Poor parents, rich children: the role of schooling, nonfarm work, and migration in rural Philippines

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This paper explores how migration to local towns, big cities, and overseas has halted the transmission of poverty from parents to children in rural Philippines. Parents' income has come mainly from agricultural sources while children's income has come largely from nonfarm sources. Initially, poverty is higher among the landless households. Children from poor landless households are able to find their way out of poverty by acquiring more education, participating in rural nonfarm labor market, and migrating to big cities, local towns, and overseas. Migrant children have higher total income coming mainly from nonfarm income, which is significantly affected by education. In brief, this study demonstrates the rise in economic importance of education and the decline in economic importance of farmland in explaining economic mobility.

1. Introduction

The international community has committed to reduce poverty since world leaders from 189 countries signed the Millennium Development Goals (MDGs) in September 2000. The United Nations [UN, 2013] has reported that Goal 1, Target 1 of the MDGs—"Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day"—has been achieved 5 years ahead of 2015. The proportion of people living on less than $1.25 a day fell from 47 percent in 1990 to 22 percent in 2010, but 1.2 billion people still live in extreme poverty.

About 70 percent of the world's poor live in rural areas, and a large proportion of them are children and young people [IFAD, 2011]. This fact raises the question

of whether poverty and inequality are being transmitted across generations in the rural areas of the developing world. A grandmother's favorite bedtime story to young kids, "a poor man's child becomes rich", emphasizes the thrift, initiative, and enterprise of the poor man. Yet success hinges not only on personal drive but also on other characteristics such as education, good health, and inherited wealth from parents. And far beyond all of these are markets, infrastructure, and availability of economic opportunities.

One of the major causes of rural poverty is the increasing scarcity of farmland because of the rapidly growing rural population on a closed land frontier. The rural poor are either landless workers eking out their living from casual wage employment in agriculture or smallholder farmers who are located in unfavorable production environments (IFAD [2011]; WB [2001, 2008]). Alongside the decline in farm sizes is the decline in agricultural employment because of the acceleration in the use of labor-saving technologies (Estudillo, Fujimura, and Hossain [1999]; Hayami and Kikuchi [2000]). Thus, there are fears that the children of these rural poor will be unable to escape poverty. For poverty reduction, it is critically important to create more employment for the poor whose only asset is their labor—jobs in both agriculture and the rural nonfarm economy [WB 2008]. Migration could also be a climb up the income ladder for skilled workers and those who are well prepared.

Enhanced agricultural productivity generates rural nonfarm employment through a rise in income and demand for nonfarm products and increase in savings that could finance capital investments for nonfarm activities and release of labor to the nonfarm sector [Foster and Rosenzweig 2008]. A number of case studies in Asia and Africa show that nonfarm income (especially income from formal wage work) has provided an increasingly important share of rural incomes leading to income growth and reduction in poverty [Otsuka, Estudillo, and Sawada 2009].

This study inquires into the routes out of poverty among poor women and men in three generations of household members in rural Philippines. We focus on the landless population, the "poor man" in the grandmother's tale, whose parents have no farmland and have low levels of education, representing the poorest segment of the rural community in Asia, in general, and the Philippines, in particular [David and Otsuka 1994].[1] We find that the most important strategy to move out of poverty is to take advantage of new economic opportunities within the rural nonfarm economy of the villages or to move out to explore job markets beyond the villages in local towns and big cities and even overseas for the younger generation. How such a strategy is conditioned by parental wealth is not known.

Studies of intergenerational economic mobility in developing countries are rare, mainly because of the absence of a long-term panel dataset that gives

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[1] Otsuka [1991] suggests that the proportion of landless agricultural wage worker households is higher in the Philippines because of the suppression of tenancy markets by the land reform law.

socioeconomic information on a pair of parent and child spanning at least two generations. This is mainly because of the difficulty of tracing the whereabouts of children after they leave their parents' homes in search of wage employment elsewhere. And this is particularly true for the landless households, which are the poorer and the more mobile population. We examine dynamic changes in household member decisions with respect to wealth transfers, choice of residence and occupation, and income sources in response to changes in household resource endowments and the development of the nonfarm sector in both rural and urban areas. We used a unique dataset from surveys that enabled us to trace a parent-child pair across generations. To explore the changes in the breadth and depth of poverty across generations, we interviewed the children of parents who were residents in our study villages 23 years ago. Thanks to mobile phone technology, we were able to trace these children and to give them personal in-house interviews in their respective places of residence. To our knowledge, this is the first study of economic mobility in the rural Philippines spanning three generations of household members.

This paper is divided into five parts. Section 2 gives an overview of land and labor resources and poverty trends in the Philippines. Section 3 gives a description of the study villages and sample individuals from three generations. Section 4 identifies the determinants of farmland bequest and completed years of schooling. Section 5 explores the factors affecting residential and occupational choice of two generations and structure and determinants of household income of the youngest generation. Finally, Section 6 gives the summary and conclusions.

2. Land, labor, and poverty in the Philippines

The Philippines has been facing an unfavorable scenario in agriculture— declining farm sizes—that could lead to impoverishment. Table 1 shows arable land per capita declining from 0.29 ha in 1980 to 0.13 ha in 2012. Rice yield, nonetheless, has risen from 2.2 to 3.8 tons per ha during the same year because of the continuous adoption of newer and better varieties of rice, along with the expansion of irrigation coverage. Much of the rice production growth in the Philippines came from the irrigated rice ecosystem [Estudillo and Otsuka 2006].

The share of the labor force in agriculture declined from 51 percent in 1980 to 33 percent in 2012. Consequently, the share of value added as a proportion of gross domestic product (GDP) coming from agriculture declined from 25 to 12 percent in the same period. Labor force share of agriculture (33 percent in 2012) is much higher than its value added share in GDP (12 percent in 2012), indicating that labor productivity in agriculture is lower compared with that of industry and services. This may mean that the poor who are left behind in agriculture are trapped in poverty.

The annual growth rate of GDP per capita was -0.70 between 1980 and 1989 (Table 1) because of the financial crises in 1984 and 1985 when annual GDP

per capita growth was -9.81 percent and -9.78 percent, respectively [WB 2013]. The annual growth rate of GDP per capita rose to 0.41 between 1990 and 1999 because of the robust growth between 1994 and 1997 (with annual GDP per capita growth rate of over 2 percent). Between 2000 and 2009, the annual growth rate of GDP per capita was 2.49 and that between 2010 and 2012 was 4.23. The poverty headcount ratio was reduced from 34.9 percent in 1985 to 18.4 in 2009 because of the transformation of economic activities away from agriculture to industry and services, which stimulated economic growth. While agriculture remains important for poverty reduction, particularly in the so-called "high-value revolution" which is highly labor-intensive [WB 2008], the industrial and service sectors appear to have a bigger role to play in the Philippines.

