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Labor Migration, Remittances and Economic Well-being of Households in the Philippines

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Abstract Labor Migration has long been viewed as a strategy adopted by the household unit to allocate family resources rationally to increase the flows of income and to raise family standard of living. The research reported here examines the extent to which remittances sent by Filipino overseas workers increase the income and standard of living of households in the Philippines. Data for the analysis were obtained from a representative sample of 2,388 households drawn in 1999–2000 from four major "labor sending" areas in the Philippines. The analysis compares households with and without overseas workers to estimate the contribution of remittances to household income and to household standard of living (measured once by an 'objective' indicator and once by a 'subjective' assessment). The data reveal that due to remittances the income of households with overseas labor migrants is considerably higher than the income of households without overseas workers. The data also reveal that remittances are used mostly for consumption purposes (e.g. purchase of food, clothing, education, and goods) and that most of the difference in standard of living (whether measured on the 'objective' or the 'subjective' scale) between households with and without overseas workers are attributed to remittances. The implications of labor migration and the policy that encourages and supports labor migration for the Filipino society are evaluated and discussed.

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Labor migration has long been viewed as a rational economic strategy utilized by household units in order to increase the flows of income and to improve economic well-being of household members in poor countries (Semyonov and Gorodzeisky 2004; Massey 1990, 1994; Massey and Parrado 1994; Massey et al. 1993; Stark 1984). According to the 'household theory of labor migration', decisions to migrate are rarely reached by isolated individual actors without consideration of the household's needs. Rather, migration decisions are reached collectively and rationally within the family unit to maximize potential economic gains and to minimize the scope of economic risks (Kanaiaupuni 2000; Massey 1990, 1994; Massey and Parrado 1994; Massey et al. 1993, 1998; Taylor 1987; Stark 1984). That is, many households in places with depressed economies are likely to 'send' members of the household to distant labor markets in search of better employment opportunities and of higher incomes. They do so with the expectation that the labor migrants would remit substantial portions of their earnings back home (e.g. Massey 1990, 1994).

The empirical literature on this issue demonstrates, rather clearly, that labor migrants attain higher earnings returns on their human capital resources in the host country. They usually take jobs of lower status and lower prestige than the jobs they had in place of origin but they earn higher income than the income they could possibly attained in their place of origin (Semyonov and Gorodzeisky 2004; King 1997; Jasso and Rosenzweig 1990; Semyonov 1986). Substantial portions of their earnings are remitted to family members left behind (Semyonov and Gorodzeisky 2005). The remittances are often used to combat poverty and to overcome economic hardships in place of origin and help family members to raise standard of living and to improve quality of life (Koc and Onan 2004; Itzigsohn 1995; Findley 1994; Eelens and Speckmann 1990; Zlotnik 1990). From this point of view, labor migration is viewed, indeed, as a rational economic survival strategy of some poor but mostly lower middle-income households in less developed countries (e.g. Suro 2005; Orozco 2005).

In the present paper, we examine the role that remittances play in increasing household income and in improving standard of living of households in the Philippines. Specifically, by comparing Filipino households with and without overseas workers we are in a position to estimate the extent to which remittances explain disparities in household income and standard of living. The plan of the article is as follows: we first review previous literature on the role of remittances; next, we outline our theoretical expectations within the context of the Filipino society (a society in which labor migration is an official policy of the government). Second, we discuss the data source on which the study is based and the variables utilized in the analysis. Third, we analyze the data in order to provide estimates of the net effects of remittances on both household income and standard of living. In the concluding section of the paper we summarize the findings and discuss their meanings and implications for both social scientists and policy makers.

The Role of Remittances: General Discussion

Remittances, the portion of migrant workers' earnings sent back from the country of destination to their families in the country of origin, have come to play a major role in the economies of labor-sending societies (Lu and Treiman 2006; Durand et al. 1996; Itzigsohn 1995; Russel 1986). At the macro-economic level, remittances constitute a much-needed source of foreign currency. Remittances contribute to leveling the balance of payments and constitute a large portion of the import bill of labor-sending countries. For example, in 2005 remittances constituted 12% of the Philippines' gross domestic product and in 2004 remittances constituted 17% of Nicaragua's income share (Altman 2006). Therefore, in countries such as the Philippines, the government initiates, supports and facilitates large-scale labor-migration in order to ensure inflow of foreign currency to the country, to alleviate trade deficits and to combat problems associated with domestic unemployment (Rodriguez 1996; Itzigsohn 1995; Eelens and Speckmann 1990).

