Overseas Workers, Remittances, and Household Welfare in the Philippines

Jessaine Soraya C. Sugui
Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA)
sjessaine@yahoo.com
jscs@agri.searca.org

Michael M. Alba, Ph.D.
Economics Department
De La Salle University Manila
michael.alba@gmail.com
albam@dlsu.edu.ph

Arnelyn May Abdon
Institute for Development and Econometric Analysis (IDEA), Inc.
mitchaabdon@idea.org.ph

November 16, 2006

Abstract
The implications of migration and remittances to households’ welfare and income distribution are increasingly becoming important issues. This is especially true for developing economies, which account for the bulk of the migrants and receive most of the remittances. The Philippines is one of the largest labor-exporting countries in the world, and remittance receipts account for at least ten percent of the GDP. This study examines the implications of remittances to Filipino households. Specifically, it aims to: 1) describe the characteristics of Filipino migrants, 2) examine how these characteristics affect the incidence and amounts of remittances at the margin, 3) evaluate how remittances affect household consumption patterns, and 4) compare welfares of remittance-receiving and non-receiving households. The study is expected to provide a sound and complete analysis of the issue and serve as a resource to scholars and policymakers.

1. Rationale

The scale and scope of international migration and the volume and amounts of international currency movements from workers’ remittances have raised important issues worldwide. As the World Bank (2005) reports, about 180 million people now live outside their country of birth (three percent of the world’s population). Driven by the divergence of incomes and living standards around the world, developing-country citizens have opted in droves to work overseas to better themselves and their families. In 2004, total remittances reached US$ 216 billion, with about US$ 152 billion received by less developed countries. Ratha (2003) states that remittances to developing economies, valued at US$ 72.3 billion, exceeded total official flows and private non-FDI flows in 2001.

The places of origin of the majority of emigrants and the recipients of the bulk of remittance flows, developing countries certainly have been significantly affected by trends in international migration. On the positive side, the increased currency inflows have possibly raised the welfare of recipient households directly (through higher incomes or expenditures, lower income risks or smoother time profiles of consumption expenditures, longer leisure times, or longer search durations as a consequence of higher reservation wages) and the rest of the economy indirectly (through the multiplier effects of higher incomes and consumption expenditures and by affording more latitude for fiscal and monetary management). Moreover, to the extent that remittance receipts are used to make human and physical capital investments or to finance new ventures and entrepreneurial activities and to the degree that overseas workers are socialized into more efficient working environments and acculturated in societies with more responsive and accountable governance systems, the monetary investments and changed expectations additionally enhance the economy’s potential for long-term growth. On the negative side, to the extent that the more skilled and employable workers are the ones who migrate, the economy’s growth is restricted by the lower capabilities of the workers left behind. Moreover, the income distribution can worsen between remittance-receiving and other families, which can increase social tensions. In addition, social problems can arise from the long periods of separation between migrant workers and their families, such as those associated with poor rearing of children who grow up with relatives as well as with couples who grow apart.

While important and interesting, these issues and particularly their quantitative impact on the economy have remained relatively unexplored.

This study focuses on the Philippines, which is one of the largest labor-exporting countries in the world. The strong trend in overseas work has led to an influx of remittances, which accounted for 10.5 percent of Gross Domestic Product (GDP) in 2003. The number of overseas Filipino workers (OFWs) reached close to a million in 2004 (Table 1), up from 982 thousand in 2003, with female workers slightly outnumbering their male counterparts in the later year. The majority of these OFWs came from the National Capital Region (NCR) and the nearby areas of Region IV-A.
(composed of six provinces in Southern Luzon) and Region III (composed of seven provinces in Central Luzon).

Table 1: Number of OFWs (in thousands)

<table>
<thead>
<tr>
<th>Region</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines</td>
<td>1063</td>
<td>524</td>
<td>529</td>
<td>982</td>
<td>508</td>
<td>475</td>
</tr>
<tr>
<td>NCR</td>
<td>194</td>
<td>121</td>
<td>73</td>
<td>182</td>
<td>116</td>
<td>66</td>
</tr>
<tr>
<td>CAR</td>
<td>24</td>
<td>6</td>
<td>18</td>
<td>20</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Region 1</td>
<td>86</td>
<td>25</td>
<td>61</td>
<td>82</td>
<td>31</td>
<td>51</td>
</tr>
<tr>
<td>Region 2</td>
<td>57</td>
<td>12</td>
<td>45</td>
<td>63</td>
<td>13</td>
<td>50</td>
</tr>
<tr>
<td>Region 3</td>
<td>149</td>
<td>90</td>
<td>59</td>
<td>119</td>
<td>65</td>
<td>54</td>
</tr>
<tr>
<td>Region 4-A</td>
<td>191</td>
<td>110</td>
<td>80</td>
<td>170</td>
<td>113</td>
<td>57</td>
</tr>
<tr>
<td>Region 4-B</td>
<td>11</td>
<td>5</td>
<td>6</td>
<td>14</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Region 5</td>
<td>32</td>
<td>16</td>
<td>16</td>
<td>32</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>Region 6</td>
<td>92</td>
<td>38</td>
<td>53</td>
<td>98</td>
<td>49</td>
<td>50</td>
</tr>
<tr>
<td>Region 7</td>
<td>49</td>
<td>33</td>
<td>16</td>
<td>52</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td>Region 8</td>
<td>24</td>
<td>9</td>
<td>14</td>
<td>19</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Region 9</td>
<td>22</td>
<td>6</td>
<td>17</td>
<td>18</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Region 10</td>
<td>28</td>
<td>13</td>
<td>14</td>
<td>27</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Region 11</td>
<td>34</td>
<td>10</td>
<td>25</td>
<td>32</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Region 12</td>
<td>30</td>
<td>11</td>
<td>19</td>
<td>31</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>Region 13</td>
<td>10</td>
<td>3</td>
<td>6</td>
<td>10</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>ARMM</td>
<td>31</td>
<td>15</td>
<td>17</td>
<td>13</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: Details may not add up to totals due to rounding.
Source: Survey of Overseas Filipinos (SOF)

The top six destinations of OFWs in 1998 and 1999 were Hong Kong, Japan, Singapore, Saudi Arabia, and Taiwan (Table 2). In both years, Saudi Arabia hosted the largest number of Filipino workers. Filipino migrant workers, however, were found in all continents, with the possible exception of Antarctica (Table 3). In 2003 and 2004, most of the OFWs were in Asia, though numerous migrants also headed for Europe and North and South America.