TABLE 1. Land and labor resources and poverty in the Philippines, 1980-2012

	1980	1990	2000	2012
Arable land per unit labor (ha)[1]	0.29	0.22	0.16	0.13
Rice yield (tons/ha)	2.2	2.9	3.0	3.8
Share of female in the labor force (%)	na	36	37	39
Proportion of labor force				
Agriculture (%)	51[2]	45	37	33
Industry (%)	15[2]	15	16	15
Services (%)	34[2]	40	47	52
Gross domestic product (GDP) per capita PPP (constant 2005 international $)	2,807	2,538	2.685	3,801
Value added (% of GDP) from				
Agriculture	25	21	14	12
Industry	39	34	34	31
Services	36	44	52	57
GDP per capita growth (annual %)	-0.70[3]	0.41[4]	2.49[5]	4.23[6]
Poverty headcount ratio (%)[2]	34.9[7]	30.6[8]	22.4	18.4[9]
Poverty gap ratio (%)	10.2[7]	8.5[8]	5.4	3.79

1   Refers to arable land divided by population between 15 and 60 years old
2   Refers to 1981   6   Refers to 2010 to 2012
3   Refers to 1980 to 1989   7   Refers to 1985
4   Refers to 1990 to 1999   8   Refers to 1991
5   Refers to 2000 to 2009   9   Refers to 2009
Data sources: WB (2013), FAOStat, NSCB (1990, 2000, 2012)

3. The study villages and sample individuals

3.1. The study villages and survey design

We have four study villages—two villages are located in Central Luzon and two are on Panay Island (Figure 1). These four villages were purposely selected from 50 villages drawn from representative irrigated and rain-fed lowland rice areas

in northern, central, and southern Luzon plus Panay Island in the Visayas.[2] The International Rice Research Institute, in line with its research project Differential Impact of Modern Rice Technology in Favorable and Unfavorable Areas [David and Otsuka 1994], conducted a complete census of households in the villages in 1985 to obtain basic information on farmland characteristics and tenure as well as individual household member characteristics such as age, gender, education, and occupation. Based on access to farmland, households were grouped into two: farmer households consisting of owner-cultivators, leaseholders,[3] and share tenants; and landless households consisting of casual agricultural workers and nonagricultural households. We used the census in 1985 as the baseline data in our subsequent surveys in 2008.
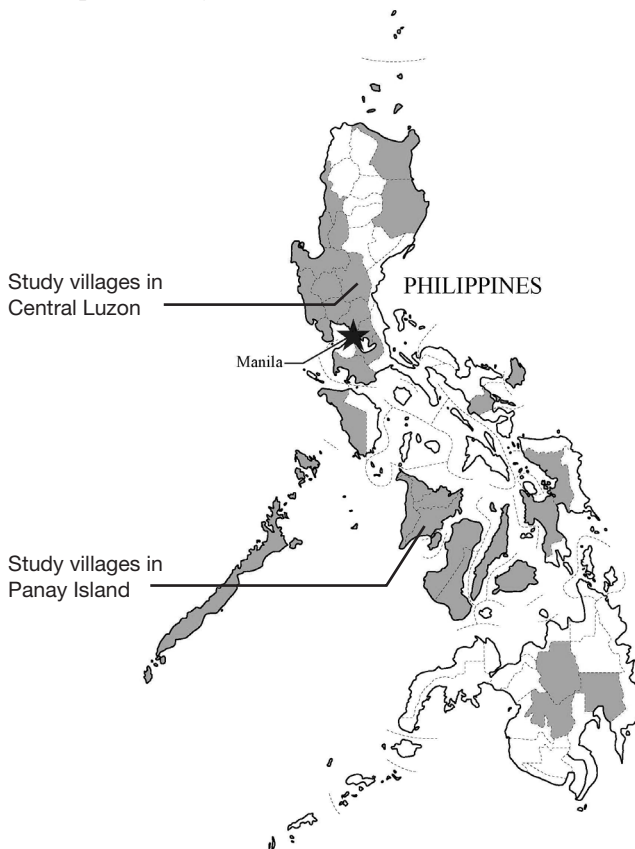

FIGURE 1. Location of study villages and residences of sample children in the Philippines

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[2] Originally, there were five villages, but we dropped one village because of insufficient panel data.

[3] Leaseholders include recipients of Certificate of Land Transfer who are amortizing owners of farmland obtained through the land reform program.

Table 2 shows a total population of 632 households in the four villages combined consisting of 474 farmer households and 158 landless households in 1985; these data were drawn from the census of four villages. There were 2,490 children coming from farmer households and 728 coming from landless households. In the first phase of our research, we went back to the villages in 2008 in search of the 632 original households to administer a shortened version of the original 1985 census questionnaire in order to obtain information on the current contact addresses of the 3,218 children. We were able to successfully track 68 percent of the households (432 out of 632) that enabled us to update information on 48 percent of the children (1,522 out of 3,218).[4] The tracking rate on the landless households was lower because landless households are geographically more mobile: many of them were not available at the time of the resurvey or were no longer residing in the study villages in 2008 with hardly any information on their whereabouts.

In the second phase, we conducted a unique survey that directly reached out to children at their contact addresses. These children received a personal in-house interview in their current respective places of residence using questionnaires that contain demographic characteristics of their own households, migration and occupational history, and sources of income. The green areas in Figure 1 show the locations of current residences of our sample children. Children tend to cluster in the northern and central parts of the country, where infrastructure is more developed and peace and order is not a problem. We divided children into four groups based on their residential addresses at the time of the 2008 resurvey: (I) study villages; (II) local towns; (III) big cities; and (IV) overseas. Local towns refer to the *poblacion* (town center) of the study villages, contiguous villages, towns located in the same province, small cities nearby, and cities and towns in other provinces. Big cities include Metro Manila, Metro Cebu, and Baguio. We were able to interview 27 overseas children, as it happened that they were visiting the study villages at the time of our survey.

We tried to track 100 percent of the children in big cities and 100 percent of the children in local towns, but we were able to interview only about 80 percent of them. The main reasons for attrition are refusal of interview and absence during our survey visit. We selected 60 percent of the children residing in the villages using a lottery in order to make our sample selection truly random. Out of 1,522 children, we were able to give in-house interviews to 870 children (an interview rate of 57 percent) (Table 2).[5] We believe that this sample set is reasonable in size for a panel survey. While sample selection bias is oftentimes a problem in panel data, we found that the average schooling in 2008 of the 870 children is 10.2, which is not statistically different from the average schooling of 10.4 of the 652 children who we were not able to trace.

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[4] There were 1,529 children, but 7 did not have information on their current addresses.

