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Migration and the Rural-Urban Continuum: Evidence from the Rural Philippines

Agnes R. Quisumbing and Scott McNiven

2033 K Street, NW, Washington, DC 20006-1002 USA • Tel.: +1-202-862-5600 • Fax: +1-202-467-4439 • ifpri@cgiar.org
www.ifpri.org

Abstract

Migration is an important livelihood strategy in the Philippines. In 1991, 26 percent of urban households and 13 percent of rural households received remittances from migrant parents or children. Although international migration has received more attention than internal migration, the latter is significant in the Philippines. Between 1980 and 1990, the number of persons over the age of five years who were not resident in the city or municipality they resided in five years ago, increased from 2.85 to 3.24 million. Recent migration flows are interprovincial, typically in the direction of Metropolitan Manila and surrounding areas, and are dominated by women. While the percentage of the population classified as urban increased from 36 percent in the mid-1970s to 52 percent in the early 1990s, roughly 80 percent of moves by a nationally representative sample of ever-married women were to areas no more urbanized than the migrant's area of origin. This indicates that internal migration flows are quite heterogeneous. This is of interest to policymakers, who are paying increasing attention to the role of small towns and peri–urban areas as migrant destinations. For small and intermediate-sized urban centers, in-migration from rural areas could increase local opportunities for income diversification as well as decrease pressure on larger national urban centers.

This paper explores the diversity of the experience of migrants to rural, peri–urban, and urban areas using a unique longitudinal data set from the Philippines. In 2003 and 2004, the Bukidnon Panel Study followed up with 448 families in rural Mindanao who were previously interviewed in 1984/85 by the International Food Policy Research Institute and the Research Institute for Mindanao Culture, Xavier University, and surveyed both a sample of their offspring living in the same area as well as a sample of those who had moved away to different locations. Parents (original respondents) and children who formed separate households in the same locality were interviewed in 2003; original respondents' offspring that migrated to different rural and urban areas were interviewed in 2004. Thus, migration patterns were examined using the full listing of

children of the original respondents as well as a special survey of 257 of their migrant offspring who were tracked down in 2004. This migrant survey focused on differences in the migration experience of males and females who moved to other rural areas, *poblaciones* (the administrative seats of municipalities or towns), and urban areas. We follow this with an examination of the determinants of children's location, using the sample of all children. In addition to migration to rural, peri–urban, and urban destinations, we explicitly consider the case where the individual leaves his or her parental residence, but remains in the same village, as a locational choice.

Our preliminary exploration into the migration decisions of young Filipino adults has shown that as destinations, *poblaciones*, peri–urban areas, and urban areas are very similar. Most migrants to *poblaciones* and urban areas have very similar reasons for moving—initially for schooling, then subsequently to look for better jobs, except for substantial numbers of male migrants to the closer urban locations in Bukidnon who tend to be poorly educated and work in low-wage construction and transport jobs. If *poblaciones* and peri–urban areas can offer comparable services to migrants from rural areas, they may be able to relieve congestion in major metropolitan centers like Cagayan de Oro and Metropolitan Manila. However, the occupational profile of migrants indicates that females in both areas seem to do better than males—perhaps because female migrants to urban areas are better-educated than male migrants.

Social networks are important for migrants, particularly for the first move. While most first-time migrants move alone, they are most often financed by their parents and live with relatives in their new community. Later on, migrants increasingly self-finance their moves, and live with their families of procreation. Familial networks are thus very important for helping a migrant get settled into a new community.

Lastly, we also find that rural areas, *poblaciones*, and urban areas systematically attract different types of migrants. *Poblaciones* and urban areas generally attract better-schooled individuals, partly because young people move to those areas to further their education, or because better-educated individuals move to these areas to find better jobs. Migrants to rural areas, on the other hand, move primarily to take up farming or to get

married. Thus, it is no surprise that rural migrants, as well as those who opt to stay in rural areas, are less educated than migrants to *poblaciones*, urban and peri–urban areas.

Does outmigration from rural areas thus constitute a "brain drain" that needs to be stopped? Not necessarily. If migrants are able to find better jobs in urban and peri–urban areas, and send remittances to their origin families, then migration is welfare-improving for those who have stayed behind. However, the occupational profile of migrants to *poblaciones*, urban, and peri–urban areas is quite diverse. A large proportion of male migrants to more urbanized areas ends up in manual labor/transportation work or crafts and trades, which are not high-earning occupations. Female migrants to *poblaciones* and urban areas may fare better. A large proportion of female migrants to *poblaciones* ends up working in sales occupations, while a larger proportion of female than male migrants to urban areas has professional and managerial jobs. Clearly, many migrants are unable to fulfill their hopes and dreams. This paper cannot answer whether migration is welfare-improving for the migrant or the family he (or more likely she) left behind. In further work, we will examine whether migration is a strategy that families use to escape poverty, bearing in mind that migration and education are both individual and family decisions.

Key words: migration, rural, urban, the Philippines

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Agnes R. Quisumbing and Scott McNiven
International Food Policy Research Institute

1. Introduction

Migration is an important livelihood strategy in the Philippines. In 1991, 26 percent of urban households and 13 percent of rural households received remittances from migrant parents or children (Cox and Jimenez 1995). Although international migration has received more attention than internal migration, the latter is also significant in the Philippines.[1] Between 1980 and 1990, the number of persons over the age of five years who were not resident in the city or municipality they resided in five years ago increased from 2.85 to 3.24 million (Flieger 1995).[2] Migrants increasingly crossed provincial boundaries: in the intercensal period, intra-provincial migration decreased by 40 percent, while interprovincial migration increased by 10 percent. Among migrants listed in both census years, females outnumbered males; Filipinas are among the most geographically mobile of Asian women (Lauby and Stark 1988).

Since 1970, the in-migration center of the country has shifted from Mindanao to Metropolitan Manila and the surrounding provinces. Although Metropolitan Manila is now the most attractive destination, and the percentage of the population classified as urban increased from 36 percent in the mid-1970s to 52 percent in the early 1990s (Flieger 1995), roughly 80 percent of moves by a nationally representative sample of ever-married women were to areas no more urbanized than the migrant's area of origin (Jensen and Ahlburg 2000).[3]

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[1] See, for example, Yang (2004a, 2004b). Most studies on internal migration in the Philippines examine data from the 1970s and 1980s (Nguiagain 1985); there are relatively fewer using the 1990 census (e.g., Flieger 1995). Jensen and Ahlburg (2000) use the 1993 National Demographic Survey to examine the relationship between female migration and fertility.

[2] Although the number of internal migrants had increased, the proportion of the population above four years engaged in internal migration had decreased from 7.1 percent to 6.3 percent between 1980 and 1990. In comparison, more than 1.6 million international migrants over 15 years of age resided outside the Philippines in 1991 (equivalent to 4 percent of the nonmigrant population of that age group residing in the country) (Rodriguez and Horton 1996); in the 10-year period between 1990-1999, remittances from international migrants contributed an average of 20.3 percent to the country's export earnings and 5.2 percent of GNP (Go 2002).

[3] Flieger (1995) notes that some of the increase in urbanization came from the reclassification of rural areas to urban.

Understanding rural-urban migration in the Philippines, however, requires going beyond census definitions and simple dichotomies. In the Philippines, urban areas are defined as all settlements with at least 1,000 inhabitants, a population density of at least 500 persons per square kilometer, essential infrastructure, and where nonagricultural occupations prevail (Philippine National Statistics Office 2003). *Poblaciones* are the administrative seats of the municipality (the rural administrative district) or town (which may be classified as urban or rural depending on certain criteria). Even though all *poblaciones* are in fact population centers, only those *poblaciones* that have a population density of at least 500 persons per square kilometer and essential infrastructure are classified as urban, even if they are surrounded by predominantly rural areas. Using census definitions, moving to a *poblacion* may be classified as migration to an urban area, even if it is not very far from the individual's rural origin. In this study, allowing migrants to define the nature of their destination locality—whether rural, *poblacion*, or urban—provides additional insights into the rural-urban continuum.

What determines the decision to migrate, and given that decision, the choice of a migrant's destination? The recent literature on migration in developing countries has increasingly paid attention to the effects of familial and social factors on migration.[4] Whereas the early literature on migration typically posed the decision in terms of the costs and benefits to the individual migrant (e.g., Sjaastad 1962), more recent studies emphasize the role of migration as a family strategy. Policymakers are also paying more attention to the role of small towns and peri–urban areas as migrant destinations (Satterthwaite and Tacoli 2003). In-migration from rural areas to small and intermediate-sized urban centers could increase local opportunities for income diversification as well as decrease pressure on larger national urban centers.

It is obvious that rural areas, *poblaciones*, and urban areas offer different opportunities to migrants. Do these various destinations systematically attract different types of migrants? What kinds of individuals are more likely to move to rural areas, as

[4] See Lucas (1997) for a review of the literature on internal migration, and Stark (1991) for a discussion of migration as a family, rather than a purely individual, decision.

opposed to *poblaciones* or urban areas? Do migrants move for different reasons, depending on the destination, and do their occupational profiles, job search strategies, and support networks differ?

This paper explores the heterogeneity of the experience of migrants to rural, *poblacion*, and urban areas using a unique longitudinal data set from the Philippines. The Bukidnon Panel Study follows up 448 families in rural Mindanao who were first interviewed in 1984/85 by the International Food Policy Research Institute and the Research Institute for Mindanao Culture, Xavier University. The study interviewed the original respondents and a sample of their offspring, both those who have remained in the same area and those who have moved to a different location. Parents (original respondents) and children who formed separate households in the same locality were interviewed in 2003; offspring that migrated to other rural and urban areas were interviewed in 2004.

In this paper, we examine migration patterns using the full listing of children of the original respondents as well as a special survey including 257 of the migrant offspring who were tracked down and interviewed in 2004. The migrant survey focuses on differences in the migration experience of males and females who migrated to rural, *poblacion*, and urban areas. We then explore the determinants of children's location, using the sample of all children. In addition to migration to rural, *poblacion*, and urban destinations, we explicitly consider the case where the individual leaves his or her parental residence, but remains in the same village, as a locational choice. Following a literature that suggests that males and females migrate for different reasons (e.g., Smith and Thomas 1998), we estimate a multinomial logit regression of locational choice separately for males and females. The regressions allow us to control for other factors that may be affecting the decision to migrate.

We find that rural areas, *poblaciones*, and urban areas systematically attract different types of migrants. *Poblaciones* and urban areas generally attract better-schooled individuals, partly because young people move to those areas to further their education, or because better-educated individuals move to these areas to find better jobs. Migrants

to rural areas, on the other hand, move primarily to take up farming or to get married. Thus, it is no surprise that, controlling for other factors, rural migrants, as well as those who opt to stay in rural areas, are more likely to be less educated than migrants to urban and peri–urban areas.