At the micro-economic level, remittances have become an important component of the household income for a substantial number of families, often families belonging to the poorest strata in the society (Bendixen and Onge 2005; Semyonov and Gorodzeisky 2005; Seddon 2004; Durand et al. 1996; Itzigsohn 1995; Eelens and Speckmann 1990). For example, Itzigsohn (1995) found that in Dominican Republic remittances constitute nearly 40% of the total income of households with labor migrants and in Jamaica, remittances constitute about third of total household income. Moreover, the economic standing (measured by total income and by standard of living) of households that receive remittances is higher than the economic standing of households without labor migrants (Koc and Onan 2004; Itzigsohn 1995). Indeed, households in labor-sending societies use remittances for improvement of standard of living and for economic mobility (Itzigsohn 1995; Zlotnik 1990; Eelens and Speckmann 1990). It should be noted, however, that for many households (mostly in the less developed countries) labor migration has become a survival strategy. For these households remittances are mostly used to meet basic daily needs and to cover basic necessities of the household (e.g. Orozco et al. 2005; Cohen 2005; Seddon 2004; Findley 1994; Zlotnik 1990).

In general, studies reveal that remittances in poor countries are largely used for consumption purposes (mostly to buy food and clothing and to pay for housing and health-care expenses). For example, Orozco et al (2005) report that across Latin America over 80% of remittances recipients spend it to cover basic needs. Likewise, Cohen (2005) argues that over 90% of remittances received in Oaxaca, Mexico are used for daily expenses. While remittances are mostly used to meet immediate needs, little money is invested directly in productive ends that promote economic development in the sending country (Cohen 2005; Koc and Onan 2004; Durand et al. 1996). Nevertheless, several researchers suggest that remittances exert an indirect impact on the economy of the sending country; an impact that goes far beyond direct-consumption. That is, since remittances ease budget constraints they enable families to expand consumption and to spend more on children's education (Lu and Treiman 2006; Curran et al. 2004) as a form of investment in human capital of the future generation. In addition, increased consumption in the sending country may raise

demand for goods and services in the domestic economy that otherwise would not be acquired (Durand et al. 1996; Rodriguez 1996). From this perspective, remittances can be viewed not only as a rational economic strategy adopted by families for subsistence and mobility (Itzigsohn 1995; Massey et al. 1993) but also as a short-term rational economic strategy utilized by the government. This short-term rational, however, may have long-term detrimental consequences for future economic development of the sending country.

Remittances in the Philippines

The study of the impact of remittances on household income and on standard of living within the context of the Filipino society is especially illuminating for several reasons. The Philippines has long been viewed as a major source of labor migrants in the global labor market. During the last three decades millions of Filipino overseas workers have found employment in more than hundred different countries across the globe and the Philippines has become a prototype of a labor exporting country (Go 1998; Altman 2006).

The export of labor migrants from the Philippines is an official policy of the government (enacted in 1974 to combat unemployment and as a source of foreign currency). This policy is facilitated and supported by government agencies coupled by numerous NGOs. The Filipino economy is heavily dependent on overseas remittances—remittances constitute substantial portion of the Philippines' gross domestic product (estimated to constitute about 12% of the GDP) and a major source of income for many families (Rodriguez and Tiongson 2001; Tacoli 1999; Tigno 1998; De Guzman 1993).

According to reports by the Central Bank overseas foreign workers sent to families and friends 10.7 billion dollars during 2005 (Altman 2006). Consequently, overseas remittances become the most important mean for economic survival for many Filipino families. Furthermore, remittances were found to exert a significant impact on economic well being of families and as such they have become an important stratifying mechanism in the Filipino society. Households that receive overseas remittances are likely to attain better economic conditions than households with no overseas workers (Semyonov and Gorodzeisky 2004, 2005). To date, the literature on the Filipino society has not yet informed us in details the extent to which remittances are invested and used in the sending community. Yet, previous studies demonstrate that households that receive remittances use them for family consumption and for raising consumption (Semyonov and Gorodzeisky 2004).

Data and Variables

Data for estimating the impact of remittances and labor migration on household income and standard of living were obtained from the survey of households and children of overseas workers. The survey was conducted by the Population Institute of The University of the Philippines, Diliman, during the years 1999–2000.

The population included in the survey was proportionally sampled from the four primary sending areas of overseas workers in the Philippines: Manila City (in the National Capitol Region), Davao City (in Mindanao), Iloilo City (in the Visayas), and Pangasinan (Luzopn). For the purpose of the present analysis we focus on 1,056 that sent an overseas worker abroad and on 1,218 households that have not sent a labor migrant to an overseas labor market. Households with overseas workers are over-sampled. Thus, weighting procedures are applied to reflect the over-sampling of households with overseas workers in the different sampling areas.[1]

The variables used to predict household income and household standard of living include: age of husband (in years), age of wife (in years), education of husband (years of formal schooling), education of wife (years of formal schooling), occupation of husband (four major categories), occupation of wife (four major categories) and size of household (number of persons). Household income is used in the analysis, once as a dependent variable and once as a predictor of standard of living. Household income has two measured components: domestic earnings (in Pesos) and remittances received from overseas earnings (in Pesos).[2] The dependent variable—standard of living—is defined by two measured indicators: The first measure is an index based on the number of household goods in the possession of the family. Twenty items were selected for the construction of the index. Each item was given a value of 1 when it was in possession of the household (and 0 otherwise). The index was constructed by adding the values for each item weighted by its scarcity (hereafter OBJSTL).[3] The second measure is based on subjective evaluation of household economic position. It is derived from respondent's assessment of the relative position of the household (as compared to other households in the Philippines) with regard to: standard of living and capability to meet daily needs (hereafter SUBSTL) and is expressed in terms of a cumulative scale. The detailed operational definitions of the variables and their mean values or percentages are presented in Table 1.