[5] We interviewed 881 children, but 11 children did not have information on parental landholdings in the 1985 census.

TABLE 2. Tracking and survey rates in the study villages in the Philippines, 2008

Category	Target population (Col A)	Population whose current residence was identified (Col B)	Tracking rate (%) (Col C=B÷A)	Number of in-house interviews (Col D)	Interview rate (%) (Col E=D÷B)
Number of households in 1985 census					
Farmer households in 1985	474	340	71		
Landless households in 1985	158	92	58		
Total	632	432	68		
Number of children in 1985 census					
Farmer households in 1985	2,490	1,202	49	695	58
Landless households in 1985	728	320	44	175	55
Total	3,218	1,522	48	870	57

Since we aim to explore whether poverty has been transmitted from parents to children, it is necessary to have data on income of parents in 1985. We were able to obtain such data from a survey called "intensive survey" of households conducted by the International Rice Research Institute [David and Otsuka 1994]. This is an income survey on a sample set of farmer and landless households that were randomly selected from the census of households in the study villages in 1985, stratified by farm size for the farmer and by household size for the landless. The intensive survey has a sample size of 268 while the census has 632 households, that is, 42 percent of the population was included as sample households in the intensive survey.

We were able to get data on the characteristics of two generations of household members from a survey conducted by Quisumbing [1994] in 1989, which explored gender bias in traditional land inheritance customs. The first generation (G1) consists of parents of respondents while the second generation (G2) consists of the respondents and her/his sisters and brothers. Quisumbing [1994] intended to conduct interviews on the full set of 268 households, but she successfully obtained only a smaller set of 192 households, which is 72 percent of the 268 households in the intensive survey in 1985. The attrition in the survey by Quisumbing [1994] is explained by the low response rate of the landless households as many of them have moved out of the study villages in 1989. Only a few outmovers were included in Quisumbing's survey because there was hardly any information on the contact addresses of the outmovers. Her dataset contains a total of 1,485 individuals from G2. Quisumbing [1994] did not collect data on household income of G2. Data on the respondents' children, the third generation (G3), were taken from our own survey in 2008. Overall, we have a total of 535 individuals from G1; 1,485 individuals from G2; and 1,516 individuals from G3 (Table 3).[6]

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[6] We have a total of 1,522 members of G3, but 6 of them do not have information on parental landholdings in 1985.

TABLE 3. Characteristics of sample individuals

Category	Number	%	Year of birth	Completed years in school	Inherited land (ha)
Parents of respondents (G1)					
With job in agriculture	243	46	1907	3.4	1.14
With nonfarm job	38	7	1909	6.2	0.44
With overseas job	1	0	1910	na1	na
Unemployed and others[2]	253	47	1911	3.1	0.61
All	535	100	1909	3.4	0.83
Respondents and siblings (G2)					
With job in agriculture	680	46	1940	6.0	0.57
With nonfarm job	259	17	1943	9.0	0.23
With job in the big cities	85	6	1944	9.3	0.08
With overseas job	48	3	1949	10.1	0.51
Unemployed and others	413	28	1940	6.0	0.24
All	1,485	100	1941	6.9	0.39
Children of farmer households (G3)					
With job in agriculture in study villages	287	24	1971	8.8	0.17
With nonfarm job in study villages	202	17	1972	11.0	0.08
With job in agriculture in local towns[3]	45	4	1968	8.7	0.23
With nonfarm job in local towns[3]	76	6	1973	11.9	0.01
With job in the big cities	193	16	1973	11.1	0.03
With overseas job	78	6	1971	12.8	0.01
Unemployed and others	316	27	1972	10.2	0.02
All	1,197	100	1972	10.4	0.07
Children of landless households (G3)					
With job in agriculture in study villages	46	14	1972	8.0	0
With nonfarm job in study villages	48	15	1974	10.9	0
With job in agriculture in local towns	11	4	1971	6.8	0
With nonfarm job in local towns	26	8	1974	10.8	0
With job in the big cities	56	18	1975	10.6	0
With overseas job	35	11	1973	12.9	0
Unemployed and others	97	30	1973	9.4	0
All	319	100	1974	10.0	0

1 Means not available
2 Includes housekeepers, discouraged workers, retired workers, and people with disability
3 Includes small cities

The 1,516 members of G3 in the 2008 survey came from a complete enumeration of household members in the 1985 census. The sample consisting of the respondents and her/his siblings (G2) in 1989 survey may not be purely random as outmovers were excluded. Indeed, according to Rosenzweig [2005], long-term panel surveys that did not include members who separated from the original households may create nonrandom subsamples of individuals. Still, our panel dataset, which gives data on three generations of household members,

remains a rarity in developing countries. We believe that this dataset serves our purpose of exploring intergenerational economic mobility and poverty transition of household members.

3.2. Characteristics of sample individuals

We selected members of G2 and G3 who were 24 years old and above at the time of the 1989 and 2008 surveys, respectively. We chose 24 as the lower bound as it is the age when tertiary schooling is expected to have been completed and farmland bestowed to children commonly upon marriage, on the average, at the age of 24 for G2. Schooling and farmland are the two most important forms of intergenerational wealth transfers in developing countries [Quisumbing, Estudillo, and Otsuka 2004].

We grouped G1, G2, and G3 based on the type of job. For G1, we have the following classifications: (I) with job in agriculture; (II) with nonfarm job; (III) with overseas job; and (IV) unemployed and others (Table 3). Almost all male G1 were engaged in agriculture, and almost all female parents were unemployed, mainly housekeepers. G1 were born around 1910, had very little schooling, and owned, on the average, less than 1 ha of farmland per person (Table 3). Fathers completed more years of schooling than did mothers (3.8 years versus 3.1 years) and inherited larger areas of farmland (1.1 ha versus 0.56 ha), indicating a gender bias in the transfer of wealth in favor of males. Interestingly, male parents were those engaged in nonfarm work and had the highest level of education—6.2 years of completed years in school—indicating that the rural nonfarm labor market in the early 1990s was thin and dominated mainly by male jobs in the formal sector.

For G2, we have the following groupings: (I) with job in agriculture; (II) with nonfarm job; (III) with job in the big cities; (IV) with overseas job; and (V) unemployed and others. G2 were born around 1940, accomplished more than twice the education of their parents (6.9 versus 3.4 years), and inherited about half the size of their parents' farmland (0.40 versus 0.84 ha). The size of inherited farmland has declined over time, and the males continue to receive farmland as bequest because rice farming is intensive in male labor [Estudillo, Quisumbing, and Otsuka 2001]. Brothers and sisters had about the same level of schooling, in contrast to their parents' generation, when females were disfavored. Females started to flock to school to take advantage of the American colonial policy of free public primary school system that was opened to both sexes, which was largely unavailable during the Spanish colonial period.[7] Interestingly, both male G2 and female G2 had become engaged in more diversified occupations, including overseas work.[8] There was also a rise in the incidence of nonfarm jobs and a decline

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[7] The Philippines was under Spanish colonial regime for about 330 years from around 1570 to 1898 and then under the American colonial regime from 1900 until 1946.