2. Understanding Migration Patterns in the Rural Philippines

Motivation

In contrast to early models of migration that focused on an individual's decision to migrate, based on a comparison of the discounted value of the mover's expected income in a different location and the present value of the costs of migration (e.g., Sjaastad 1962), a growing literature has argued that individual migration is both an individual and a family decision. Taking family considerations into account has considerably expanded the scope of migration models. In their study of the migration of husbands and wives in peninsular Malaysia, Smith and Thomas (1998) discuss a number of scenarios in which family characteristics may influence the migration decision. For example, children and adolescents typically move with their parents, who decide where the family goes. For these younger migrants, parental characteristics, such as father's and mother's education, may be more important determinants of an individual's location, compared to individual characteristics. The family also matters because individuals marry and mostly live and move with their spouses. Thus spousal characteristics may affect an individual's location decision, particularly for postmarital moves.

Families may also choose which of their members will migrate in order to diversify against risk (e.g., Lucas and Stark 1985; Hoddinott 1992). If parental investment and risk-diversification strategies are consistent, an individual's probability of migration, and eventual location, will be a function of individual and household characteristics. In India, Rosenzweig and Stark (1989) find that Indian farm households with more variable profits tend to engage in longer distance marriage-cum-migration. Similarly, Rosenzweig (1993) and Rosenzweig and Stark (1989) find that children of

poorer households are more likely to migrate far away. They propose that children of households that are more vulnerable to exogenous risk tend to migrate farther afield than other children. Likewise, children of households that are better able to self-insure against exogenous risk—an ability that generally increases with wealth—may choose to reside closer to the origin household. For example, children whose families live in areas that are inherently prone to weather risk, such as drought or floods, are more likely to migrate. In contrast, children whose families have more assets, and thus are better able to self-insure, do not need to live so far away from the parental household. This is another way families can use migration as insurance.

Gender may also play an important role in the family's choice of a migrant. Whether sons or daughters migrate depends on the family's perception of the migrant in its risk-diversification strategy. If, for example, daughters are socialized to be responsible for their parents, families may invest in daughters' migration. In the Dominican Sierra, female migrants make remittances to their parents' households if the latter experience income shocks; men insure parents only if there is no other migrant in the household (de la Brière et al. 2002). In the Philippines, the family's short-run need for a stable source of income motivates unmarried female migrants to seek wage-earning jobs, despite their lack of long-term stability, since parents expect remittances to decrease after daughters marry and have their own familial obligations (Lauby and Stark 1988). In rural India, where women migrate for marriage but men are lifetime residents in the household and village, daughters-in-law living in the village and daughters of the household head who have married and moved to their husbands' village embody the family's insurance capital, linking families of origin and destination of married women in mutual aid schemes (Rosenzweig 1993).

Better-educated children are also more likely to migrate in response to economic opportunities. Because better-educated children may be able to take advantage of new employment or entrepreneurial opportunities, they have more to gain from moving than less-educated children.

The Bukidnon Panel Survey

Bukidnon is a landlocked province in Northern Mindanao, comprising 20 municipalities and two cities, Malaybalay and Valencia.[5] (See Figure 1 for a map of the Philippines and the location of the study area.) Bukidnon has a land area of 829,378 hectares, making it the largest province in Northern Mindanao and the eighth largest in the Philippines. The 2000 census reported Bukidnon's population to be 1,059,355 with an average population density of 128 people per square kilometer. An earlier census from 1995 indicated the province's population was split 70 percent to 30 percent between rural and urban areas. The national highway links Bukidnon to its neighboring provinces while the Sayre Highway links Bukidnon to Misamis Oriental and North Cotabato. The Bukidnon-Davao road links the province to Lanao del Sur and North Cotabato. Interprovincial travel is mainly by bus while inter-municipality and *barangay* travel is via

Figure 1—Map of the Philippines, indicating study area

[5] This description draws from Morales (2004).

public utility vehicles. Since Bukidnon is landlocked, it relies on Cagayan de Oro, the major metropolitan center in Northern Mindanao, as its nearest seaport.

The data used in this analysis draw from a survey conducted by the International Food Policy Research Institute (IFPRI) and the Research Institute for Mindanao Culture, Xavier University (RIMCU) of households residing in southern Bukidnon. The survey was originally designed to investigate the effects of agricultural commercialization on the nutrition and household welfare of these families. In 1977, the Bukidnon Sugar Company (BUSCO) began operating a sugar mill in the area, which had previously been dominated by subsistence corn production. The presence of the mill gave farmers the opportunity to adopt this cash crop, depending on their proximity to the mill. The survey was fielded in four rounds at four-month intervals from August 1984 to December 1985, so that each round corresponded to a different agricultural season. The survey contained information on food and nonfood consumption expenditure, agricultural production, income, asset ownership, credit use, anthropometry and morbidity, education, and 24-hour food consumption recall. The sample was drawn from 29 *barangays* (the *barangay* is the smallest political unit in the Philippines)[6] and was stratified by (1) agricultural production activities, particularly sugar (the cash crop) and corn (the food crop), (2) proximity to the sugar mill (as a proxy for access to the new crop), and (3) access to land, including ownership, tenancy and landlessness. The initial sample included 510 households, although 448 households were interviewed in all four rounds. Bouis and Haddad (1990) provide a detailed description of the sample design and survey area.

The original case study (Bouis and Haddad 1990) examined the effects of the shift from subsistence corn production to sugarcane after the construction of the BUSCO sugar mill. The main effects of the introduction of export cropping were a significant deterioration in access to land, as smallholder corn tenant farms using primarily family

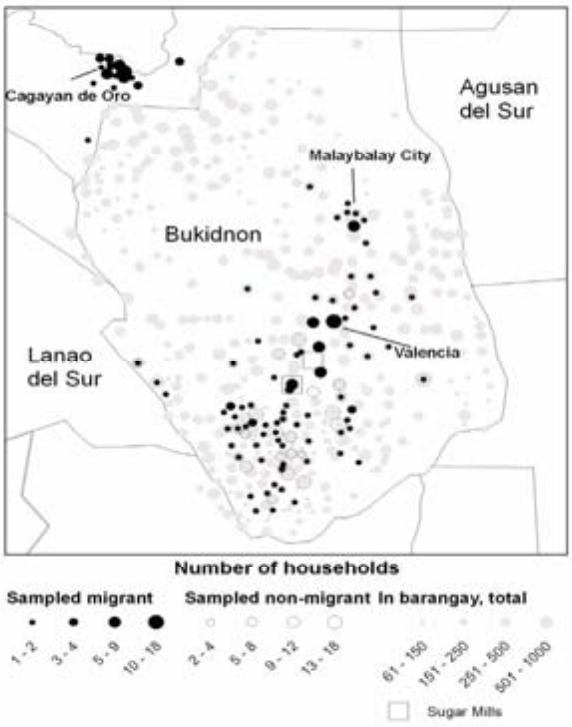
[6] The *barangay* is the smallest local government unit in the Philippines and is similar to a village. Municipalities and cities are composed of *barangays*. Historically, *barangays* are relatively small communities of 50 to 100 families. Most villages have 30 to 100 houses and the population varies from 100 to 500 persons (Wikipedia 2005, http://en.wikipedia.org/wiki/*Barangay*, citing Constantino 1975).

labor were consolidated into larger sugar farms using primarily hired labor; an increase in incomes for households that grew sugarcane; a decline in women's participation in own-farm production; and very little improvement in nutritional status as a result of increased incomes from sugarcane production, primarily because of the high levels of preschooler sickness in the sugarcane-growing households. In 1992, 352 of the original 448 households were reinterviewed in a study focusing on adolescents (Bouis et al. 1998). The 1992 survey included only one round of data collection and used a condensed survey instrument.

Following qualitative studies conducted in the study communities in early 2003, IFPRI and RIMCU returned to conduct two rounds of quantitative data collection using a survey questionnaire that closely reflected the one used in 1984/85. In the first wave of data collection in the fall of 2003, all original respondents still living in the survey area were interviewed, as were two of their children (randomly selected) that formed households in the survey area. The first wave yielded 311 original respondents (61 percent of the original respondents) and 261 households formed by non-coresident children living in the same villages as their parents. The second wave of data collection began in April 2004 and ended in July 2004. In this wave, the survey team interviewed any household formed by children who no longer live in the survey area, based on addresses and phone numbers provided by the original respondents and other family members. This included a large group of households in three major urban areas in Mindanao (Valencia, the commercial center of Bukidnon; Malaybalay, the provincial capital; and Cagayan de Oro in the province of Misamis Oriental, a major port and metropolitan area in northern Mindanao) as well as many households in *poblaciones* and other rural areas of Bukidnon. The sample size from this migrant wave consisted of 257 households—about 75 percent of potential migrants to be interviewed. Figure 2 presents a map of the survey area and the locations of original households, households formed by children in the original *barangays*, and households formed by children who migrated. While budgetary concerns did not allow all children to be followed up, the survey was designed to obtain information on all children, regardless of location. The initial

interview with the parents obtained a basic set of information about all children, including location, educational attainment, and marital status. Obtaining this information from parents, plus assiduous follow-up of migrants and children residing in the community, avoided the common problem of sample selection bias if interviews were based only on residence rules (Rosenzweig 2003).[7]

Figure 2—Sampled child and village household counts



[7] There is evidence suggesting that panel survey rules that condition on residence provide nonrandom subsamples of the baseline households (Thomas, Frankenberg, and Smith 2001; Foster and Rosenzweig 2002). If households do not divide randomly, residence-based sampling rules may bias estimates of economic mobility (Rosenzweig 2003). One important source of selection bias is children's decision to marry and leave the parental home. Only those who remain in their original households are actually resurveyed, making estimates biased because they are based on "stayers." Panel surveys using residence-based interview rules typically exclude both individuals who leave their parental residence, but remain in the same village, as well as those who have migrated to different localities. Studies of migrants also rarely link them back to the original household. There are, of course, exceptions, including the Malaysian Family Life Survey, the Indonesian Family Life Survey, the INCAP-based Human Capital Study, and the Bangladesh Nutrition Survey of 2000, to name a few.

It is important to note that in many residence and gender categories of the Bukidnon survey, the sample size is quite small and thus results must be interpreted as potentially indicative of trends—rather than final conclusions—that warrant further scrutiny.

Characteristics of the Respondents' Children

Tables 1, 2, and 3 present descriptive information on all children of the original respondents, regardless of location. This information was obtained by asking the parents to list all of their children, whether coresident, residing in the same *barangay*, or migrant. In these tables, children are classified into nonmigrants, rural migrants, peri-urban migrants, urban migrants, and overseas migrants based on the addresses given by their parents. The classification in later tables is based on respondents' self-reports so the numbers in each category may differ. In addition, these tables use "peri-urban" as a category (mostly outskirts of metropolitan areas), while surveys of the migrant offspring use "*poblacion*" instead.

