

## Remittance for Investment Decisions: A Case of Overseas Filipino Workers in Taiwan

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*Remittances are the largest source of overseas capital inflows to the Philippines accounting for 11 percent of GDP and more than 10 times the flow of FDI in 2011. Although the largest proportion of remittances are targeted for family support, the Philippine government would like to see overseas workers allocate a larger share for investment purposes as a way to spur long term economic development.. Any effective program to redirect allocation of remittances must take into account the motivations and constraints facing overseas Filipino workers. This study uses an application of the theory of planned behavior to examine intention to remit for investment purposes for Overseas Filipino Worker's in Taiwan. Survey data were collected through convenience sampling and Hierarchical Multiple Regression was used in order to test the level of influence the factors have over decisions for remittance-for-investments. The motivation of this study is to understand the various factors affecting a migrant Filipino's remittance decision making by examining how reaching monetary goals and satisfying household needs affect the intentions to remit for investment purposes. Personal disposition over their income is an important factor in the decision to remit as well as peer influence and the availability of investment opportunities in the Philippines. Our research indicates that policies to maintain a strong stable domestic economy coupled with measures to increase OFWs earning capacity (e.g., by reducing agent fees) would go a long way toward stimulating a stronger flow of growth-generating remittances for investment purposes.*

**Keywords:** Remittances, Overseas Filipino Workers, Philippines, Taiwan, Investment.

**JEL Codes:** G02, J61, J68

### 1. Introduction

Migrant remittances from overseas Filipino workers (OFWs) are extremely important for the Philippine economy and many Filipino families that have come to rely on these payments. The Philippines received US\$20.1 billion in remittances (equivalent to 11% of GDP) in the year 2011 (Bangko Sentral ng Pilipinas BSP). The Philippines ranks third in the world in receipt of total remittances behind only China and India but, on a per capita receipts basis, 2009 annual receipts were \$214 per person compared to less than \$45 per person for its Asian neighbors (World Bank, 2011). Compared to remittances, foreign direct investment (FDI) in 2011 was only a modest \$1.2 billion or less than 6% of the inflow of remittances (World Bank, 2011).

These two sources of capital inflows—remittances and FDI—serve very different purposes with different implications for Philippine economic development. FDI is

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primarily a source of funding for long term investment in new or existing business activities. It is a source of new economic activity as well as a conduit for new technologies from foreign companies. The primary motivation behind remittances is for supporting families and relatives at home; investment is only a secondary motivation. Although the Philippines benefits from both FDI and remittance capital inflows, Philippine government officials believe that long term economic development would benefit if a larger share of remittances could be channeled into investments. Bringing about this change is not easy. The flow of remittances is the result of millions of individual decisions by OFWs. The challenge for the Philippine government is how to create a financial and institutional environment that encourages OFWs to shift a larger share of their earnings into remittances for investment. The first step in doing this is to gain a better understanding of how OFWs make remittance allocation decisions. Specifically how do they choose between remitting for household consumption and saving on the one hand and investment purposes on the other.

Although research on Philippine remittances has been receiving growing attention in recent years, most studies put greater emphasis on quantitative analysis of financial flows. Quantitative analysis involves research regarding remittances' effect on Philippines productivity and economic growth. Very little focus has been given to how overseas workers allocate their remittance payments between short term household support and longer term investments. This paper takes a behavioral approach to examine the factors affecting migrant workers' remittance decisions using observations from a survey of overseas Filipino workers in Taiwan. This study aims to determine the financial literacy of OFWs in Taiwan and how it affects their personal disposition in reaching their monetary goals and intention to remit for investment purposes. If the motivations behind the allocation of remittances are well-understood, then policy makers will know the elements for creating a more investment-friendly environment for OFWs.

This paper has four sections. First, we review the research on remittances and relate it to the Taiwan context for Overseas Filipino Workers. Next, we introduce the theory of planned behavior and its application for this paper. In the third section, we present the model results. This includes a brief overview of the characteristics of the sample of OFWs in Taiwan. Then we present the results explaining the behavior to remit for investment purposes. The fourth and last section includes the conclusion, policy implications and research suggestions.