[8] According to Capistrano and Sta. Maria [2007], the first wave of Filipino overseas migration started

in unemployment, indicating that the nonfarm labor market has started to develop.

We divided G3 based on parental endowment of farmland: (I) children originating from farmer households; and (II) children from landless households (Table 3). These two groups were further subdivided into seven categories based on current residence and occupation: (I) with job in agriculture in the study villages; (II) with nonfarm job in the study villages; (III) with job in agriculture in local towns; (IV) with nonfarm job in local towns; (V) with job in the big cities; (VI) with overseas job; and (VII) unemployed and others.

G3 were born in 1973, had more than 10 years of schooling (3.3 years more than their parents), and had inherited farmland of less than one-tenth of 1 hectare. Farmer children completed 0.4 more years of schooling than did the landless children—a difference that was statistically significant at 5 percent. A larger proportion of children from farmer households opted to stay in the study villages. Landless children were geographically more mobile, residing in the big cities, local towns, and overseas. This was particularly true for female landless children who are more educated than their brothers. Interestingly, female children had become more heavily engaged in nonfarm jobs and there were more overseas female workers among the landless children.

Overall, we see a secular increase in completed years in school and a decline in the size of inherited farmland. The major question is whether the landless children, who came from poorly endowed households, have become worse off than the farmer children.

3.3. Sources of household income and poverty

Table 4 shows the sources of household income of G2 in 1985 and those of their children (G3) in 2008, classified as coming from farmer or landless households and whether single or married. Sources of household income were the following: (I) rice income consisting of income from rice production and from off-farm wage activities; (II) nonrice farm income coming from the production of nonrice crops, livestock, and poultry; (III) nonfarm income consisting of wage income from nonfarm activities such as formal and informal salary work and from self-employed activities in trade, transport, and communication sector; and (IV) domestic and foreign remittances. Income data are in Purchasing Power Parity in 2005 dollar prices.

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around the 1930s to work as plantation laborers in Hawaii and fruit-pickers in California. The second wave was in the mid-1940s after World War II; they worked as construction workers repairing the American military bases around the world. The third wave was in the 1970s in the Gulf States, where Filipinos were hired as skilled workers in the construction boom triggered by the oil price boom. The fourth wave was in the 1980s in the so-called newly industrializing countries in East Asia, where Filipinos were hired to satisfy the shortage in labor in these countries.

**TABLE 4. Composition of household income of respondents
and their children from study villages in the Philippines
(annual income in Purchasing Power Parity, constant 2005 international $)**

Source	Household income of respondents (G²) in 1985			
	Farmer households		Landless households	
	Income	Percent	Income	Percent
Rice income	1,104	58	329	36
Nonrice income	342	18	119	13
Nonfarm income	225	12	369	41
Remittances and others[1]	224	12	91	10
Total income	1,895	100	908	100
Poverty headcount (%)[2]		42		65
Poverty gap (%)[2]		20		26
Number of observations		230		65
	Household income of married children of respondents (G³) in 2008			
	Married children of farmer households		Married children of landless households	
	Income	Percent	Income	Percent
Rice income	610	8	81	1
Nonrice income	757	9	484	7
Nonfarm income	5,452	67	5,372	81
Remittances and others	1,322	16	691	11
Total income	8,142	100	6,629	100
Poverty headcount (%)		26		34
Poverty gap (%)		12		16
Number of observations		527		129
	Household income of single children of respondents (G³) in 2008			
	Single children of farmer households		Single children of landless households	
	Income	Percent	Income	Percent
Rice income	772	12	116	2
Nonrice income	545	8	446	6
Nonfarm income	4,144	62	4,963	71
Remittances and others	1,194	18	1,443	21
Total income	6,656	100	6,970	100
Poverty headcount (%)		25		16
Poverty gap (%)		13		5
Number of observations		167		43

1   "Others" refers to pensions, interest payments, gifts, etc.
2   Taken from Otsuka, Estudillo and Sawada [2009, Table 2.6, p. 33]

In 1985, a substantial portion of household income of G2 (76 percent for the farmer, 49 percent for the landless) came from agricultural sources such the production of rice, nonrice crops, and livestock (Table 4). The income of farmer households was about twice the income of landless households—a difference that was statistically significant at the 1 percent level. The major sources of disparity were incomes from rice and nonrice crop production, indicating that the size of

farmland was the primary indicator of household economic well-being in earlier years, when nonfarm employment opportunities were still limited. Nonfarm income was higher for the landless, presumably coming from low-productivity livelihood activities and giving no significant income advantage to the landless poor. And because the landless is land-poor, poverty was higher among the landless (65 percent) than among the farmer households (42 percent).[9]

Interestingly, nonfarm income has become the major income source of farmer children—67 percent of their income, while it was only 12 percent of their parents'. Income disparity between the farmer and landless households appears to have disappeared in the children's generation with nonfarm income as the major driver of income growth—the total income gap between the farmer and landless children was only $1,072 in PPP, which is not significantly different. Meanwhile, income from rice and nonrice farming remained significantly higher for the farmer children.

The ratio of children's and parents' income in the landless category was 7.4 times, whereas the corresponding ratio for the farmer was only 4.1, an indication of a substantial income growth for the landless children. While incomes of children have largely equalized, poverty incidence among the landless children remained higher, but at a mere 8 percentage points compared with their parents, in which poverty stood at 23 percentage points higher among the landless class. Landless children who migrated to local towns and big cities were the ones able to increase their income *vis-à-vis* that of farmer children. The poor in the village are mainly farm workers eking out their living doing casual daily wage work in rice farming. In brief, it is clear that participation in nonfarm labor market and migration to local towns and big cities are the main pathways in moving out of poverty for the landless poor.

3.4. Children's income, by place of residence

Table 5 shows the sources of household income of G3, by place of residence. Children working overseas had the highest income, followed by those in the big cities; children who reside in the study villages had the lowest. Accordingly, poverty incidence and depth of poverty were highest among children living in the villages and that poverty did not exist among overseas children, while less than 10 percent of migrants in the big cities were poor. Migrant children were deeply engaged in nonfarm work; the largest proportion of their incomes had come from nonfarm income. Surprisingly, even those children who remain in the study villages derived 65 percent of their income from nonfarm sources, including nonfarm wage income (44 percent) and remittances and other sources

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[9] Poverty measures are estimated using the FGT index [Foster, Greer, and Thorbecke 1984] with the US$1.25 per capita per day in Purchasing Power Parity based on private consumption as the poverty line.