Location

Table 1 presents the distribution of children 15 and over of original respondents, based on their current location.[8] About 53 percent of children 15 and over are nonmigrants: of these, two-thirds coreside with parents and one-third live in the same *barangay* but in separate households. A substantially higher proportion of males are nonmigrants (61.8 percent versus 43.5 percent for females), consistent with national trends. The proportion of males coresiding with parents (44.6 percent) is much higher than the proportion of females (24.9 percent). Men have higher coresidence rates not because women marry earlier but because women are more likely than men to migrate as teenagers, with a high proportion of women's migration occurring well before marriage

[8] The cutoff of 15 years old could overstate the "nonmigrant" population because migration may occur more often at an older age, but this age is consistent with other demographic studies. An older cutoff would not change the results substantially.

(Lauby and Stark 1988). Roughly equal percentages of males and females—between 17 to 18 percent—have formed separate households in the same village. Many of these live on a portion of the family farm or homestead that has been allotted to the child upon his or her marriage.

Table 1—Distribution of children age 15 and over of original respondents, by location, 2003

	Males		Females			
Location	Number	Percent	Number	Percent	Total	Percent distribution
Nonmigrants	510	61.8	330	43.5	840	53.1
Coresident with parents	368	44.6	189	24.9	557	35.2
Same *barangay* as parents	142	17.2	141	18.6	283	17.9
Rural migrants	115	13.9	127	16.8	242	15.3
Different *barangay*, rural	81	9.8	95	12.5	176	11.1
Rural Mindanao outside Bukidnon	27	3.3	20	2.6	47	3.0
Rural Philippines outside Mindanao	7	0.8	12	1.6	19	1.2
Peri-urban migrants	41	5.0	66	8.7	107	6.8
Different *barangay*, *poblacion*	37	4.5	59	7.8	96	6.1
Peri–urban, outside Bukidnon	4	0.5	7	0.9	11	0.7
Urban migrants	156	18.9	209	27.6	365	23.1
Urban Bukidnon	24	2.9	31	4.1	55	3.5
Cagayan de Oro	51	6.2	59	7.8	110	6.9
Other urban Mindanao	21	2.5	35	4.6	56	3.5
Urban Philippines outside Mindanao	60	7.3	84	11.1	144	9.1
Abroad	3	0.4	26	3.4	29	1.8
Total	825	100.0	758	100.0	1,583	100.0

Source: Bukidnon Panel Survey, 2003 round.

Approximately 15 percent of all children have migrated to other rural areas—a slightly higher percentage of females than males—and roughly 7 percent have migrated to peri–urban areas, with again, slightly more females than males. Twenty-three percent of the children surveyed have moved to urban areas, with significantly higher migration rates among females. Finally, only 1.8 percent of children have gone abroad, with, yet again, more females than males represented among overseas migrants.

When considering only migrants, an interesting picture emerges. Rural migration in this region of the Philippines is not only to large urban areas. Other rural areas and small towns and cities are major destinations. Of the somewhat less than half who did

move outside their home *barangay*, 36 percent of male migrants and 30 percent of female migrants (32 percent overall) went to other rural areas. Another 29 percent of migrants went to smaller cities and towns rather than to major metropolitan areas (i.e., to peri-urban areas, urban Bukidnon, and other urban aeras in Mindanao). About one-third of the migrants went to the major metropolitan area in the region, Cagayan de Oro, or to large metropolitan areas in the Philippines outside Mindanao, such as Manila or Cebu City.

Civil Status

Since marriage may be an occasion for individuals to leave the parental home, we examine the civil status of children in Table 2. Consistent with Table 1, the majority of coresident males and females are single, although 18.5 percent of coresident females are married, and living in an intergenerationally extended family.[9] Almost all children living in separate households in the same *barangay* are married. The majority of children who have migrated to rural and peri-urban areas are also married, regardless of location. However, the pattern among migrants to urban areas is more diverse. Seventy percent of male migrants to urban centers in Bukidnon are married, in contrast to only 48 percent of female migrants. On the other hand, 60 percent of male migrants to urban Cagayan de Oro are single, while 60 percent of female migrants to this same city are married (the opposite of the male pattern). Male migrants to other cities in Mindanao are almost equally distributed between married and single states, while female migrants are more likely to be married. Similarly, female migrants to other urban areas outside Mindanao are more likely to be married than single, while males are about equally likely to be single or married. Finally, the pattern of international migration for males is opposite that of females, with single females and married males more likely to migrate overseas.

[9] This could also reflect out-of-wedlock childbearing or marital dissolution, both of which are likely to be underestimated in the Philippines. The illegality of divorce, the importance of family cohesion and interpersonal harmony in Philippine society, the child-centeredness of Philippine culture, and an emphasis on the moral propriety of women may lead women without a male partner not to live alone but to reside as a "subfamily" in larger, extended households (Chant 1998).

Typically, single females are likely to be employed as domestic workers, while married males tend to migrate to the Middle East for contractual employment.

Table 2—Civil status of children age 15 and over of original respondents, by location, 2003 (percentage distribution)

	Males			Females		
Location	Single	Married	Separated/ widowed	Single	Married	Separated/ widowed
Nonmigrants						
Coresident with parents	91.0	7.6	1.4	78.3	18.5	3.2
Same *barangay* as parents	2.8	97.2	0.0	2.1	95.7	2.1
Rural migrants						
Different *barangay*, rural	27.2	71.6	1.2	6.3	93.7	0.0
Rural Mindanao outside Bukidnon	44.4	55.6	0.0	20.0	80.0	0.0
Rural Philippines outside Mindanao	28.6	71.4	0.0	0.0	100.0	0.0
Peri-urban migrants						
Different *barangay*, *poblacion*	29.7	70.3	0.0	0.0	100.0	0.0
Peri–urban, outside Bukidnon	25.0	75.0	0.0			
Urban migrants						
Urban Bukidnon	29.2	70.8	0.0	51.6	48.4	0.0
Cagayan de Oro	58.8	41.2	0.0	41.4	58.6	0.0
Other urban Mindanao	47.6	52.4	0.0	42.9	57.1	0.0
Urban Philippines outside Mindanao	51.7	46.7	1.7	35.7	64.3	0.0
Abroad	33.3	66.7	0.0	65.4	34.6	0.0
Total	56.6	42.5	0.9	37.4	61.5	1.2

Source: Bukidnon Panel Survey, 2003 round.

Education

With the exception of the overseas migrants and men in some rural and peri-urban situations, females report higher elementary and high school completion rates than males (Table 3 and Figure 3). This may reflect parental attitudes towards investing in boys' versus girls' schooling, as revealed by ethnographic studies in the same communities (Bouis et al. 1998), but is also consistent with the Philippines' national educational statistics (Quisumbing, Estudillo, and Otsuka 2004). According to the ethnographic studies, parents invest in the schooling of girls because they are "more studious," "patient," "willing to sacrifice," and "interested in their studies," which are traits that would make them succeed in school. On the other hand, boys are more prone to vices

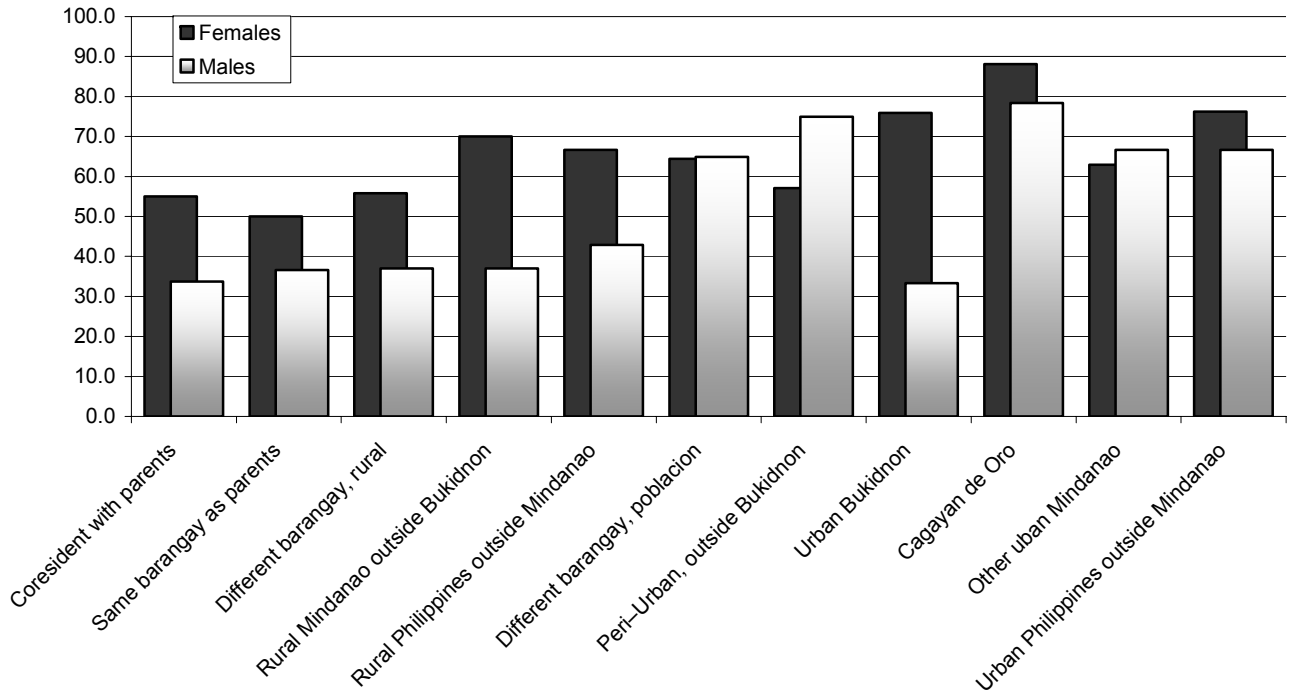
Table 3—Percent completing educational category, children 15 and over, by sex and location, 2003

Location	Males				Females			
	College	Vocational	Secondary	Elementary	College	Vocational	Secondary	Elementary
Nonmigrants								
Coresident with parents	5.7	17.1	33.7	74.7	14.3	33.3	55.0	92.6
Same *barangay* as parents	4.9	17.6	36.6	73.9	7.9	22.9	50.0	86.4
Rural migrants								
Different *barangay*, rural	11.1	23.5	37.0	85.2	13.7	28.4	55.8	85.3
Rural Mindanao outside Bukidnon	14.8 [a]	22.2	37.0	74.1	10.0	15.0	70.0	100.0
Rural Philippines outside Mindanao	28.6	42.9	42.9	71.4	8.3	41.7	66.7	100.0
Peri–Urban migrants								
Different *barangay*, *poblacion*	0.0	18.9	64.9	83.8	15.3	35.6	64.4	94.9
Peri–Urban, outside Bukidnon	25.0 [b]	75.0	75.0	100.0	14.3	42.9	57.1	100.0
Urban migrants								
Urban Bukidnon	8.3	16.7	33.3	79.2	17.2	62.1	75.9	96.6
Cagayan de Oro	21.6	49.0	78.4	92.2	37.3	67.8	88.1	98.3
Other uban Mindanao	4.8	33.3	66.7	95.2	20.0	54.3	62.9	100.0
Urban Philippines outside Mindanao	10.0	31.7	66.7	93.3	19.0	44.0	76.2	91.7
Abroad	100.0 [c]	100.0	100.0	100.0	42.3	73.1	100.0	100.0
Total	8.1	22.3	42.5	79.3	16.6	38.0	63.2	92.2

Source: Bukidnon Panel Survey, 2003 round.