## **2. Literature Review**

Greater ease of communication, more widespread information on employment opportunities combined with dispersed globally linked labor markets has facilitated the migration of workers around the world. As the number of overseas workers has increased, so has the need for financial services to repatriate earnings.

Much of the research on remittances has focused on the macro-economic perspective. Over the past decades, dozens of studies examining the determinants of remittances (Yang, 2006, Carling, 2008) have been built on the basic framework outlined by Lucas and Stark (1985). Lucas and Stark (1985) were the first to establish a framework for analyzing migrant remittances. In their study, they see decisions related to remittances as linked to migrants' motivation to go abroad to find work. The Lucas and Stark

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framework distinguishes between the conflicting motivations of “Altruism” versus “Self-interest” in making remittance decisions. Altruism means that the migrant is simply motivated to address household members’ welfare whereas self-interest means that migrants’ remittance decisions are motivated by personal investment objectives that are expected to yield a mainly personal payoff in the future. Often, migrants allocate remittances to household consumption, savings and investments in that order of priority (Mansour et al., 2011).

While remittances are motivated by a combination of altruism and self-interest, the amount and allocation will also be affected by migrant’s income, return intention, economic performance and the exchange rate (Carling, 2008). A better understanding of remittance motivations and allocation decisions serves two purposes. First, it will provide a clearer view of the migrant’s decision-making process which can guide the design of programs and training to help migrants make better financial decisions. Second, it will point to measures policy makers might take to facilitate a larger flow of remittances for investment.

The Philippines have become one of Taiwan’s key trading partners, investment locations and tourist destinations. At the same time, Taiwanese companies have hired large numbers OFWs to work in factories on a short term contract basis. In 1999, The Philippine government signed a bilateral agreement with the Taiwanese government to formalize an alternative channel in hiring Filipino workers. Although the Philippine Overseas Employment Administration (POEA) lists Taiwan is the top destination for nurses and caregivers, the majority of Filipinos work for Taiwanese companies as production and factory workers in the major industrial parks in Taiwan. POEA data for 2011 show that the number of female workers (18,181) was twice that of male workers (9,663). This is significant because, as noted in a study by San Andres (2006), female OFWs have a higher propensity to remit to their families because many of them may be mothers or breadwinners of their families. Consequently, they are likely to remit a larger portion of their income for household consumption

Taiwan ranks as the third highest source of OFW remittances in Asia next to Singapore and Japan. The Philippines generated a total US\$156 million in 2011 from remittances sent by OFWs working in Taiwan. Two other characteristics of Taiwan are important for OFWs. First, Taiwan’s guest worker law allows foreign workers to stay for only 2 years with the ability to extend for another year. Hence, the maximum stay is 3 years and there is very little opportunity to parlay that into a more permanent status. This becomes important for the analysis that follows. Second, the proximity of the Philippines facilitates communication and travel between the two countries and makes information on investment opportunities relatively easy to access and verify. These factors make Taiwan a good case study for examining attitudes of OFWs toward allocating remittances for investment purposes.

### **3. The Methodology and Model**

A migrant’s behavior in sending remittances plays a key role in the way money is allocated and spent (Meyer et al., 2010). The theory of planned behavior (TPB) Ajzen (1991) provides a framework for analyzing remittance decisions of OFWs. Our application of the TPB framework uses Intention to Remit for Investment Purposes (IRIP) as the dependent variable. We have identified four independent variables based on previous studies (Sell, 1988, Yang, 2006, Carling, 2008, Houle and Schellenberg,

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2008, Meyer et al., 2010). Fitting these variables into the TPB framework, there are two attitude constructs—attitude towards investing in the Philippines (ATIP) and attitude towards the Philippines' economy (ATPE)—one subjective norm—peer influence (PI)—and one perceived behavioral control—intention to return to the Philippines (IRP). To this framework, we add two key moderating influences that have been identified in earlier studies—the perception of reaching a monetary goal (PRM) and perception of satisfying basic household needs (PSBH). Our application extends the use of TPB theory to explain the behavior behind financial decisions, especially for remittances, by including moderating variables that greatly influence remittance decision making. Because most TPB applications have been on health-related fields like leisure, exercise and diet, we explain and justify each of our model constructs below.