Findings

Descriptive Overview

Before estimating the impact of remittances on economic well being of households in the Philippines it seems in order to present, first, how and for what purposes

[1] Survey data were collected from 2,388 households. In 72 households both husband and wife were employed abroad. Forty-two households had other members of the unit, such as aunts, uncles, or adult children, who were overseas workers. These two small groups were excluded from the analysis. For detailed description of the sampling procedure see "The study on the consequences of international migration of Filipino parents on their children"—NIRP final scientific report 2/6/2001.

[2] There might be other form of goods remitted to the households. In this study remittances are restricted only to cash flow.

[3] Standard of living is a weighted measure of the number of household goods that are in the possession of the household. The items included in the index are electricity, radio, TV, VCR, stereo, karaoke, computer, electric iron, electric fan, rice cooker, microwave, gas/electric range, fridge, washing machine, bike, motorcycle, tricycle, jeepney, car, kuliglig. That is, in scarcity index of living standard, each item was given a weight calculated as $1 - p$, where p is proportion of households in the total population who possess the item (Semyonov and Lewin-Epstein 2000).

Table 1 Mean (S.D.) Characteristics of Households with and without Overseas Labor Migrants (All descriptive statistics were calculated before weighting procedure[a])

Variable	Definition	With overseas labor migrant ($N = 1056$)	Without overseas labor migrant ($N = 1218$)
Household income (domestic earning in the Philippines + remittances)[b]	In Pesos (per month)	15,676 (14,150)	10,659* (14,494)
Household income per capita[c] (domestic earning in the Philippines + remittances)	In Pesos (per month)	3,459 (3,039)	1,833* (2,467)
Remittances	In Pesos (per month)	10,491 (9,160)	–
Remittances as share of household income[b]	In percent of household income	73.2 (28.4)	–
Objective Standard of Living Index (OBJSTL)	Weighted measure of the number of household goods (scale from 0 to 10.6)	3.44 (1.79)	2.58* (1.83)
Subjective Standard of Living Index (SUBSTL)	Sum of responses for two questions: 1. "How would you assess your family's standard of living compared to the average Filipino family?" 2. "How would you assess your family's capability in providing for your everyday basic needs?" (scale from 2- low to 10 high)	6.48 (0.98)	5.96* (1.03)
Size of household	Number of persons	5.8 (1.9)	6.3* (2.0)
Age of husband	In years	43.5 (6.8)	44.9* (7.8)
Age of wife		40.9 (6.3)	42.5* (7.4)
Education of husband	In years	11.5 (2.3)	10.4* (2.9)
Education of wife	In years	11.3 (2.3)	10.3* (2.8)
Occupation of husband	Unemployed (%)	11.9	7.3
	Professionals and technicians (%)	17.7	19.9
	Sales and clerks (%)	7.2	9.2
	Manual and personal services	63.2	63.6
Occupation of wife	Unemployed (%)	32.6	53.3
	Professionals and technicians (%)	12.5	13.5

Table 1 continued

Variable	Definition	With overseas labor migrant ($N = 1056$)	Without overseas labor migrant ($N = 1218$)
	Sales and clerks (%)	8.2	5.7
	Manual and personal services	46.7	27.5
Who is overseas labor migrant	Husband (%)	51.9	–
	Wife (%)	48.1	–

[a] Since weights were assigned to household to reflect the proportion of households with and without overseas workers in the sampling areas and since the data in the descriptive table are displayed separately for households with and without overseas labor migrants we present the unweighted descriptive statistics

[b] Statistics were computed only for sub-samples of households that reported amount of both remittances and household income (833)

[c] For household with overseas workers household income is divided by total number of persons in household minus 1 (overseas worker)

* $p < 0.05$ (for difference between household with and without overseas worker)

remittances are being used by members of the household. In Appendix Table A, thus, we list a series of responses by members of the households on the ways and for what purpose they spend the remittances they receive from overseas worker. The data reveal that about half of the families spent almost all remittances (45% when husband is the overseas worker and 62% when wife is the overseas worker). However, about half of the households indicated that they were able to save some of the remittances. Remittances were used 'always' to buy food (79% and 72%, respectively, for households with husband overseas and with wife overseas) and 'always' to purchase utilities (62% and 41%, respectively, for households with husband overseas and with wife overseas). Remittances were also used to purchase clothing with more of 70% of the households indicating that the money was used "sometime or often" for this purpose. It is important to note that remittances were not only used for personal consumption but also for investment in education. Whereas most households indicated that remittances were always or often used to support education, less than 5% of the households indicated that remittances were 'rarely' used for education. Indeed, the data confirm previous observations that Filipino households are likely to use remittances for internal consumption and for investment in education.[4]

In Table 1 we compare the mean characteristics of households with and without overseas labor-migrants for a descriptive overview. The data reveal rather clearly that income of households with overseas labor migrants is higher by 30% than the income of households without labor migrants and that the income per capita of the former type of households is almost twice the income per capita of the latter type of households. Remittances sent by overseas workers make over 70% of the household income. Apparently, remittances have become not only the major source of income for households with overseas workers but they also contribute greatly to income differentials between households with and without overseas workers.