[a] Cell size: 7.
[b] Cell size: 4.
[c] Cell size: 3.

Figure 3—Percent of males and females completing secondary school, children 15 and over, by destination location



(such as drinking), fond of "roaming around" and "playing with their *barkada*" (peer group), and have to be "reminded" and "scolded" to do their schoolwork.

Ninety-three percent of females still living with parents have completed elementary school, whereas only 75 percent of males have done so. Fifty-five percent of daughters living at home have completed high school, compared to only 34 percent of sons. Among rural migrants within Bukidnon, a larger proportion of females have completed secondary school and vocational school, and the percentage of females completing college is slightly higher than males. Migrants to rural areas outside Bukidnon show a similar pattern. However, among migrants to rural areas outside Mindanao, a higher proportion of male migrants have completed college.

Female migrants to *poblaciones* in Bukidnon are somewhat more educated than male migrants, with 15 percent completing college versus zero for men. However, male migrants to *poblaciones* outside Bukidnon have higher secondary, vocational, and college completion rates than females. Female migrants to urban areas are substantially more educated than male migrants, with higher percentages completing college than men. However, all male overseas migrants have completed college, compared to 42 percent of female migrants, who are more likely to have completed vocational school. This reflects the pattern of females migrating overseas to work as domestic helpers, but this result must be taken with caution, owing to the small sample size of overseas migrants.

In sum, just over half of the respondents' children chose to remain in their home *barangay* rather than migrate to another area. However, more female offspring migrated (56.5 percent) than male children (38.2 percent). Very few of the migrants left the Philippines, only 3.4 percent of the daughters and 0.4 percent of the sons. Of those who migrated, approximately half moved to urban areas. Females who moved to other rural and peri-urban locations were usually married, but approximately half of those that went to urban areas and two-thirds of those that left the country were still single. Female migrants to urban and peri-urban locations were at least as well educated, if not better educated than those females who stayed at home or in other rural areas, and, in general, slightly better educated than male migrants.

Migration in Retrospect: Evidence from Migration Histories

We use the 2004 round of the survey to delve more deeply into the experience of migrants. Migrant offspring to rural areas within Bukidnon and nearby neighboring provinces as well as those who moved to *poblaciones* and urban areas were tracked and interviewed between April and July 2004. The survey questionnaire was very similar to that administered to their siblings who had formed separate households within the parents' *barangay*, but included a module that collected a detailed migration history, listing all the places the individual had moved to for at least three months after leaving the parental home. This module obtained information on the reasons for migrating and occupation in each locality. In addition, a more detailed set of questions was asked regarding the first move and, for those who moved more than once, the most recent move. These focused on the type of job search, sources of support, and social networks in the new community. Because we are interested in differences in the migration experience by gender, and also across the rural-urban continuum, the descriptive tables are stratified by location, and by gender within each location. We asked respondents to report what kind of locality they moved to; the classification into rural, urban, and *poblacion* is based on respondents' assessment, not a census definition. As noted above, because the self-classification is based on respondents' assessments, they may not correspond exactly to classifications based on the parents' reports.

The following sections present descriptive statistics on basic demographic characteristics, occupational profiles, reasons for moving, migration support networks, and characteristics of the job search. We make comparisons between the first and most recent moves to discern whether migrant experiences have changed through time. The first move is important because it captures an individual's nest-leaving decision. We note that because the number of moves differs across individuals, when we examine subsequent moves, we are comparing persons at different stages of their life cycle and only those persons who have moved more than once. This group of subsequent movers, then, may be a selected sample. We control for differences in the life-cycle stage later on

in the regression analysis by including age and age-squared when analyzing present location.

Basic Demographic Characteristics

Migrants to rural areas, *poblaciones*, and urban areas are quite different in terms of basic demographic characteristics (Table 4). Female migrants to rural areas and *poblaciones* tend to be a few years younger than male migrants when they leave their parents' household, while there is no perceptible age difference between male and female migrants to urban areas. Across all locations, females achieve higher levels of schooling than males. The schooling gap, however, is smallest among rural migrants.

Table 4—Basic demographic information on migrant children reinterviewed in 2004 round, by destination of first move

	Rural area		*Poblacion*		Urban area	
Characteristic	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**
Number of observations	38	51	19	46	23	55
Age	31.0	29.1	26.4	26.9	29.9	28.9
Years of schooling	8.2	9.2	9.6	11.2	9.4	11.3
Age left parents' household	24.5	22.4	25.5	21.0	24.1	23.7
Size of current household	4.6	4.4	2.9	3.6	3.8	4.0
Civil status						
Percent single	15.8	7.8	15.8	30.4	34.8	25.5
Percent married	84.2	92.2	84.2	69.6	65.2	74.6
Migrant moves						
Mean number of moves	3.0	2.0	2.7	1.9	2.8	1.6
Median number of moves	2.0	1.0	3.0	2.0	2.0	1.0
Moves by the migrant's spouse						
Mean number of moves	1.5	1.8	2.0	1.1	1.8	1.5
Median number of moves	1.0	1.0	2.0	1.0	1.0	1.0
Distance from town center (kilometer)						
First move	11.7	9.0	5.5	11.4	3.4	2.9
Last move	10.0	8.7	0.7	1.6	2.7	2.6

Source: Bukidnon Panel Survey, 2004 round.

Note: Location classifications are based on respondent self- reports.

Similar to other countries, marriage is often an occasion for migration. Eighty-four percent of male and 92 percent of female migrants to rural areas are currently married, and 65 percent of male and 75 percent of female migrants to urban areas are

currently married. Not surprisingly, household sizes in the rural areas are largest, followed by the *poblacion*, and lastly by urban areas.

The migrants interviewed are fairly mobile, with a median number of three moves for males and two moves for females. Thus, while females are more likely to migrate, conditional on migration, males seem to move more often. Spouses appear to be less mobile than the migrants, but this could be due to recall error. Finally, distance to the *poblacion* decreased between the first and last moves, indicating that migrants may be choosing to live closer to areas where basic services are more readily accessible and jobs more available.

To summarize:

- Female migrants migrate at younger ages and have higher schooling attainment than male migrants;
- A high proportion of migrants to rural areas and urban areas are married; and
- Migrants who have moved more than once over time tend to choose to live closer to areas with easier access to public services and employment opportunities.

Occupational Characteristics

Occupations of migrants vary across locations and by gender and also change substantially between the first and most recent moves. Men tend to work in farming, crafts and trades, and manual labor and transportation in both their first (Figure 4) and their most recent (Figure 5) moves[10]. Although a large proportion of first-time migrants are students, few remain in school after their first move. Aside from school, the proportions of men in certain occupations do not change significantly after their first move; farming, crafts and trades, and manual labor and transportation are the most common occupations. In contrast, women who have moved at least twice are more likely to work in housework or childcare and are less likely to be students or work in manual labor and transportation. This change suggests that many women students and women

[10] Figures 4 and 6 show data for migrants who have moved only once. Figures 5 and 7 show data for the most recent move of migrants who have moved more than once.

who work in manual labor and transportation in their first move end up migrating again and working in housework or childcare. It is possible that a subsequent move for these women is for marriage and their husbands become the household's income earners while

Figure 4—Occupation (on first move) of those who have moved only once, by gender

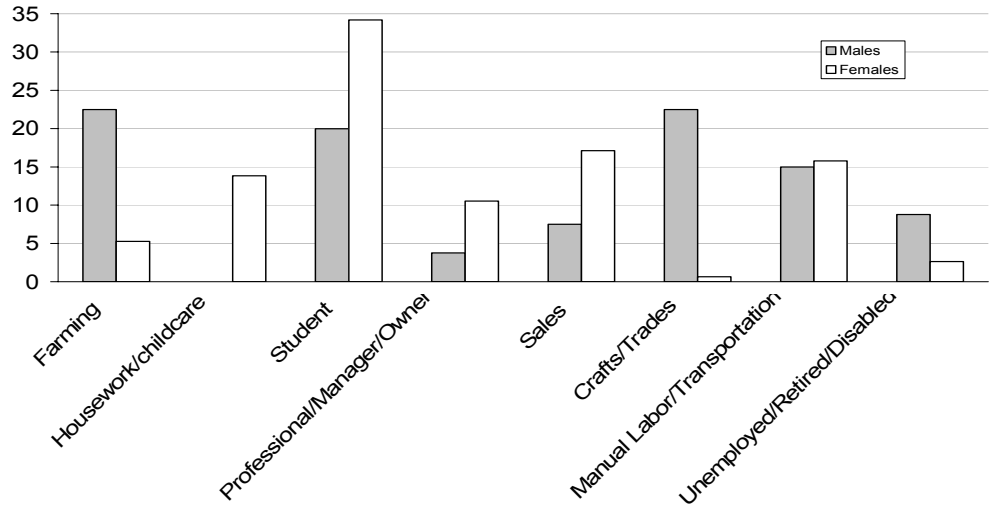
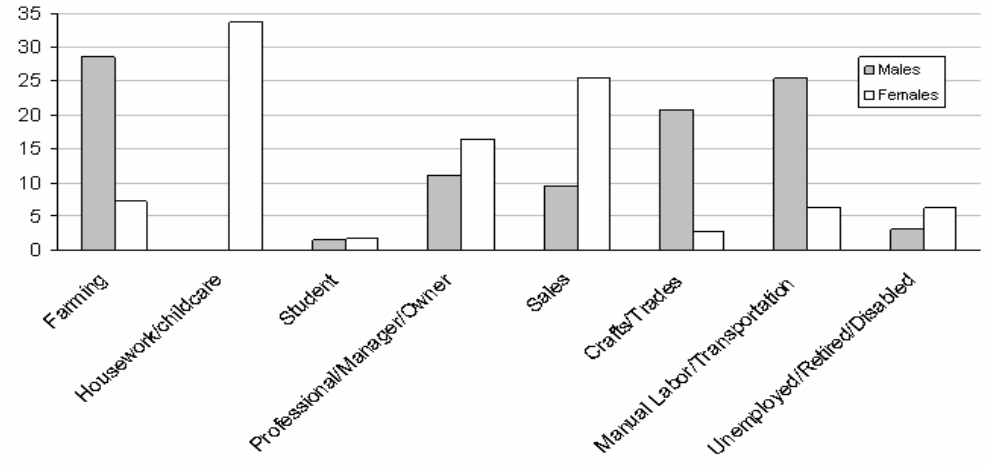


Figure 5—Occupation (most recent move) for those who have moved more than once, by gender



the women transition to reproductive tasks. While further schooling acquired during their first move may delay marriage, most women eventually end up getting married. For example, Demographic and Health Survey data for the Philippines (NSO and ORC Macro 2004) show that while only 9.4 percent of women 15-19 are ever-married, 89.2 percent are ever-married by age 30-34, and 95.5 percent are ever-married by age 45-49.