Table 2: Top Six Destinations of OFWs: 1998-1999 (in thousands)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>285</td>
<td>253</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>120</td>
<td>109</td>
</tr>
<tr>
<td>Taiwan</td>
<td>110</td>
<td>80</td>
</tr>
<tr>
<td>Singapore</td>
<td>62</td>
<td>67</td>
</tr>
<tr>
<td>Japan</td>
<td>83</td>
<td>65</td>
</tr>
<tr>
<td>USA</td>
<td>61</td>
<td>42</td>
</tr>
</tbody>
</table>

Source: SOF
Table 3: OFW Destination by Continent (in thousands)

<table>
<thead>
<tr>
<th>Continent</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>11</td>
<td>11</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Asia (Including Middle East)</td>
<td>663</td>
<td>305</td>
<td>358</td>
<td>616</td>
<td>295</td>
<td>321</td>
</tr>
<tr>
<td>Australia</td>
<td>17</td>
<td>12</td>
<td>5</td>
<td>18</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Europe</td>
<td>88</td>
<td>58</td>
<td>30</td>
<td>77</td>
<td>52</td>
<td>25</td>
</tr>
<tr>
<td>North and South America</td>
<td>77</td>
<td>46</td>
<td>31</td>
<td>83</td>
<td>59</td>
<td>24</td>
</tr>
<tr>
<td>Other Countries</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>..</td>
</tr>
<tr>
<td>Country not reported</td>
<td>1</td>
<td>1</td>
<td>..</td>
<td>7</td>
<td>6</td>
<td>..</td>
</tr>
</tbody>
</table>

Notes: Details may not add up to total due to rounding.

.. Less than 500

The estimates cover overseas Filipinos whose departure occurred within the last five years and who are working or have worked abroad during the past six months (April to September) of the survey period.

Source: SOF

Perhaps the scarcity of jobs is one factor that pushes Filipinos to seek work abroad. Data from the Asian Development Bank (ADB) website show that unemployment increased to 11.8 percent in 2004 (from 11.4 percent in 2003), given that 1.29 million new workers entered the labor force, but only 977,000 new jobs were created. Not surprisingly, poverty remained widespread in the country. Official estimates indicate an estimated 40 percent of the population lived below the poverty line in 2000, compared to 36.8 percent in 1997 (Table 4). For both years, the incidence of poverty in rural areas was higher than in urban areas.

Table 4: Poverty Incidence (in percent)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>40</td>
<td>25</td>
<td>54.5</td>
<td>36.8</td>
</tr>
<tr>
<td>Families</td>
<td>34.2</td>
<td>20.5</td>
<td>47.4</td>
<td>31.8</td>
</tr>
</tbody>
</table>

Source: Family Income and Expenditures Survey (FIES)

As the number of Filipino overseas workers increased, so did the amount of remittance receipts. The number of migrant workers that sent remittances jumped to 889 thousand in 2004 from 857 thousand in 2003 (Table 5). Households reported receiving over PhP64 billion in total remittances in 2004, slightly lower than the PhP70 billion that was remitted the previous year. This was because cash brought home in 2004 was smaller than in 2003. However, cash sent increased to more than PhP50 billion in 2004 from almost PhP49 billion the previous year. Asia and North and South America were the largest sources of remittances (Table 6).
Given these observations, it seems a worthwhile exercise to study overseas work and remittances. Some important aspects that remain to be explored include the characteristics of Filipino migrants, the influence these characteristics have on the incidence of remitting and the amount sent, and the impact of remittances on consumption patterns and welfare. The findings could yield insights that have useful policy implications.

The main purpose of this study is to examine in depth the implications of remittances on the consumption patterns and well being of Filipino households. More specifically, it aims to: 1) describe the characteristics of Filipino migrants, 2) examine how these characteristics affect the incidence and amounts of remittances at the margin, 3) evaluate how remittances affect household consumption patterns, and 4) compare welfares of remittance-receiving and non-receiving households. The study intends to answer the following research questions:

---

### Table 5: Total Remittances in Cash and Kind

<table>
<thead>
<tr>
<th></th>
<th>2004 Male</th>
<th>2004 Female</th>
<th>2003 Male</th>
<th>2003 Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of OFWs (in 1000's)</td>
<td>450</td>
<td>439</td>
<td>456</td>
<td>402</td>
</tr>
<tr>
<td>Total Remittances (in P1000)</td>
<td>42,159,518</td>
<td>22,553,689</td>
<td>46,379,598</td>
<td>24,019,985</td>
</tr>
<tr>
<td>Cash Sent</td>
<td>32,327,489</td>
<td>18,067,539</td>
<td>32,992,410</td>
<td>15,897,914</td>
</tr>
<tr>
<td>Cash Brought Home</td>
<td>8,151,840</td>
<td>3,043,113</td>
<td>11,172,680</td>
<td>6,139,590</td>
</tr>
<tr>
<td>In Kind</td>
<td>1,680,189</td>
<td>1,443,037</td>
<td>2,214,508</td>
<td>1,982,481</td>
</tr>
</tbody>
</table>

Notes: Details may not add up to total due to rounding

The estimates cover overseas Filipinos whose departure occurred within the last five years and who are working or have worked abroad during the past six months (April to September) of the survey period.

Source: SOF

### Table 6: Cash Sent by Source Continent (in thousands)

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Total</td>
<td>50,395,028</td>
<td>48,890,324</td>
</tr>
<tr>
<td>Africa</td>
<td>1,182,775</td>
<td>845,409</td>
</tr>
<tr>
<td>Asia</td>
<td>33,935,869</td>
<td>32,531,752</td>
</tr>
<tr>
<td>Australia</td>
<td>1,042,778</td>
<td>1,464,984</td>
</tr>
<tr>
<td>Europe</td>
<td>7,373,578</td>
<td>6,114,725</td>
</tr>
<tr>
<td>North and South America</td>
<td>6,439,007</td>
<td>7,207,446</td>
</tr>
<tr>
<td>Other Countries</td>
<td>275,788</td>
<td>271,187</td>
</tr>
<tr>
<td>Country not reported</td>
<td>145,232</td>
<td>454,821</td>
</tr>
</tbody>
</table>

Notes: Details may not add up to total due to rounding

The estimates cover overseas Filipinos whose departure occurred within the last five years and who are working or have worked abroad during the past six months (April to September) of the survey period.

Source: SOF

---

*Overseas Workers, Remittances, and Household Welfare in the Philippines*
(1) What are the socioeconomic characteristics of OFWs?
(2) How do these socioeconomic characteristics relate to remittances?
(3) How do remittances affect household consumption patterns?
(4) How do remittances influence welfare outcomes of receiving and non-receiving households?

At the end of the research project, we should be able to provide a solid analysis on these issues.

2. Scientific Contribution of the Research and Knowledge Gaps

Labor migration and remittances have strongly attracted the interests of researchers. The literature has looked at the effect of these phenomena at the micro and macro levels. Studies have examined their impact on poverty, inequality, labor supply, and household consumption and asset accumulation.

*Labor Migration and the Economy*

Adams (2003) constructed a new data set of 24 large labor-exporting countries to assess the pervasiveness of brain drain in the origin countries. His findings show that with respect to documented migration, most of the migrants to the United States and OECD countries have secondary and tertiary educations. Furthermore, international migration does cause brain drain in a handful of Latin American countries, but in 22 out of the 33 countries with educational attainment data, less than 10 percent of the population with tertiary education have migrated.