(21 percent). Rice income has become a much less important source of income of G3, whereas, in contrast, it was the most important source, particularly of farmer households in the earlier generation G2.

TABLE 5. Household income composition of children of respondents in study villages in the Philippines, by place of residence (annual income in Purchasing Power Parity, constant 2005 international $)

	Mean	%
Local towns[1]		
Rice income	329	4
Nonrice income	410	5
Nonfarm income	6,886	78
Remittances and others[2]	1,252	14
Total income	8,877	100
Poverty headcount ratio (%)		22
Poverty gap ratio (%)		10
Number of observations		255
Big cities		
Rice income	14	0
Nonrice income	15	0
Nonfarm income	8,545	82
Remittances and others	1,896	18
Total income	10,469	100
Poverty headcount ratio (%)		9
Poverty gap ratio (%)		3
Number of observations		116
Overseas		
Rice income	499	2
Nonrice income	86	0
Nonfarm income	24,561	96
Remittances and others	423	2
Total income	25,570	100
Poverty headcount ratio (%)		0
Poverty gap ratio (%)		0
Number of observations		27
Study villages		
Rice income	785	15
Nonrice income	990	19
Nonfarm income	2,269	44
Remittances and others	1,062	21
Total income	5,106	100
Poverty headcount ratio (%)		36
Poverty gap ratio (%)		17
Number of observations		468

1   Include small cities
2   "Others" refers to pensions, interest payments, gifts, etc.

The importance of rice income has declined due to stagnant rice yield and declining employment opportunities in the rice sector because of the acceleration in the adoption of labor-saving technologies. Also, it appears that the production of high-value crops and livestock, the so-called "high-value revolution" [WB 2008], has become more common; the share of nonrice income among children living in the study villages was 19 per cent, which is higher than the 15 per cent share of rice income. Also, a relatively larger share of income of children in the study villages has come from remittances and other sources, attesting to the economic importance of transfer income from outside the villages. Clearly, nonfarm work, migration, and production of high-value crops and livestock have served as important pathways out of poverty for G3.

3.5. Correlation of parents' and children's characteristics

The correlation coefficient of parents' and children's schooling had declined from 0.30 between G1 and G2 to 0.20 between G2 and G3. Children from lowly educated parents tended to catch up with children from highly educated parents in terms of schooling, with male children benefitting more. This could be partly attributed to the expansion of free public secondary schools in the villages since 1988 and the construction of bridges in two remote villages (in Central Luzon in 1992 and in Panay Island in 1995) connecting the two to the town centers, where secondary schools are located. The correlation coefficient between parental income and children's income was close to zero, and the coefficient of parental income in a regression function of children's income was statistically not significant with a value of -0.1187. Clearly, parental bequest decisions have become weak in explaining children's economic destiny.

To identify pathways out of poverty and inequality more rigorously, we first explored parental bequest decisions on farmland and schooling. We then assessed the extent to which bequeathed farmland and completed schooling affected the decisions of children on migration and occupational choice and their income.

4. Farmland bequests and completed years in school

Here, we explore the factors affecting farmland bequests and completed years in school in two generations of households from G1 to G2 and from G2 to G3.

Denoting inherited farmland as L and completed years in school as E, we specify the system of equation as follows:

$$L = \Sigma a_i (child\ characteristics) + \Sigma b_j\ (parent\ characteristics) + intercept + e_1 \quad (1)$$

where a_i and b_j are regression parameters and e_1 is a stochastic error term.

$$E = \Sigma \alpha_i (child\ characteristics) + \Sigma \beta_j (parent\ characteristics) + intercept + e_2 \quad (2)$$

where α and β are regression parameters and e_2 is a stochastic error term. The system of equation above is estimated using ordinary least squares (OLS) with cluster standard error at the household level. We estimate equations (1) and (2) separately for the wealth transfers from G1 to G2 and from G2 to G3.

Child's characteristics include year of birth, gender, birth order, and number of brothers and sisters. Parents' characteristics are mothers' and fathers' completed years in school and the sum of mothers' and fathers' farmland in hectares (Table 6).[10] In the case of G2, we used owned farmland to represent parental farmland, whereas in the case of G3, we used parents' inherited farmlands under various tenure categories such as those under ownership, Certificate of Land Transfer (CLT) from the land reform program, leasehold tenancy, and share tenancy.[11]

We have the following findings from Table 6. First, later born children were significantly favored in schooling in both G2 and G3. Second, gender seemed to matter significantly: females were significantly disadvantaged in land inheritance in G2 and G3 because farmland is an important bequest to sons inasmuch as rice farming demands more male labor. Also, females were significantly favored in schooling investments in G3, receiving about 1 more year of schooling than males. Third, the youngest child was favored in schooling but disfavored in farmland inheritance in G2, and such bias was no longer evident in G3. The eldest child in both G2 and G3 was neither favored nor disfavored in bequests. Fourth, the impact of sibling rivalry appeared to be mixed. An increase in the number of brothers significantly decreased farmland inheritance in both G2 and G3 and significantly decreased schooling investment in G3. On the contrary, an increase in the number of sisters had no significant impact on bequest decisions in both G2 and G3.

Fifth, in general, fathers' and mothers' education were transmitted as higher schooling of children.[12] The size of inherited farmland under CLT, leasehold, and share tenancy increased completed years in school in G3, indicating that children from landless households have received significantly lower schooling. Farmlands under owner cultivation, CLT and leasehold tenancy could be used as collateral in the credit market, revenues from which are oftentimes used as source of school funds, particularly for the tertiary level [Estudillo, Sawada, and Otsuka 2009].

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[10] The numbers of observations in Table 6 for G2 and G3 are different for schooling and farmland regression even though we used the same set of individuals for these regressions. This is because some parents remain undecided on farmland inheritance at the time of the survey. There are also some missing data on schooling and farmland.

[11] CLT holders are amortizing owners of land obtained through the land reform program. They are expected to receive the Emancipation Patent, a certificate of full ownership, upon completion of the amortization payments.

[12] Fathers of respondents (G2) completed 3.7 years in school and mothers completed 3.2. Fathers of children of respondents (G3) completed 5.6 years in school and mothers completed 5.7.