Since location along the urban-rural continuum affects a migrant's choice of livelihood activities, it is not surprising to see variation in the prevalence of occupations of migrants who have moved only once (Figure 6) and the latest occupation of those who have moved more than once (Figure 7). Farming and housework and childcare are more prevalent in rural areas, while sales, manual labor, and getting an education are more common in urban areas. In particular, among migrants on their first move, there are more students in *poblaciones* and urban areas. However, the proportion of migrants who are students in subsequent moves decreases while the proportion of some occupations

Figure 6—Occupation (first move) of those who have moved only once, by location

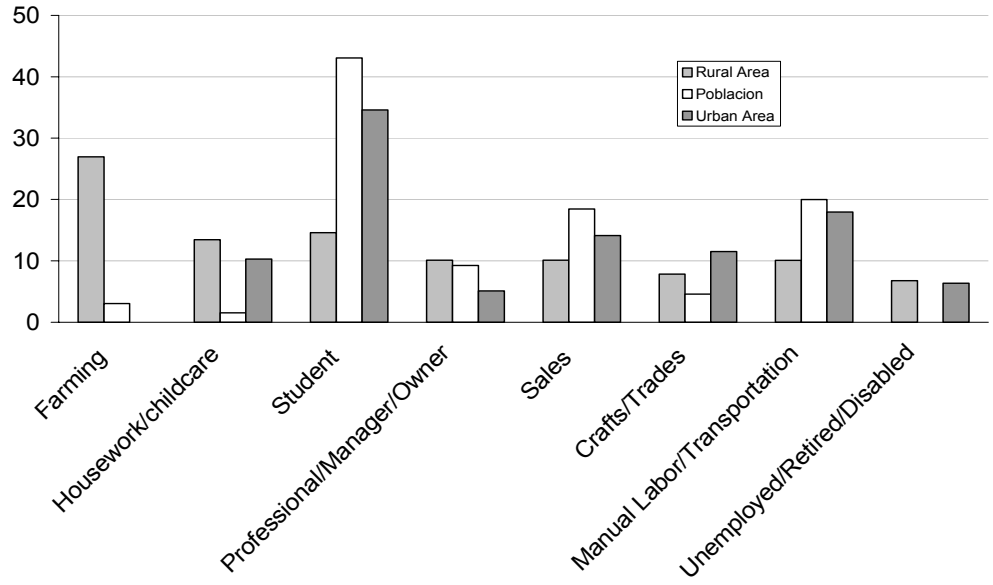
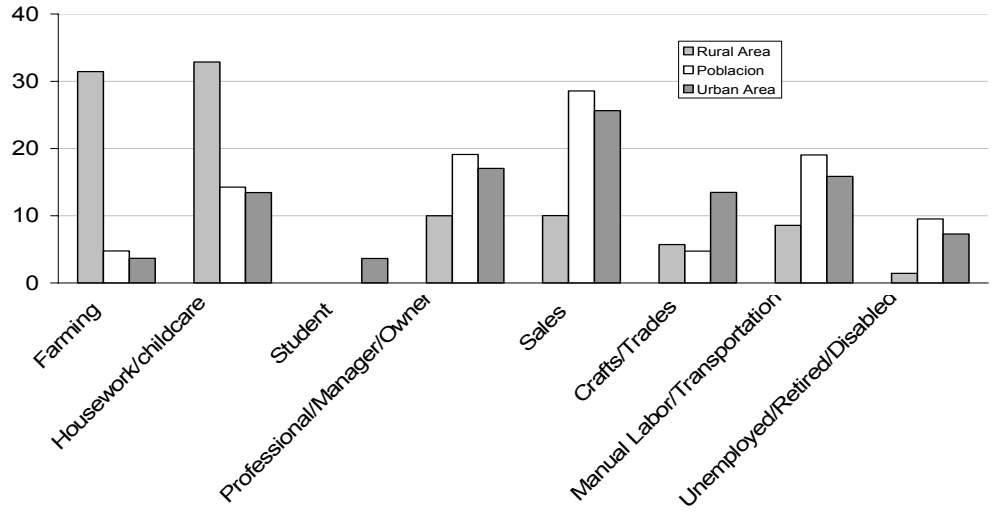


Figure 7—Occupation (most recent move) for those who moved more than once, by location



increases. In rural areas, migrants on their most recent move are farmers or do housework and childcare. In *poblaciones* and urban areas, fewer migrants are students on their subsequent move, while more engage in housework and childcare, are professionals, managers or owners, or work in sales (in *poblaciones*).

In summary:

- Men tend to work in farming, crafts and trades, and manual labor and transportation in both their first and their subsequent moves. In contrast, occupations of female migrants become less diverse in subsequent moves, with one in three females reporting that they are occupied in housework and childcare after their most recent move.
- A high proportion of first-time migrants to *poblaciones* and urban areas are students—particularly women. In rural areas, more migrants on their subsequent move are farmers or do housework and childcare than migrants on their first move. In *poblaciones*, more migrants on their most recent move do housework and childcare, are professionals, managers or owners, or work in sales than

migrants on their first move. In urban areas, more migrants on their most recent move are professionals, managers, or owners than migrants on their first move.

Reasons for Moving

Migrants' reasons for moving differ markedly by destination and by gender (Tables 5 and 6). While most male migrants to rural areas migrate for the first time to start a new job (21percent), or to get married (18 percent), the predominant reason for females to move to a rural area is marriage (35 percent), followed by starting a new job (23 percent) (Table 5). In contrast, both male and female first-time migrants to *poblaciones* and urban areas move either to start a new job or because schools are better

Table 5—Primary reason for moving, by sex and destination, first move (percent)

Reason	Rural area		*Poblacion*		Urban area	
	Males	Females	Males	Females	Males	Females
Number of observations	38	51	19	46	23	55
"Pull factors"	52.7	49.1	73.7	71.8	86.9	65.5
Better schools in destination	7.9	7.8	31.6	32.6	30.4	30.9
Schooling		2				
To start new job in destination	21.1	23.5	36.8	32.6	43.5	25.5
To look for job in destination	13.2	2	5.3		13	9.1
To look for land to cultivate	7.9	9.8				
Acquired property	2.6					
Presence of benefactor for scholarship		2		4.4		
Near current job		2				
Easy access				2.2		
"Push factors"	15.9	11.8	21.2	24	13.1	16.3
No school or poor school at origin	5.3	5.9	5.3	8.7	8.7	10.9
No job in origin	5.3	3.9	5.3	4.4		3.6
Poor job in origin	5.3	2		10.9	4.4	1.8
Escape war/violence			5.3			
Drought/famine/disease			5.3			
Life-cycle or family factors	31.5	39.7	5.3	4.4		18.1
Marriage	18.4	35.3	5.3	4.4		12.7
Moved with household head/household member	2.6	3.9				3.6
Started living independently	2.6					
Vacation [a]	7.9					1.8

Source: Bukidnon Panel Survey, 2004 round.

Notes: Number of observations refer to all migrants who answered this question. Location classifications are based on self-reports.

[a] Some migrants, especially those who attend school in urban areas, return to their homes in rural areas during the summer vacation. The migrant round was conducted during the Philippine summer vacation.

in the destination. Taking into account both "push" and "pull" factors related to education, a greater share of females than males cite schooling as their primary reason for moving to a *poblacion* or urban area.

Reasons for moving are more diverse for the most recent move, reflecting different life-cycle stages as well as the effect of previous moves (Table 6). Combining economic reasons for migration (starting a new job, looking for a job, job loss, and looking for land to cultivate), more males (a combined total of 53 percent) migrate for economic reasons than for life-cycle or family reasons. In contrast, more than half of female migrants to rural areas migrate for family reasons, with marriage accounting for 54 percent of female migrants. The pattern is different in *poblaciones* and urban areas, however. Most male and female migrants to *poblaciones* migrate for economic reasons, such as starting a new job. The next highest percentage of male migrants move for marriage, while schooling is the next most important motivation for female migrants. Economic motives also dominate the most recent move by male migrants to urban areas, while economic and life-cycle motives are equally important for female migrants—30 percent of females move to start a new job or to look for a job, while 27 percent move to urban areas to get married.

Migrants were also asked whether they were planning to move from their present location, and if not, why not. Among those who were not planning to move, rural males cite a variety of reasons for not planning to move, the most important being the presence of friends and family (42 percent), followed by a number of other reasons related to jobs and farming (Table 7). More than 60 percent of rural females, on the other hand, say that the presence of friends and family in the area is the most important reason for not moving to another community—highlighting the importance of social networks for females in rural areas. This is not surprising because females in rural areas are more likely to have moved because of marriage rather than to pursue schooling or better employment opportunities. Equal proportions of males in *poblaciones* mention having a good job and proximity to friends and family as reasons for not moving, whereas half of females in the

Table 6—Primary reason for moving, by sex and destination, most recent move of migrants who moved more than once

Reason	Rural area		*Poblacion*		Urban area	
	Males	Females	Males	Females	Males	Females
Number of observations	36	65	8	27	36	59
"Pull factors"	58.3	33.8	62.5	63	75	55.9
Better schools in destination				7.4	5.6	3.4
Schooling					2.8	
To start new job in destination	27.8	9.2	62.5	33.3	38.9	20.3
To look for job in destination	11.1			11.1	13.9	10.2
To look for land to cultivate	11.1	13.9				
To look for cheaper rent		1.5				
To look for better place to live		1.5				
Acquired property	8.3			7.4	5.6	13.6
Business		1.5		3.7	5.6	
Better salary		1.5				
Near current job		1.5				
Near home					2.8	1.7
Free housing		3.1				3.4
Easy access						3.4
"Push factors"	5.6	4.6	0.0	18.5	11.1	8.5
No school or poor school at origin				7.4		3.4
No job in origin		1.5				
Poor job in origin				7.4	2.8	1.7
Lost previous job	2.8					
High cost of living						1.7
Bankruptcy					2.8	
Didn't like the previous place					2.8	
Far from work	2.8					
Far from basic services				3.7		
Relocation		3.1			2.8	1.7
Life-cycle or family factors	36.1	61.5	*37.5*	*18.5*	13.9	35.6
Marriage	30.6	53.8	37.5	11.1	5.6	27.1
Moved with household head/household member	2.8	6.2		3.7	5.6	3.4
Spouse working here		1.5				
Started living independently	2.8				2.8	1.7
Domestic problems				3.7		
Domestic responsibility						1.7
Vacation						1.7

Source: Bukidnon Panel Survey, 2004 round.