Adams and Page (2003) studied the impact of international migration on poverty in developing economies. Their results indicate the following: 1) international migration has a strong effect on decreasing poverty, 2) distance plays a major role in migration with developing countries nearest to the USA or OECD countries having the highest rates of migration, 3) developing countries with middle income per capita yield the most number of migrants, and 4) remittances have a strong influence on poverty reduction.

Chalamwong (2004) looked at, among others, the brain drain effect of migration in East Asia. His findings illustrate how the migration of Filipino nurses has exacerbated the poor situation in the health care sector. Some 12,300 Filipino nurses migrated between 1988 and 2000. The United States accounts for 83 percent of the total number of Filipino nurses overseas, followed by Australia and Canada. In the end, the author put forward a number of suggestions, including a *return option* program in East Asian countries to mitigate the brain drain.

*Remittances and Household Behavior*

Stark and Lucas (1988) developed the view that remittances are a part of a family’s cooperative contractual agreement. Net gains of the migrant and the family members at
different points in time, other than altruism, ensure the contract’s enforceability. Using data from Botswana, the results illustrate that migrants who were educated by the family earn higher wages but are expected to compensate the family. Remittances allow the family to participate in more risky agricultural activities having the assurance that the migrant will support them during bad times, while sons send remittances to increase the chances of inheriting from the parents.

Hoddinott (1994) posited that remittances are determined by, among others, the ability of the parents to bequeath lands to their sons. The migrant and his family agree to maximize a joint utility function over two states: one wherein the potential migrant actually migrates and one wherein he stays in the rural area. The author assumed that the family always chooses to maximize this joint utility function. Having a migrant means that the household has a form of insurance against agricultural shock, while the migrant has the assurance of being supported by a household while establishing himself in the urban area or when he becomes temporarily unemployed. The case of western Kenya supports the author’s hypothesis. One of the findings shows that sons’ remittances are partly determined by parent’s bequests of lands.

Adams (1998) analyzed the effect of remittances on rural asset accumulation in Pakistan. The author argued that with transitory income streams like remittances, the marginal propensity to invest of remittance-receiving households increase. The model, using a five-year longitudinal data from rural Pakistan, indicates that external remittances have a stronger statistical effect on asset accumulation than total labor income. This is because households tend to treat external remittances as transitory income. The paper also finds that external remittances have a positive and significant effect on accumulation of rain fed and irrigated land, while domestic remittances do not have significant impact on the accumulation of any rural asset.

Some studies have explored the relationship between international migration and the labor supply decisions of migrants’ families. Amuedo-Dorantes and Pozo (2005) looked at the effects of international remittances on labor supply and work allocations of Mexican households. The authors used an instrumental variable-Tobit model to assess the labor supply decisions of male and female recipients in urban and rural areas. Their paper reveals that an increase in remittances received by 100 Mexican pesos reduces men’s working hours in the formal sector, but increases these in the non-formal sector. The same is true for women workers. However, in the case of women workers in rural areas, a rise in remittances lead to greater time spent on non-paid work. Men who experience stable inflows spend more time on self-employment, while those that experience variability in receipts tend to work more in the informal sector.

**Studies on the Philippine Case**

Yang (2005) examined the Filipino households’ responses to overseas members’ economic shocks, specifically exchange rate shocks. His study used data from 1997-1998 when most overseas workers’ currencies appreciated against the Philippine peso due to the Asian crisis. As a result, household remittances received from abroad increased. His
findings reveal that positive migrant shocks result in greater child education, a reduction in the incidence of child labor, higher educational expenditures in the migrant’s household, and increased participation in entrepreneurial activities. Yang and Choi (2005), on the other hand, found out that remittances serve as insurance to households during rainfall shocks. When aggregate shocks cause local-level risk-coping mechanisms to fail, transfers from family members abroad may be used more heavily for consumption smoothing.

Rodriguez (1996) analyzed the determinants of international migrants’ remittances in the Philippines. Using the 1991 Survey of Overseas Workers (SOW), the author looked at the characteristics of migrants likely to send remittance back home. His results show that migrants who sent money, compared to non-remitters, are on the average older, slightly better educated, less likely to be employed in services, and more frequently the head or spouse of the head of households. Migrants in the Middle East have lower probability of sending remittances compared to migrants in other countries. The longer the migrant stays overseas, the lesser the likelihood of remitting money since ties at home weaken. Lastly, households in urban areas, those with higher incomes and more education, receive larger remittances indicating that international migration could increase inequality in the Philippines.

In another study, Rodriguez (1998) assessed the impacts of international migration on household income and its distribution in the Philippines. Using 1991 data, he explored the topic using counterfactuals (migration and no migration regimes) and decomposition analysis. Both methods show that emigration raises household per capita income, although the magnitude is larger in the first approach. However, the results also indicate that remittances worsen inequality.

Rodriguez and Tiongson (2001) assessed the effects of temporary international migration on the labor supply of urban households using 1991 data from the Philippines. The paper illustrates that households with migrant workers tend to have lower labor participation and work hours. This is because migrant relatives substitute income for more leisure. Male labor participation goes down when the overseas worker is part of the nuclear family. The same is true for women, except that female labor participation goes up when the migrant is educated. Furthermore, the authors find that an increase in remittances lead both genders to decrease their working hours, although the effect is stronger in the case of males.

Cabegin (2006) analyzed the impact of migration on the non-migrant’s spouse. The findings suggest, among other things, that women in migrant households with school age children are 28 percent less likely to hold a full-time job and 26 percent more likely to non-employed than women with school age children in non-migrant households. On the other hand, higher remittance income of a migrant wife decreases the husband’s labor participation in full-time employment.

These efforts have definitely helped bring migration and remittances to the fore of academic discussion. The literature is far from exhaustive however. For instance, the
economic papers that focus on remittances in the Philippines are few and far in between. The studies of Rodriguez (1996, 1998) and Rodriguez and Tiongson (2001) all utilized data from 1991, and obviously, there is a need to look at the issue using more recent information. In addition, to our knowledge, no recently published study has made an in-depth analysis on the effect of international remittances on Filipino households. One aspect that has to be studied is how receiving households treat these monies: whether they are treated as transitory or permanent income. Another noteworthy area to examine is how remittances are used in good and bad years. Existing studies on the Philippines have not commented on these issues. Lastly, the literature is silent on the link between the migrant’s characteristics, remittance flows, and how these funds are used. For instance, it would be useful to find out if women migrants (e.g., daughters) are more likely to remit than male migrants (e.g., sons). Furthermore, studies have not shown if the migrants’ gender affect how these monies are used. This paper aims to comment on these issues that are important, but for one reason or another, have not been thoroughly examined in the literature.

3. Policy Relevance

Given the importance of international migration and the remittances that ensue for the domestic economy, the Philippine government constantly faces pressures to formulate and implement policies that affect OFWs and their families. Thus, while Section 2 of Republic Act 8042, otherwise known as the Migrant Workers and Overseas Filipinos Act, stipulates that: “the State does not promote overseas employment as a means to sustain economic growth and achieve national development,” the overall tone of the government toward migration or overseas employment is one of implicit approbation, if not outright encouragement. In fact, President Gloria Macapagal Arroyo announced in a press release in Singapore in 2001 that the Philippine economy would be heavily dependent on overseas workers’ remittances in the foreseeable future.