**TABLE 6. Determinants of education and farmland inheritance
of two generations in study villages in the Philippines
(ordinary least squares with clustered standard errors)**

Variable	Respondents' generation (G²)		Children of respondents (G³)	
	Education	Land	Education	Land
	(0.013)	(0.002)	(0.015)	(0.001)
Female dummy (1=yes)	0.304	-0.309***	1.116***	-0.065***
	(0.192)	(0.052)	(0.143)	(0.013)
Youngest dummy (1=yes)	0.428*	-0.128**	0.264	0.013
	(0.235)	(0.058)	(0.162)	(0.014)
Eldest dummy (1=yes)	-0.062	0.097	0.205	0.001
	(0.206)	(0.082)	(0.158)	(0.014)
Number of brothers	-0.126	-0.042**	-0.179**	-0.014***
	(0.083)	(0.019)	(0.084)	(0.005)
Number of sisters	0.073	-0.022	-0.133	-0.003
	(0.086)	(0.020)	(0.083)	(0.007)
Father's education	0.129**	0.038**	0.133***	-0.001
	(0.061)	(0.016)	(0.038)	(0.002)
Mother's education	0.062	-0.043**	0.082**	0.005**
	(0.075)	(0.021)	(0.037)	(0.002)
Owned land	0.120*	0.038**	0.245	0.016
	(0.067)	(0.017)	(0.184)	(0.012)
Land under Certificate of Land Transfer			0.590***	0.060***
			(0.140)	(0.020)
Leasehold land			0.393***	0.066***
			(0.082)	(0.022)
Share tenancy land			0.681***	0.020**
			(0.167)	(0.010)
CL1(1=yes)[3]			-1.359***	-0.015
			(0.372)	(0.035)
CL2 (1=yes)[3]			-1.932***	-0.019
			(0.355)	(0.025)
P1 (1=yes)[4]			1.089***	-0.037**
			(0.326)	(0.016)
Constant	-164.151***	-7.187	-61.735**	7.131***
	(24.903)	(4.578)	(30.518)	(2.056)
Number of observations	1,424	1,311	1,497	1,478
R-squared	0.188	0.077	0.236	0.187

1   Numbers in parentheses are robust standard errors
2   *** means significant at 1% level, ** at 5%, and * at 10%
3   Means Central Luzon
4   Means Panay Island

We notice that schooling investment in children of parents across different land ownership categories responded differently to an additional 1 ha increase in farmland: an additional 0.245 year of schooling for 1 ha of owned lands, which was not statistically significant; an additional 0.590 year for 1 ha of CLT lands; an additional 0.393 year for 1 ha of leasehold lands; and an additional 0.681 year for 1 ha of share tenancy lands.

Particularly noteworthy are the finding that the increase in the size of owned land did not significantly increase schooling investment in children, whereas an increase in the size of share tenancy land, which could not be used as collateral in the credit market, most strongly increased schooling investment. This might be because parents in the different farmland ownership categories had different expectations about (or different attitudes toward expected) future jobs of their children and invested in children's schooling accordingly. For instance, parents with secure farmland ownership are likely to have assumed that their children will continue to be on the farm, in which returns to schooling remain low, and thus their demand for high-level education had not been necessarily higher than that of the landless, whereas the parents who are share tenants tended to prepare their children to work in the nonfarm sector so that they invest more in their children's schooling. These differences in expectation and associated schooling investment behavior are likely to have resulted in the reduced inequality in schooling levels and income between farmer and landless children.

Inasmuch as landless daughters receive more schooling than their brothers and inherit no farmland, along with the increasing scarcity of jobs in rice farming and the practice of virilocality, it is thus not surprising that landless daughters have a higher propensity to migrate out of the village.[13]

Sixth, and finally, village dummies, using the remote village located in Panay Island as the default category, were included to capture various village-specific characteristics, most importantly, access to public schools and complementary infrastructure such as rural roads, bridges, and electricity. Not only the low economic cost of schooling (i.e., the downward shift of the supply curve of schooling) but also the high expected returns to schooling (i.e., the upward shift of the demand curve of schooling) in these areas with better access to public schools and infrastructure may have resulted in higher educational attainment. The results show that children in the favorable village in Panay Island had the highest level of schooling. This is the same village where we observed a relatively large number of male overseas workers as seafarers, a job requiring some university schooling. Overall, our statistical results show that parental wealth continues to exert significant impacts on children's human and physical wealth, indicating that the poverty of the older generation could be potentially transmitted to the younger

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[13] Virilocality is a traditional practice whereby the wife joins the husband''s family in his native village upon marriage.

generation, unless ample nonfarm job opportunities are created that would reduce the impacts of transferred wealth on children's income.

5. Occupational choice and income determinants

5.1. Choice of occupation

Here we explore the factors affecting children's residential and occupational choice. We focus on the role of education and inherited farmland as these are the major forms of inheritance that could potentially affect children's residential and occupational preferences.

For G2, we considered the following five alternatives: (I) agricultural work; (II) nonfarm job in rural areas; (III) job in the big cities; (IV) overseas job; and (V) unemployed. Housewives, discouraged workers, retired workers, and people with disability (except those who are residing overseas) were classified as unemployed.

For G3, we have the following seven alternatives: (I) agricultural work in study villages; (II) nonfarm work in in study villages; (III) agricultural work in local towns; (IV) nonfarm work in local towns; (V) job in the big cities; (VI) job overseas; and (VII) unemployed.

Let us define Y^*_i as a latent variable corresponding to alternative k as follows:

$$Y^*_i = \delta E_i + \zeta L_i + \gamma X_i + e_3 \tag{3}$$

where Y^*_i denotes the job choice of individual i, which is affected by schooling (E_i), inherited farmland (L_i), and her own characteristics (X_i) such as year of birth, birth order, and gender, while e_3 is the error term. We observe $Y^*_i = 1$ if and only if alternative k is chosen over other types of job, and $Y^*_i = 0$, if otherwise. We used the multinomial probit model in our estimation.

We initially treated inherited farmland L and schooling E as endogenous variables and inserted the predicted values obtained from the estimates of farmland bequests and completed years in school from the earlier OLS into the multinomial probit function following the methodology of Rivers and Vuong [1988]. We found that a large number of residuals were not significant, indicating that schooling and inherited farmland are largely devoid of endogeneity.

Table 7 shows the multinomial probit function of the choice of occupation of G2. There were five choices and we used unemployed as the default category. We report the following important findings: (I) education positively and significantly affects the choice of nonfarm work and migration to the cities; (II) children with larger inherited farmland are significantly more likely to work in agriculture and significantly less likely to engage in nonfarm work and to migrate to the cities; (III) later born children are more likely to work overseas; (IV) females are more likely to be unemployed as housekeepers; (V) the youngest child is less likely to be an agricultural worker and nonfarm worker and more likely to be a migrant in

the big cities or stay overseas; and finally, (VI) the eldest child is significantly less likely to stay on the farm.