Disparities between the two types of households are also evident with regard to standard of living whether measured on the 'objective' index of possession of goods (OBJSTL) or on the 'subjective' assessment scale (SUBSTL). Standard of living is considerably higher among households with overseas workers. Households with overseas workers are more able than households without overseas workers to purchase goods for household consumption, hence, to raise their standard of living and quality of life. Likewise, respondents in households with overseas workers tend to assess their standard of living and the ability to meet daily needs (as compared to other families in the Philippines) significantly higher than respondents in households without overseas workers.

The two types of households not only differ by their income and standard of living but also by their demographic and social composition. More specifically, households with overseas workers are characterized by higher educational levels and by younger age (of both husband and wife) than households with no overseas worker. They are also of smaller size. Unemployment rate is considerably higher among wives belonging to households without overseas workers and the proportion of manual and service workers is almost twice as large among wives belonging to

[4] Unfortunately no direct questions were asked on investment in the economy or businesses. Therefore, we have no data to present on domestic investment.

households with overseas workers. We tend to believe that the differences in employment status and occupational composition among women were shaped by the structure of employment and occupational opportunities available in the global labor market. That is, Filipinas were able to avoid unemployment by taking jobs in overseas markets, mostly as service and domestic workers (see Semyonov and Gorodzeisky 2004, 2005).

Multivariate Analysis

Since the data displayed in Table 1 reveal that households with and without overseas workers not only differ by access to remittances but also by income level and by standard of living as well as by their social and demographic composition, it seems important to estimate the net effect of remittances on the two indicators of economic well being (i.e. household income and the two measures of household standard of living). Thus, in the analysis that follows we estimate a series of regression equations predicting household income (presented in Table 2) and a series of regression equations predicting household standard of living (presented in Tables 3 and 4).

The data presented in Table 2 pertain to the net impact that remittances exert on household income. Equation 1 pertains to households with overseas workers while Eqs. 2–4 pertain to both types of households. In Eqs. 1 and 2 we let household income be a function of remittances plus socio-demographic characteristics of both the husband and the wife. In Eq. 3 remittances is replaced by a variable distinguishing between household with and without overseas workers. In Eq. 4 both remittances and type of household are introduced as predictors of household income.

The analysis reveals, rather clearly, that net of the household socio-demographic characteristics, every peso that the household receives in the form of overseas remittances increases household income substantially. The effect of remittances on family income is positive and highly significant in both Eq. 1 ($b = .338$) and Eq. 2 ($b = .051$).

Notwithstanding the impact of remittances on household income, the findings indicate that household income is also affected by the socio-demographic characteristics of the family members. Household income is likely to rise with age of wife, education of husband, and size of the households (the effects of all these variables are positive and significant in all four equations). The analysis also shows that household income tends to be depressed in households that either the husband or the wife is unemployed. The effects of all employment categories (whether of husband or of wife) are positive and significant implying that income of households with an unemployed parent is significantly lower than the income of households in which both parents are employed, regardless of the occupational category of employment.

The findings revealed by Eq. 3 suggest that income of households with overseas workers is significantly higher than the income of households without overseas workers, net of the socio-demographic attributes of households. The effect of overseas employment on income is positive ($b = .379$) and highly significant.

Table 2 Regression equations coefficients (SD) predicting LN household income

	Only household with overseas labor migrant	Total population of households		
	(1)	(2)	(3)	(4)
Remittances (LN)	0.338* (0.018)	0.051* (0.004)	–	0.314* (0.024)
Age of husband	0.000 (0.005)	0.006 (0.003)	0.006 (0.004)	0.006 (0.003)
Age of wife	0.013* (0.005)	0.015* (0.004)	0.015* (0.004)	0.013* (0.004)
Education of husband	0.043* (0.012)	0.034* (0.008)	0.036* (0.008)	0.032* (0.007)
Education of Wife	0.007 (0.011)	0.032* (0.008)	0.033* (0.008)	0.033* (0.008)
Size of household	0.082* (0.012)	0.065* (0.008)	0.064* (0.008)	0.061* (0.008)
Occupation of husband[b]				
Professionals and technicians	0.653* (0.091)	0.807* (0.071)	0.796* (0.072)	0.776* (0.069)
Clerks and sales	0.233* (0.053)	0.384* (0.040)	0.376* (0.040)	0.374* (0.039)
Manual workers	0.420 (0.074)	0.372* (0.063)	0.368* (0.063)	0.365* (0.061)
Occupation of wife[a]				
Professionals and technicians	0.569* (0.076)	0.735* (0.053)	0.728* (0.054)	0.751* (0.052)
Clerks and sales	0.455* (0.092)	0.499* (0.070)	0.501* (0.070)	0.503* (0.067)
Manual workers	0.257* (0.054)	0.251* (0.038)	0.255* (0.038)	0.319* (0.037)
Households with overseas labor migrants	–	–	0.379* (0.039)	−2.401* (0.218)
Constant	4.13	6.27	6.26	6.38
R^2	0.510	0.385	0.370	0.426
N	719	1724	1724	1724

[a] Omitted category—unemployed

* $p < 0.05$

The results of Eq. 4 indicate, rather forcefully, that the differences in household income between households with and without overseas workers can be fully attributed to remittances.