Given the irreversible trend in migration (at least in the medium term), this study can be a source of insights for concerned policymakers. For instance, correlations between migrant worker characteristics and their destinations (e.g., domestic workers in Asian countries, technically-skilled workers in Middle Eastern countries, and medical care practitioners in the U.S. and Europe) may help to inform policies on the types of support personnel Philippine consulates should have in different countries, so that they can become more responsive to the needs of overseas workers. The marginal effects of migrant characteristics on remittances may help to provide more accurate forecasts of total remittances given the pool of OFWs in a given year. The information, in turn, can be used by macroeconometric or time series models to forecast the level of aggregate income under different sets of fiscal and monetary policy scenarios.

In addition, parameter estimates of Engel equations (in good and bad years) may help to forecast consumption patterns (e.g., that remittances will help to shore up food consumption in a bad year and will be used to accumulate durable goods [as stores of value] in a good year). In turn, the information can help to inform policies on income distribution and inequality (since remittances may be inequality increasing in good years).
and the design of entitlement and welfare programs (since remittances reduce the vulnerability of some households to domestic shocks).

Since the topic is relatively unexplored, the marginal contribution of the findings to the literature and to policy discussion will be potentially large. The lack of information on migrants and remittances serves as a hindrance to sound policymaking. This paper has the potential to fill that gap.

4. Methodology

**Theoretical Model**

We believe that remittance flows between a family and its non-resident member(s) occur in the context of household risk management over both space and time. This implies that a theoretical model that attempts to explain these intra-family transfers must posit an uncertain environment (over both time and space) and therefore must have temporal and spatial dimensions. In addition, it must incorporate both the consumption-smoothing aspect and the precautionary motive of saving.

Assume that a family has the following expected utility function:

\[
V_p^0 = E \left[ \sum_{t=p}^{T} \rho^{t-p} u(x^b_t, s_t) \bigg| \Omega_p \right],
\]

where the expectation at time period \( p \) is specified to be conditional on \( \Omega_p \), the information set available in that period, \( \rho \) is the discount parameter, \( u(\cdot, \cdot) \) is the individual period sub-utility function, which is assumed to be increasing and concave in its arguments, \( x^b_t \) is the value of nondurable goods consumption in time \( t \), and \( s_t \) is the value of durable goods consumption (or the service flow from the stock of durable goods) in time \( t \), the evolution of which is governed by the following equation,

\[
s_t = (1 + r - \delta) (s_{t-1} + x^d_t)
\]

for \( t = p, \ldots, T \), (2)

where \( r \) and \( \delta \) are the interest rate and the depreciation rate, respectively, and \( x^d_t \) is the value of durable goods purchased in period \( t \). Assuming that financial markets do not exist and there are no productive investments available, the per period budget constraint is given by

\[
x^b_t + x^d_t = \bar{y} + \theta_t,
\]

for \( t = p, \ldots, T \), (3)

---

1 The idea here is to avoid having to include another variable, \( A_t \), for assets that do not have consumption value. Arguably, however, this assumption is reasonable for the Philippines, where ownership of agricultural land remains tenuous because of the protracted implementation of agrarian reform and the stock market is not exactly accessible for most households.
where $\bar{y}$ is permanent income and $\theta_t = y_t - \bar{y}$, the difference between current income, $y_t$, and permanent income, is transitory income. We assume here that transfers including those from entitlement programs are zero.

In each period $p$, the family is assumed to maximize (1) subject to (2) and (3) by choosing a stream of expenditure pairs $\{(x^b_t, x^d_t), t = p, p+1, \ldots, T\}$. Because of uncertainty, however, it will only make final choices for the current period, postponing those for future periods until they arrive, given that the information set can change.

Now suppose that in period 1 the family considers sending its $j$th member(s) to another location. Let its expected utility function now be given by

$$V_1 = V\left\{E\left[\sum_{t=1}^{T} \rho^{t-1} u_j(x^b_t, s_j) | \Omega_1\right] \right\},$$

where $V\{\cdot, \cdot\}$ provides a weighting scheme for valuing the expected utility of the family members who stay at home, $E\left[\sum_{t=1}^{T} \rho^{t-1} u_j(x^b_t, s_j) | \Omega_1\right]$, and the expected utility of the migrant member(s), $E\left[\sum_{t=1}^{T} \rho^{t-1} u_j(x^b_t, s_j) | \Omega_1\right]$. The household will now maximize (4) subject to location-specific constraints

$$s_{it} = (1 + r - \delta)(s_{i,t-1} + x^d_{it}), \quad \text{for } t = 1, 2, \ldots, T \text{ and } \ell = j, -j,$$

and

$$x^b_{-jt} + x^d_{-jt} = \bar{y}_{-jt} + \theta_{-jt} + R_{jt} - C_{jt}\rho \quad \text{for } t = 1, 2, \ldots, T,$$

$$x^b_{jt} + x^d_{jt} = \bar{y}_{jt} + \theta_{jt} + R_{jt} + C_{jt}\rho \quad \text{for } t = 1, 2, \ldots, T,$$

where $C_{jt}\rho = C_{jt}$ are the one-time migration and settling costs incurred by the family to set up its $j$th member(s) in the new location in period $t = 1 = t^0$ and $R_{jt} = -R_{jt}$ are net remittances that must sum up to zero in each period.

Assume that the household can undertake the mental exercise of solving the maximization problem involved in each possible configuration of placements of family members (either some family members in one other location or spreading them out in different locations). In period 1, we can think of the family as choosing the placement configuration, consumption patterns, remittance flows, and any set up costs such that

$$W_1 = \max \{V^*_{1^0}, V^*_{1^1}, \ldots, V^*_{1^T}\},$$

A more precise description is that $j$ is a subset of family members.

Overseas Workers, Remittances, and Household Welfare in the Philippines
where \( V^*_t \) is the first-period maximized value of the expected utility function for placement configuration \( g \) subject to the constraints (2) and (3) in the case of \( V^*_t \) and constraints (5) and (6) in the case of the other configurations, and \( L \) is the maximum number of possible placement configurations that the household considers.

Then in the next and subsequent periods, the family can undertake similar calculations and choose the configuration such that

\[
W_t = \max \{ V^{*,0}_t, V^{*,1}_t, ..., V^{*,L}_t, V^{*,*}_{t-1} \}, \quad \text{for } t = 2, \ldots, T,
\]

where \( V^{*,*}_{t-1} = W_{t-1} \) is the configuration chosen in the previous period (that is, the choice of staying put and not making any locational changes) and \( V^{*,0}_t \) is the choice of collecting all family members back together again.