TABLE 7. Determinants of choice of occupation of respondents and siblings in study villages in the Philippines (multinomial probit)

Variable	Agricultural work	Nonfarm work	Job in the big cities	Job overseas
Education	-0.012	0.204***	0.206***	0.172***
	(0.022)	(0.022)	(0.027)	(0.031)
Inherited land	0.149*	-0.323***	-0.714***	0.039
	(0.084)	(0.101)	(0.199)	(0.125)
Year of birth	0.005	-0.005	-0.002	0.030***
	(0.006)	(0.006)	(0.007)	(0.010)
Female dummy (1=yes)	-3.327***	-2.046***	-1.845***	-1.723***
	(0.150)	(0.159)	(0.190)	(0.225)
Married dummy (1=yes)	0.338	-0.175	-0.377	-0.426
	(0.220)	(0.218)	(0.251)	(0.280)
Youngest dummy (1=yes)	-0.381*	-0.574***	0.223	0.287
	(0.200)	(0.216)	(0.227)	(0.258)
Eldest dummy (1=yes)	-0.345*	-0.146	-0.055	-0.228
	(0.200)	(0.211)	(0.270)	(0.372)
Constant	-7.543	9.481	2.770	-59.207***
	(11.065)	(11.576)	(14.499)	(19.429)
Number of observations	1,352	1,352	1,352	1,352

1   Numbers in parentheses are standard errors
2   *** means significant at 1% level, ** at 5%, and * at 10%

Table 8 shows the multinomial probit function of the choice of occupation of G3. We have seven job alternatives; unemployed was the default category. In comparison with the default category, we have the following findings: (I) the more educated children are more likely to engage in nonfarm work in the village and local towns and migrate to the big cities and overseas; they are less likely to engage in agricultural work in the village and local towns; (II) similar to G2, children with larger inherited farmland are more likely to choose farming in the village and local towns; (III) later born children in G3 are more likely to migrate to local towns to engage in the rapidly expanding nonfarm sector; (IV) females are more likely to become housekeepers; (V) married children, regardless of gender, are more likely to migrate to local towns to engage in both agricultural and nonfarm work; (V) the youngest child in G3 is more likely to be a migrant in the big cities or stay overseas; and finally, (VI) the eldest child in G3 is likely to stay in the village and overseas and more likely to stay in local towns.

TABLE 8. Determinants of choice of occupation of respondents' children from study villages in the Philippines (multinomial probit)

Variable	Agricultural work in the village	Nonfarm work in the village	Agricultural work in local towns	Nonfarm work in local towns	Job in the big cities	Job overseas
	1	2	3	4	5	6
Education	-0.069***	0.132***	-0.067**	0.180***	0.139***	0.326***
	(0.022)	(0.023)	(0.032)	(0.028)	(0.023)	(0.033)
Inherited land	1.085***	0.485	1.051***	-1.165	-0.293	-1.046
	(0.317)	(0.328)	(0.354)	(0.756)	(0.400)	(0.693)
Year of birth	-0.011	0.008	-0.027*	0.019	0.023**	-0.003
	(0.011)	(0.011)	(0.016)	(0.013)	(0.011)	(0.013)
Female dummy (1=yes)	-2.683***	-1.753***	-2.248***	-1.538***	-1.806***	-1.579***
	(0.147)	(0.133)	(0.216)	(0.155)	(0.132)	(0.158)
Married dummy (1=yes)	0.070	-0.253	1.066***	0.557***	0.098	-0.099
	(0.166)	(0.154)	(0.391)	(0.209)	(0.158)	(0.183)
Youngest dummy (1=yes)	-0.349**	-0.441***	-0.277	-0.385**	-0.452***	-0.589***
	(0.159)	(0.151)	(0.235)	(0.181)	(0.150)	(0.186)
Eldest dummy (1=yes)	-0.306**	-0.289**	-0.181	-0.034	-0.228	-0.442**
	(0.147)	(0.142)	(0.203)	(0.164)	(0.141)	(0.175)
Constant	23.770	-16.769	53.133*	-39.764	-46.220**	3.612
	(22.000)	(21.103)	(32.194)	(25.131)	(20.958)	(25.916)
Number of observations	1,479	1,479	1,479	1,479	1,479	1,479

1   Numbers in parentheses are standard errors
2   *** means significant at 1% level, ** at 5%, and * at 10%

Summing up, schooling has enabled members of G2 and G3 to explore job opportunities in the nonfarm sector in the village and local towns and has prepared to migrate to big cities and overseas. Inherited farmland remains a decisive factor in choosing farming vis-à-vis other occupations in the village and local towns. Since landless children in G3 obtained schooling levels less than but comparable with that of farmer children, it is reasonable to expect that they are equally likely to explore job opportunities in the nonfarm labor market in the village, local towns, and the big cities. In fact, landless children have a higher propensity to migrate in search of economic opportunities elsewhere outside the village (Table 3).

5.2. Determinants of children's income

Here we estimate the household income function of the 880 members of G3 to whom we were able to give an in-house interview in their respective places of residence. We explore determinants of household income by place of residence: (I) big cities and overseas; (II) local towns; and (III) study villages.

Let Y_i denote the income of a household living in place i = {big cities, local towns, overseas, study villages}. We consider the following model of income received by living in place i:

$$Y_i = \Sigma\mu_i(husband\ characteristics) + \Sigma v_i(wife\ characteristics) + c_i \qquad (4)$$

Own child and spouse characteristics include years of schooling and size of inherited farmland, respectively; μ and v are regression parameters; and c is the error term. We used the OLS in our estimation. We combined big cities and overseas because we are able to give in-house interviews to only 27 overseas workers. We estimated the function separately for married and single children.

We represented Y_i in three components—(I) total income, (II) farm income, and (III) nonfarm income—because the impact of child characteristics and spouse characteristics may be different for each of the income components. Table 9 shows income functions for married children in four places of residence while Table 10 shows those for single children.[14]

TABLE 9. Determinants of household income of married children of respondents in study villages in the Philippines, by place of residence, 2008 (ordinary least squares)

Variable	Total income	Farm income	Nonfarm income
	Manila and overseas		
Age of husband	-385.20	12.28***	-397.48
	(254.450)	(4.579)	(254.224)
Education of husband	574.15	-1.39	575.54
	(611.243)	(10.999)	(610.698)
Inherited land of husband	-3,211.74	236.01	-3,447.75
	(8,380.371)	(150.797)	(8,372.903)
Age of wife	1,250.54***	-4.95	1,255.48***
	(264.011)	(4.751)	(263.775)
Education of wife	3,156.50***	-14.72	3,171.21***
	(618.535)	(11.130)	(617.984)
Inherited land of wife	1,597.50	-7.89	1,605.39
	(17,550.908)	(315.812)	(17,535.268)
Constant	-56,350.82***	-33.20	-56,317.62***
	(10,093.465)	(181.622)	(10,084.470)
Number of observations	97	97	97
R-squared	0.448	0.137	0.449

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[14] Another regression specification is to combine all children using a dummy for place of residence and interaction term between the place of residence and other variables of interest. We believe however that individual regression for each group is more convenient in assessing the impact of each variable on income.