When both remittances and overseas employment are introduced into Eq. 4, the impact of remittances on household income remain positive and significant ($b = .314$) but the effect of overseas employment becomes negative ($b = -2.4$). This finding may attest to the productivity loss of households that sent labor migrants overseas. Without overseas remittances the income of households with labor migrants could have been considerably lower.

The data displayed in Table 3 examine the impact of remittances on household standard of living (measured on the index of possession of goods—OBJSTL). Equations 1 through 3 pertain to the sub-sample of households with an overseas labor migrant and Eqs. 1a through 4a pertain to the total sample (both households with and without labor migrants). In Eq. 1 we let the index of standard of living be a function of remittances and socio-demographic attributes. In Eq. 2 we replace overseas remittances with household domestic earnings, and in Eq. 3 we introduce both remittances and earnings in the Philippines as predictors of standard of living.[5] Equations 1a, 2a, 3a and 4a of Table 3 pertain to total sample (both households with and without labor migrants). In Eq. 1a, standard of living (OBJSTL) is predicted as a function of socio-demographic characteristics of the household plus a variable that distinguishes between two types of households (i.e. households with and without labor migrants). In Eq. 2a remittances is added to the set of predictors, and in Eq. 3a remittances is replaced by domestic earnings. Equation 4a includes all sources of earnings (remittances and earnings in the Philippines) along with type of household as predictors of standard of living.

Equations 1–3 of Table 3 demonstrate, rather clearly, that among households with labor migrants, overseas remittances are the foremost determinant of household standard of living. By contrast, domestic earnings have no impact on household standard of living. That is, while remittances exert significant and positive effect on the number of goods in the possession of the household (Eqs. 1 and 3) earnings in the Philippines do not exert a significant influence on standard of living (Eqs. 2 and 3). Apparently, number of goods in the possession of the household as an indicator of standard of living is likely to rise due to remittances. The higher are the remittances the higher is the standard of living.

The results displayed by Eq. 1a suggest that, other things being equal, households with labor migrants enjoy higher standard of living (measured by the index of household goods—OBJSTL) than households without labor migrants. The effect of migrant status in Eq. 1a is positive and highly significant ($b = .531$) implying that households with overseas workers are able to purchase more goods than households without overseas workers. The difference between the two types of households in OBJSTL, however, can be attributed to differences in the income of the two types of households, especially to differences due to remittances. That is, when 'remittances'

[5] To examine the impact of missing values (13.8% for earnings in the Philippines and 19.3% of reported overseas remittances) we estimated the equations once using pairwise deletion procedure and once using listwise delition procedure. The results are quite similar and lead to the same conclusions reported here.

Table 3 Regression equations coefficients (S.D.) predicting household objective standard of living index (OBJSTL)

	Only household with overseas labor migrant			Total population of households			
	(1)	(2)	(3)	(1a)	(2a)	(3a)	(4a)
Remittances (LN)	0.152* (0.046)	–	0.135* (0.048)	–	0.156* (0.056)	–	0.161* (0.059)
Domestic earnings in the Philippines (LN)	–	−0.002 (0.909)	0.000 (0.020)	–	–	0.055* (0.019)	0.061* (0.019)
Age of husband	0.016 (0.013)	0.012 (0.014)	0.013 (0.014)	0.012 (0.008)	0.009 (0.008)	0.007 (0.008)	0.007 (0.008)
Age of wife	0.024 (0.014)	0.026 (0.014)	0.023 (0.014)	0.018* (0.008)	0.020* (0.008)	0.019* (0.009)	0.017* (0.008)
Education of husband	0.199* (0.032)	0.121* (0.032)	0.144* (0.032)	0.118* (0.017)	0.105* (0.018)	0.100* (0.018)	0.098* (0.018)
Education of wife	0.122* (0.029)	0.125* (0.030)	0.122* (0.030)	0.133* (0.018)	0.135* (0.019)	0.128* (0.019)	0.128* (0.019)
Size of household	−0.002 (0.033)	−0.001 (0.036)	−0.006 (0.035)	0.024 (0.019)	0.016 (0.019)	0.004 (0.020)	0.001 (0.020)
Occupation of husband[a]							
Professionals and technicians	0.388 (0.240)	0.412 (0.274)	0.383 (0.273)	1.098* (0.155)	1.120* (0.161)	1.098* (0.173)	1.073* (0.173)
Clerks and sales	0.179 (0.142)	0.174 (0.157)	0.175 (0.156)	0.402* (0.088)	0.428* (0.090)	0.348* (0.096)	0.340* (0.096)
Manual workers	0.248 (0.197)	0.245 (0.233)	0.250 (0.232)	0.419* (0.134)	0.428* (0.140)	0.393* (0.152)	0.379* (0.152)
Occupation of wife[a]							
Professionals and technicians	0.738* (0.202)	0.721* (0.242)	0.740* (0.241)	0.702* (0.121)	0.726* (0.124)	0.529* (0.130)	0.530* (0.130)
Clerks and sales	0.548* (0.247)	0.525 (0.280)	0.523 (0.279)	0.638* (0.155)	0.693* (0.160)	0.508* (0.166)	0.499* (0.165)
Manual workers	0.083 (0.144)	−0.023 (0.187)	0.039 (0.187)	0.141 (0.086)	0.202* (0.088)	0.046 (0.093)	0.070 (0.094)
Households with overseas labor migrants	–	–	–	0.531* (0.085)	−0.817 (0.507)	0.798* (0.117)	−0.608 (0.525)
Constant	−2.72	−1.28	−2.28	−2.13	−1.98	−1.95	−1.90
R^2	0.183	0.168	0.178	0.271	0.276	0.265	0.268
N	732	719	719	1910	1811	1724	1724