We assume that this sequential maximization process stays in place for as long as the participation constraints of both migrants and those left behind are satisfied. Suppose in period \( p \) \( W_p \) is obtained under configuration \( g \). Let the maximized expected utilities of each party be given by

\[
V^*_p = \max E \left[ \sum_{t=p}^{T} \rho^{t-p} u_j \left( x^b_{ij}, s_{j} \right) \right] \Omega_p \quad \text{s.t. (5) and (6a)}
\]

(9a)

in the case of the family members left behind and

\[
V^g_p = \max E \left[ \sum_{t=p}^{T} \rho^{t-p} u_j \left( x^b_{ij}, s_{j} \right) \right] \Omega_p \quad \text{s.t. (5) and (6b)}
\]

(9b)

in the case of the family members who migrate. Let the default maximized expected utilities in period \( p \) be given by

\[
V^d_p = \max E \left[ \sum_{t=p}^{T} \rho^{t-p} u_j \left( x^b_{ij}, s_{j} \right) \right] \Omega_p \quad \text{s.t. (2) and (3)}
\]

(10a)

in the case of the family members left behind and

\[
V^j_p = \max E \left[ \sum_{t=p}^{T} \rho^{t-p} u_j \left( x^b_{ij}, s_{j} \right) \right] \Omega_p \quad \text{s.t. (2) and (3)}
\]

(10b)

in the case of the family members who migrate. Then both parties will remain connected for as long as \( V^*_p \geq V^d_p \) and \( V^g_p \geq V^j_p \). If either constraint is violated, the parties go their separate ways and no transfers (both ways) transpire henceforth.

---

3 \( V^{*,0}_t \) would be the maximized value of objective function (1) subject to constraints (2) and (3), except that it would add one time resettling costs to the budget constraint (3) due to the reverse migration.
To summarize, our model posits that a family maximizing its overall well-being over time diversifies risk by locating one or more of its members in different geographic areas, the income shocks of which are either statistically independent or negatively correlated. Since migration itself is risky, however, the migrant requires set-up costs in the initial period. Consequently, the initial stream of remittances may be viewed as ex post payments of insurance premiums for setting up the migrant and as ex ante payments of insurance premiums for future income shocks to the migrant (which would depend on the job security and opportunities of the migrant, given his or her human capital stock, in the place of destination).

Some issues have to be clarified, however. First, what determines remittances in the context of the model? We argue that the stream of remittances is an arrangement between the family and the migrant. Both will continue to participate in the arrangement as long as the net expected benefits are greater than non-participation (i.e., each party going on its own way). Factors that enter into consideration are (a) the safety net or insurance that either party provides in case the other falls into hard times, given the uncertain environment of the model (migration being a diversification of spatial risk), (b) expectations of bequests when the family is resource rich, (c) expectations to be taken in and cared for by the family in the migrant’s old age or in case he/she gets sick.

Thus, remittances are explained by the characteristics and conditions of the migrant worker and his or her calculations of the expected future benefits. When a migrant is able to settle (in terms of legal status) and integrate well in his/her new destination (in terms of job tenure and social networks), and when he/she is able to form her a new nuclear family unit, when she has access to safety nets and insurance mechanisms, the less likely is he/she going to honor the arrangements. If he/she is more alienated, if his/her job has a specified duration, if his/her legal status is questionable, if he/she has no social networks, if he/she does not intend to settle in the new place, he/she is unlikely to break her bonds with her family back home. These are indicated by the migrant’s civil status, occupation, length of stay abroad, type of contract (permanent or temporary), which are contained in the Survey on Overseas Filipinos (SOF). To illustrate, Table 7 contains information on total and average remittances sent by migrants classified by occupation in 2004. Altruism may also play a role in the flow of remittances. This is indicated, for example, by the number of dependents in the migrant’s household (i.e., children and elderly) which can be obtained from the Family Income and Expenditures Survey (FIES).
Table 7: Total and Average Cash Remittance by Major Occupation Group and by Sex (In 1000) 2004

<table>
<thead>
<tr>
<th>Occupation Group</th>
<th>Both Sexes</th>
<th>Male</th>
<th>Female</th>
<th>Both Sexes</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines</td>
<td>58520</td>
<td>74276</td>
<td>42425</td>
<td>5039028</td>
<td>3232489</td>
<td>18067539</td>
</tr>
<tr>
<td>Officials of government and special interest organizations, corporate, executives, managers, and supervisors</td>
<td>99592</td>
<td>103570</td>
<td>48718</td>
<td>2196066</td>
<td>2118093</td>
<td>77193</td>
</tr>
<tr>
<td>Professionals</td>
<td>83776</td>
<td>111289</td>
<td>67857</td>
<td>5251278</td>
<td>2556846</td>
<td>2694431</td>
</tr>
<tr>
<td>Technicians and associate professionals</td>
<td>72205</td>
<td>97304</td>
<td>39309</td>
<td>5190636</td>
<td>3967697</td>
<td>1222516</td>
</tr>
<tr>
<td>Clerks</td>
<td>61332</td>
<td>63818</td>
<td>59357</td>
<td>2266752</td>
<td>1044236</td>
<td>1222516</td>
</tr>
<tr>
<td>Service workers and shop and market sales workers</td>
<td>49014</td>
<td>56828</td>
<td>42984</td>
<td>5093927</td>
<td>2572270</td>
<td>2521207</td>
</tr>
<tr>
<td>Farmers, forestry workers, and fishermen</td>
<td>71267</td>
<td>71267</td>
<td>135408</td>
<td>135408</td>
<td>663276</td>
<td></td>
</tr>
<tr>
<td>Trades and related workers</td>
<td>61806</td>
<td>63666</td>
<td>47885</td>
<td>849440</td>
<td>7831164</td>
<td>663276</td>
</tr>
<tr>
<td>Plant and machine operators and assemblers</td>
<td>78578</td>
<td>82241</td>
<td>53422</td>
<td>10762431</td>
<td>9832216</td>
<td>930214</td>
</tr>
<tr>
<td>Laborers and unskilled workers</td>
<td>38292</td>
<td>51209</td>
<td>35935</td>
<td>10985756</td>
<td>2250712</td>
<td>875044</td>
</tr>
<tr>
<td>Special occupations</td>
<td>40000</td>
<td>40000</td>
<td>..</td>
<td>18395</td>
<td>18395</td>
<td>..</td>
</tr>
</tbody>
</table>

1) Details may not add up to total due to rounding
2) .. Less than 500
3) The estimates cover overseas Filipinos whose departure occurred within the last five years and who are working or had worked abroad during the past six months (April to September) of the survey period.

Source: NSO SOF

Second, how will remittances be spent? This depends on both the family and the migrant, and how they treat the funds. If remittances are treated as transitory income, it is likely that flows will be used for housing, housing repairs, or accumulating durables. If these monies are treated as permanent income, they will be mainly used for basic consumption (e.g., food expenditure). The treatment of remittances, it turn, might depend on the migrant’s characteristics. For instance, Villamil (1998) finds that, in the Philippines, female migrants are more likely to send remittances over the long term. Male migrants, once married and constituted with their own households, stop remitting. Thus, remittances from female migrants might be used for basic consumption, while income streams from male migrants might be used to finance durable goods accumulation or housing. Utilization also depends on economic conditions. In a bad year, remittances might be used to shore up basic consumption, while in a good year, they might be used for durable goods accumulation. In a nutshell, remittances affect consumption patterns in two ways: by augmenting basic consumption like food expenditures (if the amount received is considered part of permanent income, which must be allocated over the rest of the lifecycle of the household) or by financing the purchase of durable goods and housing (if amount received is considered transitory). In the latter case, remittances received are likely to be used for durable goods consumption in part as a store of value to provide the household with a mechanism to cope ex post with a negative income shock.