**Intention to Remit for Investment Purposes (IRIP).** (Dependent variable). Understanding the motivations driving remittance for investment decisions will help guide policies that will help promote long term development of the Philippines. The “self-interest” factor, according to Lucas and Stark (1985), is the driving force behind migrants' desire for future gains from their remittance decisions and is the key to remitting for investment purposes. Accumulated remittances sent may loosen the capital constraints facing returning migrants and allow them to start a business or to invest in assets and financial instruments that will promote future income generation (Amuedo-Dorantes and Pozo, 2006).

**Attitude toward investment in the Philippines (ATIP).** (Independent variable) Attitude towards investing in the Philippines is supported through the study of Lucas and Stark (1985). They found that, in the context of self-interest, migrants are willing to remit a portion of their earnings back to their home country for investments if they are expected to yield certain pay-offs in the future. If investment opportunities are plentiful in their home country, they are more likely to remit for investment purposes (Amuedo-Dorantes and Pozo, 2006).

**Attitude towards Philippine economy (ATPE).** (Independent variable) Attitude towards the home country economy is an important factor to be considered (Yang, 2006) because it reflects migrants' view of the Philippine economic environment. According to studies by Yang (2006) and Carling (2008), migrants adjust their remittance decisions accordingly to the economic conditions that their home country is experiencing. When OFWs feel that the economy of the Philippines is flourishing, they would reserve a larger portion of their remittances for investment purposes.

**Peer influence (PI).** (Independent variable) Peer influence (defined here to include influence from family, friends and colleagues) is the pressure of conforming to some social norm thus affects behavior. Clark and Drinkwater (2007) noticed that peer opinion affects remittances through psychological factors formed by considering the thoughts of others with regards to their decision to remit. Naturally, an OFW would have a higher intention to remit for investment purposes if their peers—including family members, friends or colleagues-- agree or feels good with their decision to invest.

**Intention to return to the Philippines (IRP).** (Independent variable) Intention to return home is another factor that influences remittance decisions. Those who plan to return are more likely to remit and would probably remit larger amounts compared to those who consider permanent residency in the host country (Carling, 2008). Returning OFWs tend to remit a greater portion of their income for an investment since their