[a] Omitted category—unemployed

* $p < 0.05$

is also included in the set of predictors in Eqs. 2a and 4a, the effect of 'migrant status' on standard of living becomes statistically insignificant. Although both domestic earnings and remittances affect the number of goods in the possession of the household (as evident by the significant and positive effects of both variables in Eqs. 2a, 3a and 4a), remittances are responsible for the difference in standard of living between households with and without labor migrants.

It is interesting to note that number of goods in the possession of the household (as an indicator of standard of living) is likely to increase not only with the flow of earnings and with remittances but also with age of wife and the level of education of both husband and wife. Number of goods is also likely to rise in households where the husband is fully employed, regardless of his occupational category, and in households where the wife finds employment in professional, clerical or sales occupations. Apparently, age and employment status of women enhance their negotiating power within the family in purchasing household goods. Higher educational level may represent tastes, preferences and potential future earnings.

The data presented in Table 4 examine the impact of remittances on subjective assessments of standard of living (measured on SUBSTL scale). The regression models predicting SUBSTL are identical to the models presented in Table 3. Similar to the findings observed for OBJSTL, the data suggest that the foremost significant predictor of subjective assessment of standard of living among households with overseas workers (Eqs. 1–3) is overseas remittances. The higher the remittances sent from overseas the higher is the value of the SUBSTL scale ($b = .082$). However, and similar to the findings observed for the previous measure of standard of living (OBJSTL), domestic earnings exerts no impact on respondent's subjective evaluation of the household relative economic position. (The net effect of domestic earnings on SUBSTL in both Eqs. 2 and 3 is negligible and statistically insignificant).

The data displayed in Eqs. 1a through 4a in Table 4 pertain to the total sample including both households with and without overseas workers. The data clearly reveal that the subjective assessment of standard of living is significantly higher among households with overseas workers. The effect of type of household on SUBSTL in Eqs. 1a and 3a is positive and significant ($b = .463$ and $b = .506$, respectively). However, similar to the findings observed in Table 3 for the index of possession of household goods, the difference between the two types of households is fully attributable to the flow of remittances. When remittances is included in Eqs. 2a and 4a the effect of type of household on SUBSTL becomes statistically insignificant. The data suggest, once again, that remittances is an important determinant of subjective evaluation of standard of living. The data also suggest that domestic earnings (Eqs. 3a and 4a) have no influence on the subjective assessment of the household standard of living.

Decomposition of Mean Differences between Households

The data presented thus far reveal that household income and standard of living whether measured on the objective index of possession of household goods

Table 4 Regression equations coefficients (SD) predicting household subjective standard of living index (SUBSTL)