Empirical Model

From the theoretical model, we obtain in each period $t$ the (optimal) location of each family member and, for the subset of members living together in a particular area, the demand functions for basic and durable goods and a net remittance function. Focusing only on the subset of members left behind in the place of origin (in anticipation of the fact that the data source does not have information on migrants, except possibly for their characteristics) and assuming that information on prices are not available, we can specify Engel equations for basic, durable, and other goods conditional on whether or not
remittances are positive. In other words, for a sample of households we may specify the
following empirical model: Let net remittances be explained by

\[ R_i^* = g(m_i, h_i, z_i) + u_i, \quad (1) \]

where \( m_i \) is a vector of characteristics of the migrant member of the \( i \)th family in the
sample, \( h_i \) is a vector of household characteristics, \( z_i \) is a set of other variables (e.g., the
economic conditions in the migrant’s location), and \( u_i \) is a random disturbance term. \( R_i^* \),
however, is a latent variable; in lieu of \( R_i^* \), what is observed is

\[ R_i = \begin{cases} R_i^* & \text{if } g(m_i, h_i, z_i) + u_i > 0 \\ 0 & \text{otherwise.} \end{cases} \quad (2) \]

Moreover, if \( R_i > 0 \), the following equations are observed as well:

\[
\begin{align*}
    x_{i}^{b} &= x_{i}^{b}(X_i, h_i) + \varepsilon_{i}^{b} \\
    x_{i}^{d} &= x_{i}^{d}(X_i, h_i) + \varepsilon_{i}^{d} \\
    x_{i}^{l} &= x_{i}^{l}(X_i, h_i) + \varepsilon_{i}^{l} \\
    &\vdots \\
    x_{i}^{l} &= x_{i}^{l}(X_i, h_i) + \varepsilon_{i}^{l} \\
\end{align*}
\]

\[
R_i = g(m_i, h_i, z_i) + u_i. \quad (3)
\]

But if \( R_i = 0 \), we observe

\[
\begin{align*}
    x_{i}^{b} &= x_{0i}^{b}(X_i, h_i) + \varepsilon_{0i}^{b} \\
    x_{i}^{d} &= x_{0i}^{d}(X_i, h_i) + \varepsilon_{0i}^{d} \\
    x_{i}^{l} &= x_{0i}^{l}(X_i, h_i) + \varepsilon_{0i}^{l} \\
    &\vdots \\
    x_{i}^{l} &= x_{0i}^{l}(X_i, h_i) + \varepsilon_{0i}^{l},
\end{align*}
\]

where \( X_i \) is total expenditures and \( h_i \) is a set of household characteristics. In principle,
estimation of these two sets of equation systems can be done using the method of
maximum likelihood.

Following Deaton and Case (1987) and Alba (1998/99), we can use the Working-Leser
specification of the Engel equations and impose cross-equation restrictions on the
parameters to ensure that the estimated values conform with consumer theory. The
parameter estimates will allow us to calculate expenditure elasticities and to determine
which expenditure categories are necessities (which are likely to be supported by
remittances during downturns). In particular, we can verify whether \( x^b \) is indeed a
necessity and which categories are luxuries.
To determine how consumption patterns change between good and bad years, we will estimate the system of Engel equations using 2000 and 2003 FIES data. By comparing the estimated results for remittance-receiving and non-receiving households in both years, we should be able to explore how the incidence of receiving remittances as well as the amount received affect expenditure elasticities during an economic downturn. (Our hypothesis is that, for remittance-receiving households, the elasticity of food consumption will not be statistically different in both years.) In addition, we should be able to determine whether remittance-receiving households are more likely to accumulate durable goods during normal times, either because they act as stores of value that insulates the household from economic shocks or because they are nest eggs that the migrant worker can draw on when he/she retires.

In each year, we may also classify remittance-receiving and non-receiving households by poverty status and compare the Engel curves for the four types of households. Undertaking counterfactual simulations, we should be able make welfare comparisons of these household types using different measures of welfare (e.g., $x^b$, $x^d$, or $X$).

5. Data Requirements and Sources

This study will make use of several household survey data sets to fulfill its objectives. These include the Family Income and Expenditure Survey (FIES), and the Survey of Overseas Filipinos (SOF). The National Statistics Office (NSO) of the Philippines conducts all three surveys. Our model requires information from the merged file of these data sets.

FIES is a nationwide survey undertaken every three years as a rider to the LFS. It gathers information on family income and living expenditures. According to the FIES technical notes released by the NSO, data collected in the survey include sources of income (including assistance received abroad) in cash and in kind and the level of consumption by item of expenditure. Information such as family size, number of family members employed for pay or profit (wage/salary or own-account worker), employment status, occupation, age and educational attainment of household head, and housing characteristics are also part of the survey. It provides estimates on income distribution, levels of living and spending patterns, degree of inequality among families, and poverty threshold and incidence for the country. Households in the sample undergo two rounds of interview: one in January and another one in July. The reference period for income is the six months preceding the interview, while for food items the reference period is the average weekly consumption. On the other hand, the reference period for expenditures on fuel, light, and water, transportation, and communication, and household operations and personal care and effects is the past month (in some cases average for the month).

The SOF is a rider survey to the October round of the Labor Force Survey conducted annually. It is a rich source of information on overseas workers such as data on the socio-economic characteristics of overseas workers. SOF obtains their overseas locations, their

---

4 We consider 2000 to be a bad year, with the economy still reeling from the real sector effects of the 1997 Asian financial crisis and the El Nino drought episodes, and 2003 to be a relatively normal year.
length of stay overseas, and provides estimates on the amount of cash and in kind transfers received by the families and the mode of remittance from a probability sample of about 41,000 households. The survey covers information on OFWs who left the country during the period of April 1 to September 30. At the same time, data on remittances are culled only for the past six months.

The merged file of the two surveys yields information on household income and expenditure, employment, hours worked, wages, migrant family members (if one or some of the household members are migrant workers), and remittances. However, there are some issues arising from merging the data sets. The first is the difference in reference periods. Income in the FIES is collected from January to June and July to December, but remittance data from the SOF if for the period of April to September. Also, the sample size of households with migrant workers and remittances maybe small because the SOF is a rider survey of the LFS, and the latter is not primarily designed to collect information on migrants and their families. Hence, it is not expected that all 41,000 sample-households have a migrant worker and receive remittance income.

Data from these two surveys can be merged since both uses the same household IDs. Prior meeting with NSO officials indicated that merging is possible and that the Statistical body has facilities of doing so. Furthermore, a recent study of Cabegin (2006) used merged data sets from these two surveys.