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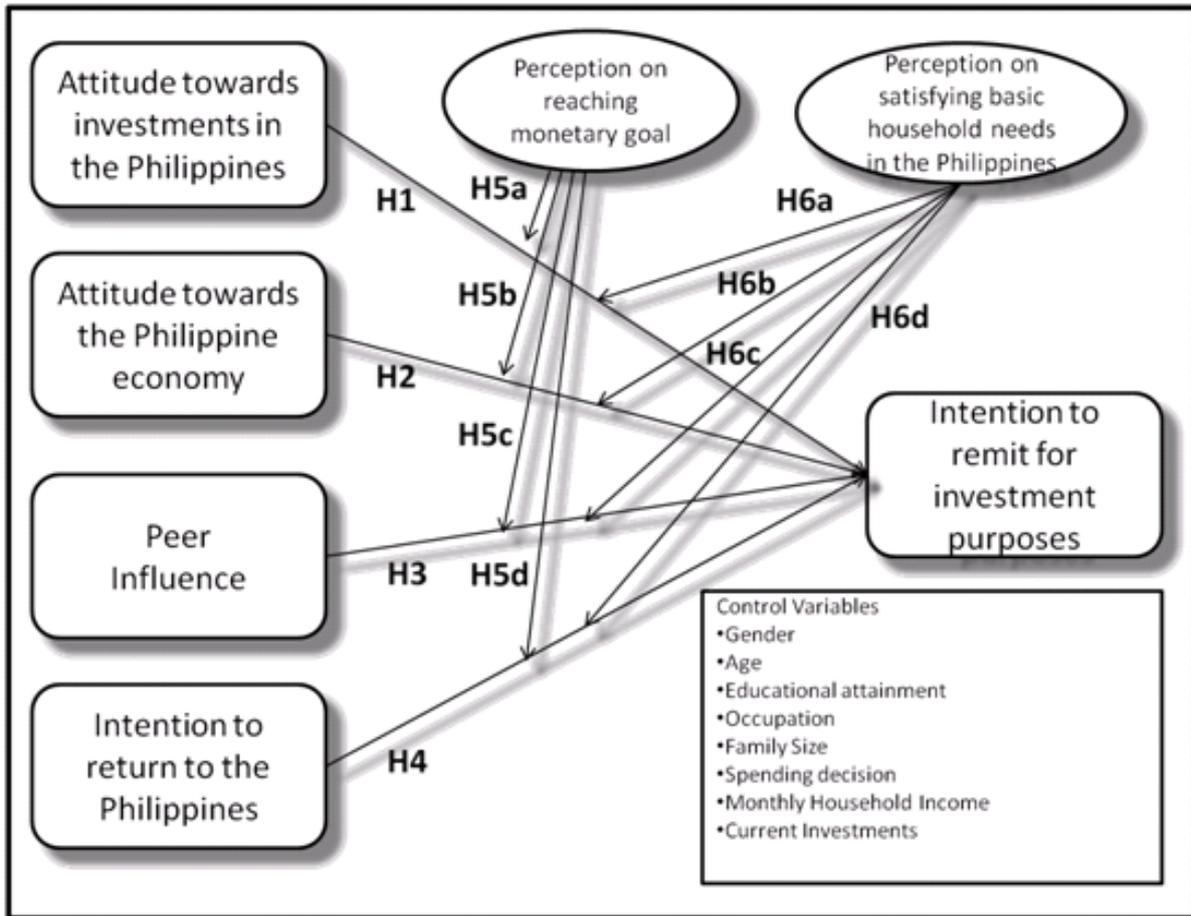
return to the Philippines would mean a temporary (or even permanent) suspension of their source of income.

**Perception of reaching a monetary goal (PRM).** (Moderating influence) Migrants' perception on reaching monetary goal (PRM) will affect how migrants make remittance allocation decisions. Initially, migrants are primarily target earners, that is, they have a monetary target that represents their goal (Sell, 1988). Then if a migrant has the financial earning capacity, they are more likely to remit larger amounts for investment purposes if they achieve their goal (Houle and Schellenberg, 2008). An OFW's intention to remit for investment purposes is greatly influenced by their perception on how capable they are of reaching their monetary goal.

**Perception of satisfying basic household needs (PSBH).** (Moderating influence) Satisfying household needs is normally the primary motivation of migrant's interest in sending remittances (Naufal, 2008). Migrants would take into account the satisfaction of basic household needs first before taking into consideration other decisions like investments (Carling, 2008). If the perception of an OFW is that they have more than sufficient funds to satisfy the basic household needs in the Philippines, they could then send a portion of their remittances for investment purposes. Thus, the greater the OFW's commitment to support the family, the less the OFW will have available for investment purposes.

Figure 1 summarizes the model and the hypothesized relationships. In the interest of parsimony, we represent the model hypotheses in the figure rather than providing a formal statement for each one. The independent variables—ATIP, ATPE, PI and IRP—all are expected to have a positive relationship with intention to remit for investment purposes (IRIP)—hypotheses H1~H4. The moderating influences--reaching a monetary goal (PRM) and satisfying household needs (PSBH)—are expected to positively affect each of the independent variable relationships (hypotheses H5a~H5d and H6a~H6d, respectively).

