total N	678	154

Table 2

Coefficients from Multi-level Models of Decision to Remit: Guizhou Province in 20003

Independent Variables	Model A		Model B	
	B	SE	B	SE
Intercept	-1.6180	1.1800	-3.1154	1.8876
Age	0.1551 **	0.0586	0.2232 *	0.0928
Age ²	-0.0020 **	0.0007	-0.0029 *	0.0012
Relationship to HH head				
HH head or spouse(reference)	----	----	----	----
Son	-0.0370	0.3408	-0.3236	0.5127
Daughter	-0.4341	0.3922	-0.4319	0.6056
Sibling	-0.0323	0.8246	-1.3729	1.1821
Education				
Elementary school or below (reference)	----	----	----	----
Junior middle school	0.0639	0.2015	0.5110	0.2997
high school or above	-0.8985 *	0.3817	-0.4656	0.5632
Migration length	-0.0396	0.0427	-0.0276	0.0669
Migration income	0.0003 ***	0.0001	0.0005 ***	0.0001
Migration expense	-0.0004 ***	0.0001	-0.0006 ***	0.0002
Migration Initiation				
Introduced by relatives	-0.0496	0.1966	0.2554	0.3365
Self-motivated(reference)	----	----	----	----
Migration destination				
East area	0.8939 ***	0.2195	0.7029 *	0.3432
Non-east area(reference)	----	----	----	----
Household size			0.1634	0.1249
Household type				
Village cadre household			0.2152	0.7120
Entrepreneur household			-2.0570 *	0.8321
Others (reference)			----	----
Household income			-0.0001 *	0.0000
More than 1 migrant in the household			-0.3849	0.3167
Average remittance at the village level			0.0001	0.0002
Distance from village to the central town of the county			-0.0004	0.0102
Distance from village to nearest middle school			0.1631 **	0.0620
-2 Log Likelihood	716.690		605.551	
Chi-Square	71.06		54.94	
df	12		20	
Number of cases	831		831	

Note:

*
P < 0.05,

**
P < 0.01 and

P < 0.001

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Table 3

Coefficients from Multilevel Regression Model of Predicting Amount of Remittance, Guizhou Province, 2003

Independent Variables	Model A		Model B	
	B	SE	B	SE
Intercept	6.1725 ***	0.3894	5.8609 ***	0.4008
Age	0.0130	0.0204	0.0097	0.0207
Age ²	−0.0003	0.0003	−0.0002	0.0003
Relationship to HH head				
HH head or spouse(reference)	----	----	----	----
Son	−0.3135 ***	0.0977	−0.3120 ***	0.0976
Daughter	−0.3039 **	0.1165	−0.3194 **	0.1202
Sibling	−0.4024	0.2319	−0.3600	0.2322
Education				
Elementary school or below (reference)	----	----	----	----
Junior middle school	−0.0331	0.0617	−0.0710	0.0615
high school or above	0.0833	0.1413	−0.0178	0.1382
Migration length	0.0448 ***	0.0130	0.0521 ***	0.0135
Migration income	0.0003 ***	0.0000	0.0003 ***	0.0000
Migration expense	−0.0003 ***	0.0000	−0.0003 ***	0.0000
Migration Initiation				
Introduced by relatives	0.0374	0.0614	0.0686	0.0664
Self-motivated(reference)	----	----	----	----
Migration destination				
East area	0.0119	0.0688	0.0410	0.0710
Non-east area(reference)	----	----	----	----
Household size			0.0580 *	0.0256
Household type				
Village cadre household			0.0072	0.1378
Entrepreneur household			0.4675 *	0.2291
Others (reference)			----	----
Household income			−2.83e ^{−06}	7.59e ^{−06}
More than 1 migrant in the household			−0.1976 **	0.0667
Average remittance at the village level			0.0001 *	0.0000
Distance from village to the central town of the county			0.0001	0.0018
Distance from village to nearest middle school			−0.0007	0.0066
R-Square	0.4338		0.4555	
df	12		20	
Number of cases	680		680	

Note:

* P < 0.05,

**
P < 0.01 and

P < 0.001

Dependent variable: ln(Remittance)

Source: the 2003 China Rural Household Survey (Guizhou Province).

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