**TABLE 9. Determinants of household income of married children
of respondents in study villages in the Philippines,
by place of residence, 2008 (ordinary least squares) (continued)**

Variable	Total income	Farm income	Nonfarm income
	Local towns		
Age of husband	134.64	-21.47	156.12
	(317.567)	(43.090)	(317.002)
Education of husband	1,794.83***	26.21	1,768.62***
	(609.803)	(82.743)	(608.719)
Inherited land of husband	2,537.36	1,027.17*	1,510.19
	(4,198.091)	(569.635)	(4,190.631)
Age of wife	177.93	51.25	126.67
	(319.862)	(43.402)	(319.294)
Education of wife	1,189.11**	20.36	1,168.75**
	(579.587)	(78.644)	(578.557)
Inherited land of wife	-14,456.20	-782.60	-13,673.60
	(15,434.737)	(2,094.324)	(15,407.307)
Constant	-32,008.42***	-781.26	-31,227.17***
	(9,828.811)	(1,333.661)	(9,811.344)
Number of observations	180	180	180
R-squared	0.167	0.034	0.161
	Study villages		
Age of husband in 2008	21.43	-3.00	24.43
	(55.071)	(28.564)	(45.799)
Education of husband	379.66***	98.26*	281.41***
	(103.313)	(53.586)	(85.918)
Inherited land of husband	1,697.74***	1,899.60***	-201.87
	(449.135)	(232.958)	(373.513)
Age of wife in 2008	71.56	50.67*	20.89
	(54.344)	(28.187)	(45.194)
Education of wife	510.72***	41.64	469.08***
	(114.598)	(59.440)	(95.303)
Inherited land of wife	-934.53	1,054.11	-1,988.64
	(1,478.399)	(766.817)	(1,229.478)
Constant	-7,487.88***	-1,624.89	-5,862.98***
	(1,908.329)	(989.813)	(1,587.020)
Number of observations	359	359	359
R-squared	0.186	0.201	0.148

1   Numbers in parentheses are standard errors
2   *** means significant at 1% level, ** at 5%, and * at 10%

TABLE 10. Determinants of household income of single children of respondents in study villages in the Philippines, 2008 (ordinary least squares)

Variable	Total income	Farm income	Nonfarm income
Age in 2008	17.29	-0.90	18.19
	(71.508)	(30.454)	(64.106)
Education	494.04***	-217.95***	711.99***
	(168.498)	(71.760)	(151.056)
Female dummy (1=yes)	1,012.88	701.30	311.57
	(1,057.013)	(450.165)	(947.599)
Inherited land	3,091.17	2,076.68	1,014.49
	(3,951.678)	(1,682.954)	(3,542.627)
Constant	-254.50	3,398.47***	-3,652.97
	(3,010.776)	(1,282.240)	(2,699.121)
Number of observations	130	130	130
R-squared	0.095	0.084	0.174

1   Numbers in parentheses are standard errors
2   *** means significant at 1% level, ** at 5%, and * at 10%

We report several findings for married children (Table 9). First, for G3 living in Manila and overseas, the age and education of wives significantly increase household's nonfarm income while the age of husbands affects farm income. A few of the G3 living in Manila and overseas have farm income, if any of the husband and wife has inherited farmland. Importantly, the size of inherited farmland does not affect total income of G3, which indicates that G3, regardless of the size of their inherited farmland, have equal chance of migrating to Manila and overseas. Second, for G3 in local towns and for G3 who choose to remain in the villages, education of both husband and wife significantly increases nonfarm income, whereas inherited farmland of husband significantly increases farm income. In brief, education significantly increases nonfarm income while inherited farmland significantly increases farm income. Furthermore, the size of inherited farmland does not affect nonfarm income of G3, regardless of the fact that they are migrants in Manila and overseas and local towns or they continue to stay behind in the villages. This indicates that the G3 coming from landless parents have an equal chance of participating in nonfarm employment as those G3 coming from farmer parents. For single children (Table 10), education is the only factor that matters with a negative impact on farm income and a positive impact on nonfarm income.

To sum up this section, our results point to the importance of education for avoiding poverty in a state of landlessness. Education has facilitated the participation of landless children in nonfarm employment and migration to big

cities and local towns, strategies that led to an increase in income, notably income earned from nonfarm labor activities.

6. Summary and conclusions

This study is an inquiry into intergenerational economic mobility. Do rich parents produce rich children, and do poor parents produce poor children? Economic mobility means parental endowment during childhood not being reflected in a child's later circumstances in life—i.e., the grandmother's bedtime story about how "a poor man's child becomes rich." Our aim is to explore whether poverty has been transmitted over generations of household members in selected villages in northern and central Philippines.

We use a long-term panel dataset that enables us to trace changes in the socioeconomic conditions of three generations of members belonging to the same households for a period of 23 years beginning in 1985. We examine dynamic changes in household members' decisions with respect to transfer of wealth, residential and occupational choice, and income-earning activities in response to changes in household resource endowments and factor prices. Our focus is on the children whose parents are poorly endowed with farmland and schooling.

To explore economic mobility, we identify the factors affecting the transfer of farmland and schooling from the older to the younger generation. We then examine whether those wealth transfers affect the choice of the younger generation of their place of residence (big cities, local towns, overseas, and study villages) and occupation (farm and nonfarm job) and their income sources. Migration and labor employment decisions could be strategies for avoiding poverty for a landless child whose parents have no access to farmland. We then examine to what extent inherited farmland and schooling have affected children's income in various residential places.

Our major finding is that landless children reach an educational level comparable with that of famer children and, thus, are able to move vertically up the ladder of economic mobility by participating in rural nonfarm labor market and migrating to big cities and local towns. This conclusion may apply to a group of landless children who are relatively successful and thus could be easily be traced and included in our sample. Poverty has declined among the landless children, and the income gap between the farmer and landless households has narrowed. The findings of this study point to the expansion of the labor demand in the nonfarm sector as the major driving force that improves the lot of the landless poor, leading to a decline in poverty and improvement in the distribution of income.

Going back to the grandmother's story of "a poor man's child becoming rich", the question is how the poor children from our study villages are able to escape poverty. It is obviously more than just their virtue of frugality, initiative, and enterprise. The poor man needs education, farmland, infrastructure, and

availability of economic opportunities both in the village and outside in order to move up the economic ladder. With these elements, the grandmother's story may not be a fairy tale after all.

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