Figure 1: Conceptual framework and hypothesis



#### 4. The Findings

We tested the above model by collecting responses of Taiwan OFWs to an English-Filipino survey questionnaire which was circulated to more than 300 potential respondents in a 3-month period between March and May 2012. Around 213 valid questionnaire responses were retrieved coming from OFWs located in the southern part of Taiwan.

Table 1 shows the characteristics of the survey respondents including their gender, age, educational attainment, occupation, family size, monthly personal income, current investments and remittance decisions. Majority of the respondents are female (57.3%), 26-30 years old (47.9%) and most are college graduates (52.1%). Most of the OFWs in the survey are production equipment operators or laborers (86.9%) and many have more than five family members (45.5%). Monthly personal income for the vast majority is only around PHP 15,000-24,000 (80.3%). Based on the data from the POEA discussed in section 1.2, the sample is broadly representative of the broader population of OFWs in Taiwan. However, one pertinent finding is that most of the OFWs in Taiwan have current investments in the Philippines (72.8%) and most of the “remitters” (63.4%) say that they alone make the decision when it comes to how the remittances should be spent. These responses are particularly significant because they show that most overseas Filipino workers control the allocation of the money they send back home.

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**Table 1: Characteristics of Respondents**

	Frequency	Percentage (%)
<b>Gender</b>		
Male	91	42.7
Female	122	57.3
<b>Age</b>		
Less than 25	33	15.5
26 – 30	102	47.9
31 – 35	53	24.9
36 – 40	18	8.5
over 40	7	3.3
<b>Education</b>		
High school graduate	16	7.5
Vocational course	30	14.1
College	54	25.4
College graduate	111	52.1
Graduate school	2	0.9
<b>Occupation</b>		
Production Equipment Operator / Laborer	185	86.9
Professional / Technical Worker	4	1.9
Sales Worker	3	1.4
Service Worker	21	9.9
<b>Family size</b>		
3	23	10.8
4	36	16.9
5	57	26.8
More than 5	97	45.5
<b>Monthly Personal Income (in PhP)</b>		
15,000-24,999	171	80.3
25,000-34,999	38	17.8
35,000-44,999	1	0.5
More than 45,000	3	1.4
<b>Current Investment</b>		
Yes	155	72.8
No	58	27.2
<b>Remittance Decision</b>		
Remitter	135	63.4
Recipient	78	36.6

Respondents were asked a series of questions about their attitudes towards remittances. Confirmatory factor analysis (CFA) and reliability tests were implemented to determine whether the responses to the questions were relevant (Hair et al., 2006). According to the results of the tests, all the items for ATIP and PI were found to be

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reliable and valid. Therefore no items were deleted. However, some items from ATPE, IRP, PRM, PSBH and IRIP were deleted due to low factor loading (see Table 2).

**Table 2: Factor Analysis for all Constructs**

Construct	Factor Loading	KMO	Explained Variance	Cronbach's Alpha ( $\alpha$ )	Item-to-total correlation
Attitude Towards Investments in the Philippines (ATIP)		0.857	70.561	0.892	
atip2	0.914				0.842
atip5	0.910				0.840
atip1	0.902				0.821
atip4	0.776				0.656
atip3	0.670				0.540
Attitude Towards the Philippine Economy (ATPE)		0.802	74.497	0.886	
atpe1	0.889				0.790
atpe4	0.861				0.748
atpe5	0.851				0.733
atpe2	0.851				0.732
atip3	<b>Deleted</b>				<b>Deleted</b>
Peer Influence (PI)		0.855	59.501	0.902	
pi1	0.814				0.734
pi5	0.812				0.742
pi6	0.803				0.735
pi2	0.775				0.688
pi3	0.772				0.688
pi4	0.747				0.658
pi7	0.729				0.649
pi8	0.713				0.631
Intention to Return to the Philippines (IRP)		0.715	76.313	0.844	
irp1	0.896				0.752
irp2	0.884				0.732
irp5	0.840				0.658
irp3	<b>Deleted</b>				<b>Deleted</b>
irp4	<b>Deleted</b>				<b>Deleted</b>
Perception of Reaching Monetary Goal (PRM)		0.687	71.443	0.799	
prm1	0.885				0.710
prm4	0.835				0.622
prm3	0.814				0.598
prm2	<b>Deleted</b>				<b>Deleted</b>
prm5	<b>Deleted</b>				<b>Deleted</b>
Perception on Satisfying Basic Household needs (PSBH)		0.803	74.540	0.886	
psbh2	0.905				0.812
psbh1	0.886				0.782