	Only household with overseas labor migrant			Total population of households			
	(1)	(2)	(3)	(1a)	(2a)	(3a)	(4a)
Remittances (LN)	0.082* (0.027)	–	0.075* (0.030)	–	0.065* (0.034)	–	0.060 (0.037)
domestic earnings in the Philippines (LN)	–	−0.016 (0.013)	−0.014 (0.013)	–	–	0.001 (0.012)	0.003 (0.012)
Age of husband	0.010 (0.008)	0.009 (0.008)	0.009 (0.008)	0.008 (0.005)	0.009 (0.005)	0.007 (0.005)	0.007 (0.005)
Age of wife	−0.001 (0.009)	0.002 (0.009)	0.001 (0.009)	0.002 (0.005)	0.001 (0.005)	0.004 (0.005)	0.003 (0.005)
Education of husband	0.067* (0.019)	0.071* (0.020)	0.067* (0.020)	0.045* (0.011)	0.043* (0.011)	0.041* (0.011)	0.040* (0.011)
Education of wife	0.030 (0.018)	0.036* (0.019)	0.035 (0.019)	0.039* (0.011)	0.038* (0.012)	0.045* (0.012)	0.045* (0.012)
Size of household	−0.045* (0.020)	−0.040 (0.022)	−0.042 (0.022)	−0.032* (0.012)	−0.030* (0.012)	−0.030* (0.013)	−0.030* (0.013)
Occupation of husband[a]							
Professionals and technicians	0.169 (0.148)	0.294 (0.170)	0.278 (0.168)	0.698* (0.096)	0.691* (0.100)	0.713* (0.110)	0.704* (0.110)
Clerks and sales	−0.096 (0.087)	0.146 (0.097)	0.146 (0.097)	0.194* (0.054)	0.206* (0.056)	0.227* (0.061)	0.223* (0.061)
Manual workers	0.110 (0.121)	0.210 (0.144)	0.213 (0.144)	0.425* (0.083)	0.437* (0.087)	0.462* (0.096)	0.457* (0.096)
Occupation of wife[a]							
Professionals and technicians	0.159 (0.124)	0.225 (0.150)	0.236 (0.150)	0.131 (0.075)	0.166* (0.077)	0.151 (0.083)	0.151 (0.082)
Clerks and sales	−0.007 (0.152)	0.077 (0.171)	0.075 (0.173)	0.148 (0.096)	0.181 (0.099)	0.187 (0.105)	0.183 (0.105)
Manual workers	0.152 (0.089)	0.197 (0.116)	0.232 (0.116)	0.117* (0.053)	0.124* (0.055)	0.108 (0.059)	0.117* (0.060)
Households with overseas labor migrants	–	–	–	0.463* (0.052)	−0.084 (0.301)	0.506* (0.074)	−0.019 (0.333)
Constant	4.32*	4.76*	4.21*	4.31*	4.35*	4.27*	4.28*
R^2	0.072	0.065	0.073	0.144	0.146	0.149	0.150
N	730	716	716	1897	1798	1711	1711

[a] Omitted category—unemployed

* $p < 0.05$

Table 5 Components of LN household income and household standard of living differentials between household with overseas labor migrant and household without labor migrant[a]

	Household 'ncome (LN)	Objective household standard of living (OBJSTL)	Subjective household standard of living (SUBSTL)
Mean for household with overseas labor migrant	9.396	3.468	6.508
Mean for household without overseas labor migrant	8.913	2.655	5.987
Initial gap ($\bar{Y}o - \bar{Y}w$)	0.482 (100%)	0.813 (100%)	0.520 (100%)
Gap Remaining after Standardization ($\sum_{i=1}^{n} Bio(\bar{X}o - \bar{X}w)$)	−0.008 (−1.8%)	0.192 (26 %)	0.162 (31%)
Gap due to "Remittances" (K)	0.491 (101.8%)	0.621 (73%)	0.358 (69%)

[a] The decomposition procedure can be expressed by the following statistical notation: $\bar{Y}o - \bar{Y}w = \sum_{i=1}^{n} Bio(Xio - \bar{X}iw) + K$

(OBJSTL) or on the scale of subjective assessment of living standard (SUBSTL) are likely to rise with remittances and that remittances are responsible, to a large extent, for the disparities in income and standard of living between households with and without overseas labor migrants. In order to systematically and accurately evaluate the extent to which remittances explain the observed disparities between households with and without overseas workers we decomposed the mean differences between the two types of households using regression equations.

There are several methods for decomposing mean differences between groups via the use of regression equations. In the present analysis we employed standardization procedure to decompose mean differences in income and two measures of standard of living between households with overseas workers and households without overseas workers. The logic embodied in the procedure employed here is to ask what would be the income or standard of living of households without overseas workers if their income and their standard of living, respectively, would be determined exactly in the same way as households without overseas workers. It serves as a hypothetical case where one group (i.e. households with overseas workers) is exposed to the same conditions and processes that determine outcomes of the other group (i.e. households with overseas workers). The procedure can be expressed by the following notation:

$$\bar{Y}o - \bar{Y}w = \sum_{i=1}^{n} Bio\left(\bar{X}io - \bar{X}iw\right) + K$$

where O and W stand, respectively, for households with overseas workers and for households without overseas workers, and Y's are the mean value of the dependent variables. The X's are the mean values of the independent variables weighted by the regression coefficients (B) obtained from the regression equation for the standard population (here households with overseas workers). The k term is the component

due to "remittances". The results of this analysis are displayed in Table 5.[6] Column 1 pertains to household income, column 2 pertains to OBJSTL and column 3 pertains to SUBSTL.