Notes: Number of observations differs from the previous tables because this table refers to migrants who moved more than once and who responded to this question. The distribution across types of places reflects subsequent moves. Location classifications are based on self-reports.

poblacion mention that their primary reason for not moving is having a good job (having friends and family close by is mentioned by a substantially smaller 14 percent). Lastly, both having a good job and proximity to friends and family are the most important reasons that male and female urban migrants are planning to stay, with the order of

importance reversed for males and females. More males cite having a good job as a reason to stay, while more females cite proximity to friends and family. The relative importance accorded to economic and familial factors by males and females is consistent with Smith and Thomas' (1998) findings for Malaysia.

Table 7—Reasons for not moving to another community, migrants who do not intend to move, 2004

Reason	Rural area		*Poblacion*		Urban area	
	Males	Females	Males	Females	Males	Females
Number of valid responses	26	45	7	14	31	52
Positive factors						
Good job here	11.5	20.0	42.9	50.0	38.7	21.2
Good business here				7.1	6.5	5.8
Good opportunities for children here				7.1		9.6
Studying here					3.2	
Married						1.9
Spouse working here		4.4				1.9
Have friends and family here	42.3	62.2		14.3	19.4	30.8
Good job here and have friends and family	11.5	2.2	42.9		12.9	3.9
House/lot owned by family		4.4				7.7
Own house and lot and have friends and family						1.9
Affordable house rental				7.1		
Free housing					6.5	
Favorable climate for farming	3.9					
Near the city	3.9			7.1		
Near farm	7.7	2.2				
Started planting corn in a free use land					3.2	
Negative factors						
Afraid of not finding job elsewhere	15.4	4.4	14.3	7.1	3.2	7.7
Don't know anyone elsewhere	3.9				6.4	5.8
No available place to transfer						1.9

Source: Bukidnon Panel Survey, 2004 round.

Note: Locations refer to migrants' current location; classification is based on self-reports.

To summarize:

- More males migrate to rural areas for economic reasons than for family or life-cycle reasons; the reverse is true for females. Most male and females migrate to *poblaciones* for economic reasons. While males migrate to urban areas for economic reasons, both economic and family reasons are equally important for females.

- The majority of female migrants to rural areas and a plurality of males cite the presence of family and friends as their primary reason for not wanting to move again; in *poblaciones* and urban areas, the proximity to friends and family and having a good job are important factors for both male and female migrants who choose to stay put.

Migration Support Networks

Support networks play different roles depending on the migrant's destination. For the first move (Table 8), over 50 percent of male migrants to all destinations in this survey moved alone. About 25 percent of males moving to *poblaciones* moved with

Table 8—Networks and support for the first move, by destination location and sex (percent)

Type of network/support	Rural area		*Poblacion*		Urban area	
	Males	Females	Males	Females	Males	Females
Number of observations	38	51	19	46	23	55
Company in moving to new community						
Alone	52.6	39.2	52.6	58.7	56.5	47.3
Parents	2.6	2.0	5.3		4.4	
Siblings	5.3	2.0		13.0	4.4	12.7
Spouse/fiancé	10.5	29.4	5.3	4.4		9.1
Children	7.9	15.7	5.3	2.2		3.6
Other relative	10.5	9.8	5.3	10.9	21.7	16.4
People from place of birth	5.3	2.0	26.3	10.9	13.1	9.1
Acquaintances	5.3					1.8
Persons lived with in new community						
Nobody	18.4	25.5	26.3	19.6	17.4	12.7
Parents	2.6				4.4	7.3
Siblings	2.6	5.9	5.3	10.9	30.4	3.6
Spouse/fiancé	2.6	13.7		4.4		12.7
In-laws	10.5	7.8				
Other relative	47.4	25.5	47.4	37.0	43.5	41.8
People from place of birth	2.6	2.0		6.5		1.8
Other acquaintances	5.3	7.8	5.3	4.4	4.4	1.8
Employer	5.3	11.8	5.3	15.2		16.4
Stranger	2.6		10.5	2.2		1.8
Financial support for moving expenses						
No one/own savings	29.0	31.4	31.6	8.7	21.7	20.0
Parents	39.5	25.5	57.9	65.2	52.2	50.9
Siblings	2.6	5.9	5.3	10.9	13.0	10.9
Spouse/fiancé		13.7		2.2		3.6
In-laws	2.6	3.9				
Other relatives	23.7	7.8	5.3	4.4	13.0	3.6
People from place of birth	2.6	2.0				
Employer		9.8		8.7		10.9

Source: Bukidnon Panel Survey, 2004 round.

people from their place of birth, and 22 percent of those moving to urban areas were accompanied by relatives. While 39 percent of female migrants to rural areas also noted that they moved alone, 29 percent said they moved with their spouse or fiancé, consistent with the high proportion of women moving to rural areas because of marriage. This number increases to 45 percent if we include the additional 16 percent that moved with children in tow. In contrast, 59 percent of women moving to *poblaciones*, and 47 percent of women moving to urban areas, moved alone. Upon arrival in the new community, a large proportion (25 to 47 percent) of all first-time movers lived with relatives other than immediate family members. Another 30 percent of male migrants to urban areas lived with their siblings, probably reflecting a practice whereby children going to school rent an apartment jointly. First-time migration, particularly to *poblacion* and urban areas, is also predominantly financed by migrants' parents.

Support patterns for subsequent moves are markedly different from the first (Table 9). More than 70 percent of male and 85 percent of female migrants to rural areas made this move with their spouses—many accompanied by children as well. Fifty percent of females now moving to the *poblacion* moved with their spouse, with children accompanying them half the time. Additionally, 50 percent of male and female migrants to urban areas moved this time with spouses and often children. In contrast, about 70 percent of male migrants to *poblaciones* tended to make their subsequent move alone; only 28 percent moved with their families. This could reflect men's moving to the *poblacion* for work, commuting on weekends to the nearby rural area to visit their families. Probably reflecting accumulated wealth or experience, most migrants did not live with other people in their most recent move, with the exception of spouses (in the case where families moved together). About a quarter of migrants to rural areas, both male and female, lived with their in-laws.

While first-time movers typically rely on family and friends for financial support while looking for work in their new community, most subsequent moves tend to be self-

Table 9—Networks and support for the most recent move for migrants who moved more than once, by location and sex (percent)

Type of network/support	Rural area		*Poblacion*		Urban area	
	Males	Females	Males	Females	Males	Females
Number of valid responses	25	45	7	14	31	50
Company in moving to new community						
Alone	24	13.3	71.4	42.7	35.5	37.2
Siblings						2
Spouse/fiancé	52	48.9	14.3	35.7	12.9	27.4
Children/spouse/fiancé	20	35.6	14.3	14.3	38.7	25.5
Other relative	4			7.1	6.4	5.9
People from place of birth		2.2			6.4	2
Persons lived with in new community						
Nobody	56	35.6	42.9	35.7	41.9	25.5
Parents		2.2				3.9
Siblings					9.7	3.9
Spouse/fiancé	12	15.6	28.8	14.3	9.7	29.4
Children/spouse/fiancé		2.2			6.5	
In-laws	24	26.7		7.1	6.5	
Other relative	8	13.3		14.3	6.5	7.8
People from place of birth				7.1		1.7
Other acquaintances			14.3	7.1	9.7	19.6
Employer			14.3	14.3	3.2	7.8
Stranger		4.4			3.2	
Financial support for moving expenses						
No one/own savings	64	44.4	71.4	28.6	77.4	47.1
Parents	12	8.9	14.3	35.7	6.4	11.8
Sibling	4	8.9				5.9
Spouse	4	17.8	14.3	14.3	6.4	25.5
In-laws	12	11.1				2
Other relatives		6.7		7.1		
People from place of birth	4				3.2	
Employer		2.2		14.3	6.4	7.8

Source: Bukidnon Panel Survey, 2004 round.

financed. Tables 10 and 11 present information regarding the job search of migrants in their first and most recent move, respectively. Owing to the small sample sizes in some of the categories, these patterns are merely indicative and cannot direct us to particular conclusions. Nonetheless, our data demonstrate that first-time migrants to rural areas and to urban areas relied on family and friends they lived with while looking for a job, while male migrants to the *poblacion* relied on their own savings. Female migrants to the *poblacion* relied on family and friends from their previous place of residence, yet "own-savings" for females in rural areas and support from "those in previous residence" is also significant.

Table 10—Characteristics of the job search after the first move, by location and sex (percent)

	Rural area		*Poblacion*		Urban area	
	Males	Females	Males	Females	Males	Females
Number of valid responses	27	34	11	30	16	37
Source of support while looking for a job in new community						
Own savings	18.5	26.5	27.3	10.0	18.8	8.1
Family/friends lived with	33.3	38.2	18.2	23.3	50.0	43.2
Family/friends in previous place of residence	33.3	23.5	18.2	53.3	31.3	37.8
Other family/friends	14.8	5.9	18.2	6.7		5.4
Employer (free food/house)		2.9		6.7		2.7
Own savings and lived with family/friends		2.9				
Family and friends lived with and in previous place			9.1			
Menial work/begging			9.1			2.7
How did you look for a job in the new community						
Own search before moving	20.0	34.5	18.2	32.1	6.7	11.5
Arranged by family	20.0	3.5	27.3	28.6	6.7	15.4
Arranged by friends	20.0	37.9	27.3	10.7	26.7	34.6
Own search after moving	36.7	17.2	9.1	17.9	53.3	34.6
Arranged by relatives	3.3	3.5	18.2	7.1	6.7	3.9
Other		3.5				
Selected by employer				3.6		

Source: Bukidnon Panel Survey, 2004 round.