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Construct	Factor Loading	KMO	Explained Variance	Cronbach's Alpha ( $\alpha$ )	Item-to-total correlation
psbh3	0.838				0.713
psbh4	0.822				0.693
psbh5	<b>Deleted</b>				<b>Deleted</b>
Intention to Remit for Investment Purposes (IRIP)		0.794	70.899	0.858	
irip2	0.909				0.811
irip1	0.871				0.742
irip5	0.796				0.644
irip3	0.786				0.632
irip4	<b>Deleted</b>				<b>Deleted</b>

Most of the items deleted were questions that were inversely coded in order to make sure that the respondents were reading carefully and had a complete understanding of the survey questions. After deleting these items, the Cronbach's Alpha of the said items increased above the critical threshold.

Confirmatory Factor Analysis (CFA) results show that the responses to the questions are consistent with the factors identified in the hypothesized model but CFA does not test the relationships among the factors. For that, we use hierarchical regression to assess how the independent variables (ATIP, ATPE, PI and IRP) influence the intention to remit for investment purposes (IRIP) as well as the level of influence that PRM and PSBH have on this relationship. Table 3 contains the results of two models—one with PRM as a moderating variable and one with PSBH. The table row headings are divided into 4 sections—one for control variables, one for the independent variables, one for interaction terms and a final section of statistical information including  $R^2$ , F and Durbin-Watson statistics. Both models have the same general specification with exception of the interaction variables.

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**Table 3. Regression Results<sup>1</sup>**

Variables		PRM	Variables	PSBH
Control	Gender	0.002	Gender	-0.027
	Age	0.076	Age	0.039
	Educational attainment	<b>0.103*</b>	Educational attainment	<b>0.104 †</b>
	Occupation	-0.047	Occupation	-0.034
	Family size	<b>0.109*</b>	Family size	<b>0.117*</b>
	Monthly personal income	0.007	Monthly personal income	0.029
	Current investment	0.079	Current investment	0.082
	Remittance decision	0.077	Remittance decision	0.062
Independent	ATIP	<b>0.130 †</b>	ATIP	<b>0.148*</b>
	ATPE	0.029	ATPE	0.042
	PI	<b>0.155*</b>	PI	<b>0.201**</b>
	IRP	<b>0.149*</b>	IRP	<b>0.237***</b>
Interaction	ATIP x PRM	<b>0.221**</b>	ATIP x PSBH	<b>0.224*</b>
	ATPE x PRM	0.101	ATPE x PSBH	0.040
	PI x PRM	<b>-0.373***</b>	PI x PSBH	<b>-0.283**</b>
	IRP x PRM	0.081	IRP x PSBH	0.140
R <sup>2</sup>		0.501		0.445
Adjusted R <sup>2</sup>		0.458		0.397
F		4.463		2.515
Durbin-Watson		1.720		1.747

<sup>1</sup>Variable definitions: ATIP—Attitude Toward Investment in the Philippines; PRMG—Perception on Reaching Monetary Goal; ATP—Attitude Toward Philippine economy; PI- Peer Influence; IRP—Intention to Return to the Philippines, etc. PRM—perception of reaching monetary goal; PSBH—perception of satisfying basic household needs.

Note: n=213, Standardized coefficients are reported.

† p ≤ .10, \* p ≤ .05, \*\* p ≤ .01, \*\*\* p ≤ .001

The first model includes all variables plus the moderating factor PRM. Results show that the over-all model fit or R<sup>2</sup> is 0.501. Only education and family size are significant indicating that OFWs with higher education and larger families will allocate a greater portion of their remittances for investment purposes.