The findings provide firm support for the thesis that most of the disparities between households with labor migrants and households without labor migrants in either income or standard of living are accounted by the availability of remittances. In fact, the entire income gap (101%) between households with and without overseas workers is found to be attributed to the flow (or lack) of remittances. Without remittances, the predicted income of households with overseas workers would be virtually equal to the income of those households that have not sent migrants to overseas labor markets. Availability of remittances accounts for almost three-quarters (73%) of the disparity in standard of living measured on the index of possession of household goods (OBJSTL). Had families without overseas workers received remittances their standard of living could have improved considerably. The improvement in standard of living due to remittances is also reflected in subjective assessments of respondents. Two thirds of the gap in the subjective evaluation of economic standard of living (SUBSTL) is accounted by availability of remittance. Indeed, the data presented here do not leave any doubt that the flow of remittances is responsible for economic disparities between households in the Philippines.

Conclusions

The major objective of the study was to examine the impact of remittances on economic well being of households in the Philippines. The data presented by the analysis lend firm support to the thesis that labor migration is a rational economic strategy of poor and lower-middle income households to combat poverty and to improve standard of living. The findings demonstrate that the money that labor migrants send back home is mostly used by members of the households for consumption (e.g. to buy food, utilities and clothing) and to support education. Due to remittances households with overseas workers have higher incomes and enjoy

[6] The equations that seem most appropriate for conducting this decomposition procedure are those that do not include remittances among the set of predictors. The exclusion of remittances from the analysis enables us to estimate the portion of the gap between the two types of household that is due to availability of remittances. The structural regression equations that were used for the decomposition are: Household Income = 6.732–0.002*age of husband + 0.021*age of wife +0.060*education of husband +0.015*education of wife + 0.092*size of household + 0.684*husband is professional or technician + 0.209*husband is clerk or sale + 0.367*husband is manual worker +0.476*wife is professional or technician + 0.416*wife is clerk or sale + 0.058*wife is manual worker. OBJSTL = − 1.278 + 0.012*age of husband + 0.026*age of wife +0.121*education of husband +0.125*education of wife-0.001*size of household + 0.412*husband is professional or technician + 0.174*husband is clerk or sale + 0.245*husband is manual worker +0.721* wife is professional or technician + 0.525* wife is clerk or sale-0.023* wife is manual worker-0.002* household earning in the Philippines (LN). SUBSTL = 4.76 + 0.009*age of husband + 0.002*age of wife +0.071*education of husband +0.036*education of wife + 0.040*size of household + 0.294*husband is professional or technician + 0.146*husband is clerk or sale + 0.21*husband is manual worker +0.225* wife is professional or technician + 0.077* wife is clerk or sale + 0.197* wife is manual worker-0.016* household earning in the Philippines (LN).

higher living standard than households without overseas workers. The analysis reveals, rather clearly and forcefully, that the entire income gap and most of the gap in standard of living (whether measured by the number of goods in the possession of the household or by subjective assessment of the household relative standard of living) between households with and without overseas workers can be accounted by availability of remittances.

The findings of the present study suggest that the goals of the Filipino migration policy were largely achieved. That is, labor migrants (many of whom were unemployed or underemployed in the Philippines) are able to send home large sums of foreign currency in the form of remittances; remittances, in turn, are heavily used by members of the household to improve standard of living. However, the findings also reveal that at the same time that overseas remittances increase standard of living they also increase economic inequality (i.e. disparities in standard of living) between households with and without overseas workers. Notwithstanding, the significant impact on labor migration on both standard of living and economic inequality among households in the Philippines, their intended and unintended implications for the Filipino society are yet to be systematically studied.

For example, it is not clear yet whether and to what extent the prevalence and scope of labor migration in the Philippines have prompted investment in the domestic economy. It is also not clear whether programs that support and encourage overseas labor migration prevent implementation of alternative programs for domestic economic development. Unfortunately, the data provided by the Survey of Families and Children of Overseas Workers do not provide information on the extent to which remittances are invested back in the local economy or on the extent to which remittances stem and prompt domestic economic development. It is our hope that the complex and multiple effects of labor migration and labor migration policies on the sending societies would be further studied and understood. We also hope that future studies would be able to examine the impact of non-monetary remittances, gender dimensions of overseas employment on domestic behavior, and on non-economic aspects of overall wellbeing.

Appendix For what purpose remittances were spent by type of household (only for households with overseas labor migrant)

		Husband is overseas labor migrant ($N = 548$)	Wife is overseas labor migrant ($N = 508$)
How do you spend the money he/she sends?			
	Spend all (%)	45.1	62.1
	Spend and save some (%)	54.9	37.9
If money is spent for:			
Food	Always (%)	79.2	72.5
	Sometimes–Often (%)	19.3	23.6
	Never–Rarely (%)	1.5	4.0

Appendix continued

		Husband is overseas labor migrant ($N = 548$)	Wife is overseas labor migrant ($N = 508$)
Clothes	Always (%)	7.7	2.8
	Sometimes–Often (%)	71.7	76.9
	Never–Rarely (%)	20.6	20.4
Utilities	Always (%)	62.4	41.1
	Sometimes–Often (%)	34.8	50.1
	Never–Rarely (%)	2.8	8.8
Education	Always (%)	70.8	58.1
	Sometimes–Often (%)	26.6	35.3
	Never–Rarely (%)	2.6	6.6

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