6. Dissemination Strategy

This research project is a potentially rich source of information and insights on the implications of remittances to Filipino households. Thus, it is important that the results are disseminated to the concerned sectors. The research exercise is expected to produce three types of output: 1) an academic paper which would pass the standards of a refereed journal, 2) policy notes targeted to policy makers and concerned practitioners, and 3) newspaper columns summarizing the findings for the general public.

The research output will be presented in seminars or paper presentations in the following institutions: 1) universities and colleges (e.g. the University of the Philippines -School of Economics Friday Seminar Series and the Lounge Lecture Series of the Economics Department of De La Salle University), 2) research organizations (e.g. Legislators Forum Series and Senate Staff Economic Forum Series of the Philippine Institute for Development Studies), and 3) annual meetings and conferences of economists (e.g. annual meetings of the Philippine Economic Society).

On the other hand, the policy notes which can be published under the Center for Business and Economics Research and Development of De La Salle University Manila, will be circulated among government agencies such as the 1) Department of Labor and Employment, 2) Department of Foreign Affairs, 3) Philippine Overseas Employment Agency, 4) National Economic Development Authority, 4) Anti-Poverty Commission, 5) Overseas Workers’ Welfare Administration and the 6) National Statistics Coordinating Body among others. The policy notes will also be circulated to relevant non-government...
agencies such as 1) Migrant Watch, 2) Kanlungan Center, and the 3) Gabriela Commission on Overseas Filipinas among others. Lastly, the findings will be summarized for publication in the Business Focus column of the Manila Bulletin and the Yellow Pad column of Business World.

7. Bibliography


Lipton, M. 1980. “Migration from Rural Areas of Poor Countries: The Impact on Rural Productivity and Income Distribution.” World Development. 8:12.


8. Team Members’ Work Experience and Prior Training

Ms. Jessaine Soraya C. Sugui graduated with a degree in M.A. Economics from the School of Economics at the University of the Philippines in Diliman. She is presently a project development specialist at the Research and Development Department of the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA). Her work responsibilities include providing technical support to SEARCA publications such as “Securing Rice, Reducing Poverty: Challenges and Policy Directions,” “Agriculture and Rural Development in Asia: Lessons Learned and Emerging Challenges,” and “Agriculture and Development Primer Series: Philippines.” She is currently involved in a research collaboration between SEARCA and the Center for International Economics (CIE) entitled, “Philippine Policy Linkage Scoping Study,” which is being funded by the Australian Center for International Agricultural Research (ACIAR). She also monitors and evaluates the progress of her institution’s projects under its R&D program. She has done extensive work on agriculture, the rural sector, and other development topics as a researcher for studies funded by the German Technical Cooperation (GTZ), Foundation for Advanced Studies on International Development (FASID) and the Philippine Institute for Development Studies (PIDS). Ms. Sugui is in charge of 1) managing the research process from the interim report to completion, 2) doing the empirical analysis, and 3) drafting the research paper, policy notes, and newspaper columns.

Dr. Michael M. Alba earned his Ph.D. in Applied Economics from Stanford University. He is currently an Associate Professor at the Economics Department of De La Salle University Manila (DLSU). From May 2001 to May 2006, he served as dean of the DLSU College of Business and Economics. His research interests include growth economics, microeconometrics, and human resource economics. Dr. Alba has published papers on household vulnerability to employment shocks, consumption patterns of urban poor households, and the effects of schooling on wages among others. Since he is back to full time research, Dr. Alba will play a more active role in the project. As a team member, his responsibilities include: 1) providing technical advice on the data sets and empirical analysis, 2) assisting in the estimations, and 3) co-writing the research paper, policy notes, and newspaper columns.

Ms. Arnelyn Abdon is the research director of the Institute for Development and Econometric Analysis (IDEA). She has done papers on various topics in macroeconomics. Ms. Abdon however, has extensive experience in Stata processing due
Overseas Workers, Remittances, and Household Welfare in the Philippines

Ms. Maricar Paz M. Garde will serve as an external resource person. She is a graduate of the M.A. Economics program of the School of Economics at the University of the Philippines in Diliman. Her research interests include regional integration, foreign direct investment (FDI), trade, and poverty. She has written two papers, *What Drives Strong Opinions on the President: The Case of Gloria Macapagal-Arroyo* and *Inflation, Unemployment and the Poor: Evidence from the Philippines*, which dealt with survey data and utilized limited dependent variable analysis. She has recently completed a paper with Michael M. Alba entitled *A New Look at the Host Determinants of FDI Inflows* funded by the International Development Research Center through the Angelo King Institute.

### 9. Expected Capacity Building

The research team will benefit from the learning experience inherent in the project. The two members below thirty years old are expected to enhance their research skills. Specifically, the study will develop the young researchers’ proficiency in 1) handling micro-level data sets, 2) utilizing advanced methods of quantitative analysis, and 3) conducting large-scale research projects. Ultimately, the experience will contribute to the professional development of the young team members.

More importantly, the team will gain expertise in the topic of remittances. Remittances are increasingly playing an important role in the economy, especially in household welfare and income distribution. Thus, the topic has caught the attention of scholars and policy makers. Multilateral organizations have started doing their own research. It is important that Filipino researchers become well versed in the topic and competent in the necessary quantitative methods in order to contribute to the growing literature and policy dialogue.

The expertise gained by the researchers will be beneficial to their respective institutions. Since their institutions are based in the Philippines, they can share this expertise with colleagues and encourage more studies in remittances. The trend of Filipino overseas migration is not likely to abate in the near future, and remittances will continue to play a role in the economy in the coming years. If the Philippine economy and Filipino households are to benefit from remittances, it is important that institutions in the country have the capacity to produce rigorous research that will help shape policymaking.

### 10. Ethical, Social, Gender, and Environmental Issues and Risks

The primary aim of the research is to analyze the implications of remittances and their implications to Filipino households. However, the findings are expected to touch on some
gender and social issues. For instance, the profile of overseas workers will reveal the number and characteristics of women who migrate. The analysis will reveal who are likely to send remittances based on destination and occupation. In addition, the study will yield insights on how remittances are spent by receiving households, i.e. whether on consumption expenditure or productive investments. As such, the government can use the findings to craft migration policy and welfare programs. At present, these are the foreseeable gender and social insights which can be gleaned from the study.