Table 11—Characteristics of the job search after the most recent move, by location and sex (percent)

	Rural area		*Poblacion*		Urban area	
	Males	Females	Males	Females	Males	Females
Number of valid responses	16	34	4	9	23	36
Source of support while looking for a job in new community						
Own savings	68.8	47.1	50.0	44.4	78.3	30.6
Family/friends lived with	31.2	38.2	50.0	33.3	8.7	55.6
Family/friends in previous place of residence		5.9		11.1	4.4	8.3
Other family/friends		5.9		11.1	8.7	
Own savings and lived with family/friends		2.9				
Menial work/begging						2.8
Own savings and menial work						2.8
How did you look for a job in the new community						
Own search before moving	19.0	30.0	33.3	20.0	44.4	20.7
Arranged by family	4.8	10.0		20.0	14.8	24.1
Arranged by friends	23.8	20.0	33.3	20.0	7.4	3.5
Own search after moving	38.1	40.0	33.3	40.0	25.9	44.8
Arranged by relatives	9.5				3.7	3.5
Selected by employer	4.8				3.7	3.5

Source: Bukidnon Panel Survey, 2004 round.

In contrast to the first time they moved, subsequent migrants to all areas, particularly males but females as well, were more likely to be able to support themselves while looking for work (Table 11). Self-finance and being supported by coresident family/friends are also the most important categories of support reported by female migrants to the *poblacion* (44 percent and 33 percent, respectively, in their most recent move, with 22 percent receiving support from non-coresident family and friends. Seventy-eight percent of male migrants to urban areas who moved more than once said that they supported themselves in their most recent move, while 56 percent of female migrants said they received support from family and friends for their most recent move.

The Job Search

First-time male migrants to rural areas found jobs by doing their own search after moving, while female migrants to rural areas either had jobs arranged by friends, or looked for a job prior to moving. The majority of male and substantial numbers of female migrants to *poblaciones* found jobs that were arranged by family and friends; yet many women—more so than men—did their own search for employment. In contrast, half of male migrants to urban areas searched for jobs after moving, and a quarter found jobs through friends. About 35 percent of female migrants to urban areas found jobs by themselves after moving, and an equal percentage found jobs through their friends.

For subsequent moves, migrants were less dependent on friends and relatives to arrange for their employment in the new locale, and were in a somewhat better position to conduct their own job search. In this case, almost 60 percent of men and 70 percent of women heading to rural destinations did their own search (versus 29 percent and 30 percent, respectively, that had help from family and friends). Seventy percent of men and 65 percent of women did their own search for urban employment. Interestingly, on subsequent moves to urban areas, male migrants are more much more likely to move *after* they have found a new job rather than to embark on the move and then look for work, which is usually the case on their first move.

To summarize the latter two sections:

- First-time moves are more likely to be financed by parents, and the migrant is more likely to be moving alone. Subsequent moves are more likely to involve a spouse and, possibly, children, and are more likely to be self-financed.
- Social networks can be more important for the first move than for subsequent moves, which to some destinations are more likely now to be self-financed. Subsequent job searches also rely less on social networks than first moves.

3. Modeling the Location Decision

Empirical Specification

We also looked at the determinants of a child's present location, bearing in mind that this decision was likely to have been both an individual and family decision. Regression analysis allows us to control simultaneously for individual, household, and locational characteristics that may influence an individual's migration decision.

We estimate multinomial logit regressions on the following choices of location: (1) child resides in the same *barangay* as the parents, but in a separate household; or (2) child migrates to another rural area; or (3) child migrates to a *poblacion*, peri-urban area, or an urban area.[11] The omitted category is coresidence with the parents. Given the striking gender differences in migration patterns, we estimate separate regressions for males and females. One issue in estimating migration models is the time period to which the independent variables refer. Typically, a migrant is observed at a given point in time, with the migration decision having been made in the past. Using current values of the independent variables would not provide an accurate picture of the period in which the decision was made. We therefore use variables that refer to conditions prevailing when the individual was age 15, most of which were obtained from the 1984/85 and 1992 data.

[11] Since only 5 percent of males and 9 percent of females migrated to *poblaciones* and peri-urban areas, it was difficult to obtain reliable estimates when *poblaciones* and peri-urban locations were treated as a separate category. Category (3) thus includes all three categories.

The probability of choosing location *i* can be expressed as

Probability (location *i*) = *f*(Individual characteristics, Parent characteristics, Sibling composition, Household assets, Type of origin locality, Village dummies).

Individual characteristics. Individual characteristics that influence the choice of location are the individual's stage in the life cycle and human capital. Various studies have shown that migration is inversely related to a person's age (Lanzona 1998). Younger people, who have a longer lifetime to capture the benefits of migration, are more likely to move. We control for life-cycle effects using age and age-squared. We use educational attainment as a proxy for individual human capital. However, because young people are most likely to migrate to go to school, current educational attainment could also be endogenous to the migration decision. To avoid the endogeneity of schooling to the migration decision, we would have used educational attainment at age 15 in the regressions. However, we only have this information for the children who were followed up, not all children. To avoid losing observations, we use two dummy variables: (1) whether the child completed high school; and (2) whether the child completed elementary but not high school.

We do not include marital status in the regressions because marriage and the decision to migrate may be codetermined, and thus marital status would be endogenous. Individuals generally do not marry unless they have the ability to establish their own household (Lanzona 1998) whether through their own or parental resources. Also, in societies where extended families are common, the correlation between marriage and the decision to leave home is low. In the rural Philippines, newlyweds may live with the parents for a few years, moving out when they have the resources to build their own house.

Parental characteristics. Parents' years of schooling can affect the child's decision to migrate in two ways (Mincer 1978; Lanzona 1998). First, these variables capture unobserved family background effects that can affect the child's locational

decision. Households with better-educated parents are better able to acquire information about the range of possible options in various localities and so induce greater migration. Second, these variables can also be correlated with various assets, such as social networks and family connections, that can lead to greater self-employment activities or leisure, or, conversely, can facilitate job search in the new locale. Following a literature on the collective model of the household (e.g., Thomas 1990, 1994; Schultz 1990; Quisumbing 1994), we include both father's and mother's schooling in the regression, since it is possible that mother's and father's schooling can have differential effects on the migration decision.

Sibling composition. Studies of educational attainment of siblings have shown that the gender composition of one's siblings may affect an individual's educational attainment, depending on whether sibling rivalry exists (Butcher and Case 1994; Garg and Morduch 1998a, 1998b; Morduch 2000). In Ghana, for example, the number of brothers negatively affects one's educational attainment, while the number of sisters has no effect. Gender-differentiated inheritance patterns and expectations of old age support may affect an individual's probability of migration. In the Philippines, both sons and daughters have equal rights to inherit owned (titled) land. Tenancy rights, however, are typically inherited by sons, who are less likely to migrate than females. Moreover, if parents compensate their daughters using increased educational investment, they may be more likely to migrate in search of nonagricultural employment (Estudillo, Quisumbing, and Otsuka 2001). Field interviews in the survey communities indicate, however, that while parents may have preferred to give land to sons in the past, parents now give land to whoever will use it, owing to the high outmigration rates in the study communities. However, such land is typically not deeded over to the child; parents who own land prefer to keep ownership in their name to prevent the children from mortgaging the land and going into debt.

Asset position. We use two indicators of the household's asset position that may affect the probability of migration. One is the area of owned land that was cultivated by the parents in 1984/85. Children from families owning more land per capita would be less likely to migrate as they are more likely to inherit and farm this land in the future. The other indicator of wealth is the value of nonland assets, which is likely to reduce the probability of migration owing to greater self-employment activities in the parental farm or family business. While agriculture continues to be the main activity of most of our survey households, the survey area has witnessed the growth of many small nonagricultural enterprises, such as farm machinery and agricultural processing.

Distance to facilities. Long distances from facilities and public services may induce individuals to move closer to urban areas or *poblaciones*. To capture household access to public services, we use three variables, defined as of 1984, when the sample was entirely rural: (1) distance from the household to the *poblacion*; (2) travel time in minutes to the nearest hospital; and (3) distance in kilometers to the BUSCO sugar mill. Distance to the *poblacion* is a good proxy for access to services as well as job opportunities because most publicly provided services and commercial establishments would be present in the *poblacion*. While all of the survey *barangays* would have elementary schools, for example, typically the public high school would be located in the *poblacion*. Transport and communications facilities would also be present in the *poblacion*, making it similar in function to a peri–urban area or small town.

Municipality dummies. Finally, the regressions contain dummy variables to control for unobserved municipality-specific effects.[12] These include, for example, differences in the availability of local employment conditions across municipalities.

[12] We did not use village dummies because they would be highly collinear with the variables capturing distance to facilities, even if these were measured at the household level.

Means[13] of the variables used in the regressions are presented in Table 12, together with tests of differences between males and females. We can see that males are significantly more likely to coreside with parents, whereas females are significantly more likely to migrate to a *poblacion*, peri–urban area or an urban area. Males and females are equally likely to reside in the same village as their parents or to migrate to a rural area. Males and females are not significantly different in terms of their family background characteristics. However, females are significantly more likely to have finished high school.

Table 12—Means of variables used in regression analysis

	Males Mean	Females Mean	Wald Test of differences (p-value)
Dependent variables (0/1)			
Coresiding with parents	0.42	0.29	**0.00**
Residing in the same village as parents	0.19	0.19	0.93
Migrating to rural area	0.15	0.18	0.14
Migrating to a peri-urban area	0.05	0.08	**0.04**
Migrating to urban area	0.20	0.27	**0.01**
Migrating to a peri-urban or urban area	0.24	0.35	**0.00**
Regressors			
Child characteristics			
Age	25.52	25.79	0.55
Elementary school completion, but not high school [a]	0.37	0.32	0.19
High school completion [a]	0.43	0.60	**0.00**
Household characteristics			
Father's education	5.34	5.30	0.81
Mother's education	5.84	5.87	0.86
Area of owned land cultivated in 1984/85 (hectares)	1.07	1.15	0.33
Value of nonland assets in 1984/85 (thousand pesos)	457	505	0.25
Sibling composition			
Number of younger brothers	1.80	1.89	0.57
Number of younger sisters	1.73	1.87	0.27
Number of older brothers	1.25	1.26	0.90
Number of older sisters	1.37	1.32	0.58
Location			
Distance to *poblacion* (kilometers)	4.33	4.44	0.61
Time to hospital (minutes)	63.70	59.24	0.14
Distance to BUSCO Sugar Mill (kilometers)	25.04	24.15	0.22
Number of observations	863	782	

Notes: Means are weighted, clustered means computed using weights described in the text. P-values in bold are significant at 10 percent or better.

[a] Dummy variable taking values 0 or 1.

[13] They are computed with weights that take into account the original sample design (McNiven and Gilligan 2005); they also control for sibling effects.