11. Team Members’ Past, Current, and Pending Projects in Related Areas

11.1 Jessaine Soraya C. Sugui

Present Work Experience

**Institution:** Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA)

**Designation:** Project Development Specialist

**Duration:** June 2005 – present

Current Project

**Project Title:** Philippine Policy Linkage Scoping Study

**Duration:** September 2006 – present

**Funding Agency:** Australian Center for International Agricultural Research (ACIAR)

**Designation:** Project Development Specialist

Past Projects

**Project Title:** Securing Rice, Reducing Poverty: Challenges and Policy Directions: Overview

**Duration:** June 2006- November 2006

**Funding Agency:** SEARCA, Philippine Rice Research Institute, Bureau of Agricultural Research

**Designation:** Project Development Specialist

---

5 Team members’ projects within the last two years. Please refer to researchers’ vitas for detailed work description.
**Project Title:** Farm and Non-farm Employment, Household Income, and Human Capital Accumulation, which produced the paper “Changing Determinants of Schooling Investments and Overseas Emigration: Evidence from Rural Villages in the Philippines in 1985-89 and 2000-04” by Jonna P. Estudillo, Yasuyuki Sawada, and Keijiro Otsuka

**Duration:** June 16, 2004 – March 31, 2005

**Funding Agency:** Foundation for Advanced Studies on International Development (FASID)

**Designation:** Senior Research Assistant

---

**Project Title:** Trade, Migration, and Poverty Reduction in the Globalizing Economy: The Case of the Philippines

**Duration:** June 16, 2004 – July 16, 2004

**Funding Agency:** UNU-WIDER

**Designation:** Research Assistant

---

**Project Title:** Assessment of the Information Systems and Information and Communications Technology (ICT) Resources of Regional and Local Planning Agencies/Bodies in the Visayas

**Duration:** November 27, 2003 – April 15, 2004

**Funding Agency:** German Technical Cooperation

**Designation:** Research Associate

---

11.2 Michael M. Alba

**Present Work Experience**

**Institution:** Economics Department, De La Salle University Manila

**Designation:** Associate Professor

**Duration:** 1998-present

**Past Projects**

**Project Title:** A New Look at Host Determinants of FDI under the Production Networks, Industrial Adjustment, Institutions, Policies, and Regional Cooperation Project

**Duration:** January – September 2005
Funding Agency: International Development Research Center
Designation: Researcher

Project Title: Revisiting the World Distribution of Living Standards and their Growth Rates and Locating the Philippines’ Position
Duration: 2004-2005
Funding Agency: Center for Business and Economics Research and Development of De La Salle University Manila for the Conference of Business and Economics
Designation: Researcher

11.3 Arnelyn May Abdon

Present Work Experience

Institution: Institute for Development and Econometric Analysis (IDEA), Inc.,
Designation: Research Director
Duration: 2004-present

Past Projects
Project Title: Quality Improvement Demonstration Study
Duration: July 2005 – present
Funding Agency: UPEcon Foundation
Designation: Data Analyst

Project Title: Quality Improvement Demonstration Study
Duration: March 2004 – December 2004
Funding Agency: UPEcon Foundation
Designation: Data Editor

Project Title: Tuberculosis Initiatives from the Private Sector
Duration: July 2004 – November 2004
Funding Agency: UPEcon Foundation
Designation: Survey Research Assistant
11.4 Maricar Paz M. Garde

Present Work Experience

**Institution:** Economics Department, De La Salle University Manila

**Designation:** Assistant Professorial Lecturer

**Duration:** 2002-present

Past Projects

**Project Title:** Liberalization of Cross-Border Capital Flows and Effectiveness of Institutions Against Crisis in East Asia

**Duration:** October 1, 2005 – March 31, 2006

**Funding Agency:** Association of Southeast Asian Nations (ASEAN)

**Designation:** Consultant

**Project Title:** A New Look at Host Determinants of FDI under the Production Networks, Industrial Adjustment, Institutions, Policies, and Regional Cooperation Project

**Duration:** January – September 2005

**Funding Agency:** International Development Research Center

**Designation:** Researcher

**Project Title:** Philippine Automotive Industry Survey on the Impact of AFTA and JPEPA

**Duration:** November 2004 and January 2005

**Funding Agency:** Japan International Cooperation Agency

**Designation:** Researcher

**Project Title:** PhilTIPS Private Provider Study on Tuberculosis Directly Observed Treatment Short-course (TB-DOTS)

**Duration:** June 2004 – Nov. 2004

**Funding Agency:** Philippines TB Initiatives in the Private Sector (PhilTIPS)

**Designation:** Data Editor
12. Appendix 1: Proposed Research Timeline

<table>
<thead>
<tr>
<th>Activities</th>
<th>Month*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review of Literature</td>
<td>1</td>
</tr>
<tr>
<td>Survey of available data</td>
<td>2</td>
</tr>
<tr>
<td>Cleaning and creation of analysis files for the data on Survey of Overseas Filipinos (SOF)</td>
<td>3-5</td>
</tr>
<tr>
<td>Cleaning and creation of analysis files for the data on Family Income and Expenditure Survey (FIES) and Labor Force Survey (LFS)</td>
<td>6</td>
</tr>
<tr>
<td>Processing and analysis of SOF data</td>
<td>7</td>
</tr>
<tr>
<td>Processing and analysis of merged FIES-LFS data</td>
<td>8</td>
</tr>
<tr>
<td>Draft preliminary report</td>
<td>9-10</td>
</tr>
<tr>
<td>Submission of interim report</td>
<td>11</td>
</tr>
<tr>
<td>Local presentation of preliminary results to academe, government, and other stakeholders</td>
<td>12</td>
</tr>
<tr>
<td>Completion of first policy brief</td>
<td>13</td>
</tr>
<tr>
<td>Draft final report</td>
<td>14</td>
</tr>
<tr>
<td>Local presentation of final results to academe, government, and other stakeholders</td>
<td>15</td>
</tr>
<tr>
<td>Completion of second policy brief</td>
<td>16</td>
</tr>
</tbody>
</table>

*The PEP Grants Manual adopts a 16-month research cycle.

6 Tentative and subject to funding organization’s requirements

Overseas Workers, Remittances, and Household Welfare in the Philippines
Appendix 2: Response to Comments

Comment 1: Do you interpret remittances as transitory or permanent income?

Response: We have no apriori expectation. Whether remittances are treated as permanent or transitory income remains to be seen in the analysis. If the study reveals that remittances are used for basic consumption, these monies are treated as permanent income. However, if these income flows are used to financed durable goods, these funds are treated as transitory income.

Comment 2: What social or family model explains best the role of remittances in the Philippines?

Response: In our theoretical framework, we discussed that remittance flows between the family and its non-resident members occur in the context of household risk management over both space and time. This implies that a theoretical model that attempts to explain these intra-family transfers must posit an uncertain environment (over both time and space) and therefore must have temporal and spatial dimensions. In addition, it must incorporate both the consumption-smoothing aspect and the precautionary motive of saving. We also enumerated the conditions for this model to hold.

Comment 3: How can the three data sets be merged? Is it really possible to do so? Can you show evidence that you can really do so?

Response: In the current version of the proposal, we only need the Family Income and Expenditures Survey (FIES) and the Survey on Overseas Filipinos (SOF). We no longer need the Labor Force Survey (LFS) since we will not deal with the effect of remittances on employment decisions. The FIES and the SOF are rider surveys of the LFS, thus the two have common household id’s. The National Statistics Office (NSO) would have the capacity to perfectly merge the two data sets. In fact, a recent paper by Cabegin (2006) presented at the World Bank/IZA Conference last May 25, 2005 in Berlin, Germany made use of these merged data sets. We have the permission of the author to send Pep-Net a copy of the paper if necessary.