Results

Table 13 shows marginal effects computed from weighted multinomial logit regressions on children's location decisions. Marginal effects are the change in the dependent variable (the probability of being in a particular location) resulting from a one unit change in the independent variable. Comparisons of marginal effects allow us to discern the relative strength of the influence of the independent variables, over and above knowing the direction of their influence. We also interpret these results taking the Filipino cultural context into account.

Filipino children typically live at home until they marry, unless they migrate for schooling or work to another location. Not surprisingly, for both males and females, growing older significantly reduces the probability of living at home. For males, completing high school significantly reduces the probability of coresiding with parents. Males with more older brothers are also more likely to be living at home, whereas males with more younger sisters are less likely to be living at home. Females with more older sisters are also more likely to be living at home. This may reflect the sequential nest-leaving decision of siblings, with the oldest moving out first, as well as the assignment of tasks by gender, with "similar siblings" acting as substitutes (Smith and Thomas 1998). Living farther from the *poblacion* reduces the probability that daughters coreside with parents, probably because daughters would move to seek a better education or to look for work. Distance from the sugar mill, however, increases the probability that daughters live with their parents. Households located further from the sugar mill may be more inaccessible, in general, than those located closer.

The next location category refers to living in the same village as parents, but in a separate household. This transition typically occurs at the time of marriage, when parents will allot a portion of the homestead to their newly married son or daughter. Parents also typically provide a portion of their land for their sons to farm; if their daughter marries a man who has no land, they may also provide land to their daughter. With married sons

Table 13—Determinants of migration of children age 15 and over, Bukidnon

Multinomial logit estimates, marginal effects by outcome
Regressions include correction for sampling design and attrition; standard errors account for clustering within households.

	Marginal effects on the probability of:							
	Coresiding with parents				Residing in the same village as parents			
	Males		Females		Males		Females	
Regressors	**dy/dx**	**z**	**dy/dx**	**z**	**dy/dx**	**z**	**dy/dx**	**z**
Child characteristic								
Age	-0.134	**-4.66**	-0.149	**-4.27**	0.057	**2.54**	0.062	**2.63**
Age squared	0.002	**3.57**	0.002	**3.97**	-0.001	**-1.81**	-0.001	**-2.32**
Elementary school completion [a]	-0.110	-1.28	0.117	0.81	0.004	0.06	-0.007	-0.11
High school completion [a]	-0.344	**-4.16**	0.084	0.68	-0.044	-0.81	-0.119	-1.52
Household characteristics								
Father's education	0.019	1.56	0.004	0.34	-0.003	-0.38	-0.027	**-3.58**
Mother's education	0.009	0.57	0.006	0.42	0.002	0.17	0.015	**1.82**
Area of own land cultivated in 1984/85	0.005	0.29	-0.013	-0.88	0.012	1.37	0.015	1.52
Value of nonland assets in 1984/85	0.000	-0.20	0.000	**2.90**	0.000	**1.74**	0.000	1.03
Sibling composition								
Number of younger brothers	-0.001	-0.03	-0.003	-0.12	-0.015	-1.13	-0.019	-1.32
Number of younger sisters	-0.040	**-1.86**	-0.038	-1.58	0.028	**1.87**	0.017	1.24
Number of older brothers	0.052	**2.21**	-0.038	-1.57	-0.038	**-2.52**	-0.020	-0.94
Number of older sisters	-0.011	-0.50	0.043	**2.19**	0.004	0.27	-0.051	**-2.68**
Distance from household								
Distance to *poblacion* (kilometers)	-0.005	-0.39	-0.024	**-1.83**	0.001	0.12	-0.003	-0.44
Travel time to nearest hospital in 1984 (minutes)	-0.001	-0.82	-0.001	-0.52	0.000	-0.68	0.000	1.00
Distance to nearest sugar mill (kilometers)	0.003	0.51	0.011	**2.08**	0.002	0.33	0.006	**1.90**
Actual probability	0.51		0.43		0.16		0.15	
Predicted probability	0.47		0.27		0.14		0.15	
	Migrating to a rural area				Migrating to a peri-urban or urban area			
Child characteristic								
Age	0.018	0.03	-0.003	-0.14	0.038	**1.76**	0.091	**2.81**
Age squared	0.000	0.09	0.000	0.29	0.000	-1.38	-0.002	**-2.79**
Elementary school completion [a]	0.051	0.64	-0.058	-0.95	0.130	1.40	-0.051	-0.50
High school completion [a]	0.042	0.10	-0.052	-0.70	0.458	**5.76**	0.087	0.89
Household characteristics								
Father's education	0.008	0.37	0.001	0.11	-0.024	**-2.38**	0.022	**1.85**
Mother's education	0.009	0.32	-0.038	**-3.57**	-0.001	-0.11	0.017	1.15
Area of own land cultivated in 1984/85	0.009	0.07	0.005	0.40	-0.033	**-2.30**	-0.008	-0.48
Value of nonland assets in 1984/85	0.000	0.13	0.000	-1.51	0.000	0.70	0.000	-1.28
Sibling composition								
Number of younger brothers	0.014	0.13	0.018	1.10	-0.005	-0.30	0.003	0.16
Number of younger sisters	0.013	0.19	0.015	1.17	0.029	1.64	0.005	0.24
Number of older brothers	0.015	0.92	0.015	1.01	-0.015	-0.67	0.043	**2.10**
Number of older sisters	0.014	0.42	-0.044	**-2.71**	0.019	1.13	0.052	**2.55**
Distance from household								
Distance to *poblacion* (kilometers)	0.007	0.15	0.017	**1.99**	-0.005	-0.42	0.010	0.88
Travel time to nearest hospital in 1984 (minutes)	0.000	0.21	-0.001	-0.82	0.000	0.78	0.001	1.01
Distance to nearest sugar mill (kilometers)	0.003	0.62	-0.006	-1.46	-0.003	-0.63	-0.011	**-1.97**
Actual probability	0.13		0.14		0.20		0.28	
Predicted probability	0.14		0.19		0.25		0.39	

Note: z-statistics in bold are significant at 10 percent or better.
[a] Dummy variable taking values 0 or 1.

and daughters living on the same homestead, Filipino farm family structure can be described as residentially nuclear, but functionally extended. Life-cycle factors (age and age-squared) have significant effects on both sons' and daughters' decisions to form separate households.

Family background characteristics affect sons and daughters in different ways. A daughter whose father is more educated is less likely to live in the same village, while a better-educated mother weakly increases the probability that the daughter lives in the same village. This difference may arise from complementarity of parent-child roles: if gender-casting is important (say, if fathers work with sons and mothers with daughters), or if mothers' productivity improves from having better-educated daughters nearby, the incentive for daughters to migrate may be lower if mothers complete more schooling. The value of non-land assets owned by parents increases the probability that sons live in the same village, perhaps because non-land assets increase opportunities for self-employment. The number of older brothers reduces the probability that a son will live in the same village as the parents, probably because land will have been partitioned to older sons first, leaving less to the younger son. Females with more older sisters are also less likely to live in the same village. While distance to the sugar mill increases the probability that daughters live in the same village, it does not affect sons' decisions. Indeed, none of the distance variables affect any of the sons' locational decisions.

None of the explanatory variables significantly affect sons' decisions to move to other rural areas. In contrast, a number of factors are important in daughters' decisions to relocate to other rural areas. Daughters are less likely to move to other rural areas if their mothers are better-educated. Daughters with more older sisters are also less likely to move to other rural areas. This is consistent with mother-daughter skill complementarity and may also suggest complementarity with sisters' skills. Interestingly, living farther away from the town increases girls' probability of moving to other rural areas.

Finally, we examine the determinants of the decision to migrate to a *poblacion* or an urban area. Life-cycle effects are strong for females, with marginal effects that are thrice those for males. Surprisingly, schooling is important only in males' decisions to

migrate to urban areas. Given that women already have higher levels of schooling than males, *additional* schooling probably does not increase the female propensity to migrate to urban areas. Female migrants to urban areas are employed in a variety of occupations, not all of which require higher levels of schooling. Family composition affects women's decisions to move to urban areas more than men's. Having more older brothers and sisters increases the probability that a woman migrates to a *poblacion* or urban area. It is possible that older brothers and sisters may have moved earlier to urban areas or entered the labor force earlier, providing support networks or financial resources for a younger sister's move. Distance to the the *poblacion* or travel time to the hospital does not affect the probability of migration, but greater distance from the sugar mill reduces daughters' migration probabilities.

4. Conclusions

This preliminary exploration into the migration decisions of young Filipino adults has shown that as destinations, *poblaciones* and urban areas are very similar. Migrants to *poblaciones* and urban areas have very similar reasons for moving. If *poblaciones* and peri-urban areas can offer comparable services to migrants from rural areas, they may be able to relieve congestion in major metropolitan centers like Cagayan de Oro and Metropolitan Manila. However, the occupational profile of migrants to both areas indicates that females seem to fare better than males—perhaps because female migrants to urban areas are often better-educated than male migrants. The implications of gender differences in initial endowments and in migration streams need further investigation.

This paper has also highlighted the important role of social networks for migrants, particularly for the first move. While most first-time migrants move alone, they are most often financed by their parents and live with relatives in their new community. Later on, migrants increasingly self-finance their moves, and live with their families of procreation. Familial networks are thus very important for helping a migrant get settled into a new community.

Lastly, we have found that rural areas, *poblaciones*, and urban areas systematically attract different types of migrants. *Poblaciones* and urban areas attract better-schooled individuals, partly because young people move to those areas to further their education, or because better-educated individuals move to these areas to find better jobs. Migrants to rural areas, on the other hand, move primarily to take up farming or to get married. Thus, it is no surprise the rural migrants, as well as those who opt to stay in rural areas, are less educated than migrants to urban areas and peri-urban areas.

Does outmigration from rural areas thus constitute a "brain drain" that needs to be stopped? Not necessarily. If migrants are able to find better jobs in urban and peri–urban areas or *poblaciones*, and send remittances to their origin families, then migration is welfare- improving for those who have stayed behind. However, the occupational profile of migrants to these less-rural areas is quite diverse. A large proportion of male migrants to more urbanized areas end up in manual labor/transportation work or crafts and trades, which are not high-earning occupations. Female migrants to *poblaciones*, peri–urban, and urban areas may fare better. A large proportion of female migrants to *poblaciones* end up working in sales occupations, while, compared to male migrants, a greater proportion of female migrants to urban areas have professional and managerial jobs. Clearly, many migrants are unable to fulfill their hopes and dreams. But this paper does not attempt to answer whether migration is welfare-improving for the migrant or the family he (or more likely she) left behind. In further work, we will examine this question and look at whether migration is a strategy that families use to escape poverty, bearing in mind that migration and education are both individual and family decisions.

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