All independent variables except attitude toward the Philippine economy (ATPE) are positive and statistically significant. The ATPE result implies that whether the economy in the Philippines is either good or bad, it does not influence their intention to remit to the Philippines for investment purposes. Similar results were reported in a study by (de la Briere et al., 1997). In their study, they noted that migrants' remittance decisions tend to be indifferent to economic conditions that are affecting their families. OFWs are more concerned with sending money back home to the Philippines regardless of current economic conditions. This shows that Filipinos' investment decisions in the Philippines are positively related to how they perceive future opportunities in their

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home country. As mentioned by Ang et al. (2009), we find migrants willing to remit funds in order to engage in entrepreneurial activities. Thus without having a positive attitude towards investments available back in the Philippines, OFWs will not be attracted nor will they consider remitting a portion of their income for investment purposes.

Peer influence (PI), as expected, has a significant and positive influence over IRIP. Certainly cultural norms—especially family pressure—have a strong effect on migrant workers' willingness to remit for investment purposes. Clark and Drinkwater (2007) had similar findings, thus government policies and advocates should create a positive image for remittance for investments since the opinions of family and peers will have a strong influence on OFWs. Intention to return to the Philippines (IRP), as expected, has a positive impact on the intention to remit for investment purposes. Migrant workers who foresee their return to their home country would tend to remit a greater portion of their income for investment purposes since it could become a possible new stable source of income for their families. This is especially the case of OFWs in Taiwan since migrant workers are only allowed to work for 3 years on a contractual basis. These results are consistent with (Merkle and Zimmermann, 1992, Brown, 1997, Cai, 2003, Clark and Drinkwater, 2007).

Looking at the results for the interaction variables where perceived monetary goal (PRM) interacts with each of the independent variables, we see that only ATIPxPRM and PIxPRM are significant. The somewhat surprising result is the negative sign on the interaction of PI and PRM. This implies that reaching a monetary goal reduces the peer influence effect on intention to invest in the Philippines. Although it is likely that an OFW would consult his or her peers (particularly family members) before making a remittance decision, the influence of peers diminishes when a migrant perceives that they are capable of supporting themselves financially (Lucas and Stark, 1985, Houle and Schellenberg, 2008).

Results for the moderator specification that includes perception of satisfying basic household needs (PSBH) are very similar to the results for PRM. OFWs feel more gratified when they satisfy their basic household needs, and, knowing this is in hand, they turn positively towards investment alternatives for their earned income. This is a direct reflection of the tempered altruism or enlightened self-interest identified by Lucas and Stark (1985). The same variables are significant as for the PRM case and signs on the coefficients are the same as well. Most Filipino workers tend to feel they have increased authority over decisions once they have satisfied their family's need.

## 5. Summary and Conclusions

We stated at the outset that the results of this study would serve two purposes: (1) help design programs and training for Taiwan's OFWs and (2) guide policy makers in implementing measures to facilitate the flow of remittances for investment purposes. For the first, we know that OFWs in the sample have a strong intention to remit for investment purposes and that intention is driven by three factors—a positive attitude toward investment in the Philippines, peer influence and an intention to return to the Philippines. OFWs in our survey, however, did not consider Philippine economic conditions to be important in their remittance investment decisions. Given that the sample was predominantly young college-educated female factory workers, the Manila Economic and Cultural Office (MECO)—the Taiwan-based Philippine consulate—

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needs to provide information on investment opportunities and guidance on assessing risk and returns of alternatives. Our research indicates that more knowledge of investment alternatives and opportunities will stimulate more investment.

Our results also indicate that workers face less peer influence and have a stronger attitude toward investment after they reach their financial goals and can satisfy their family needs. Consequently, MECO should direct its financial education efforts to those who are in the later part of their contracts when their financial situation is more certain. We also learned that two-thirds of the respondents said that they made their own decision on how to allocate remittances. This indicates that the focus of any financial education effort needs to be on the OFWs and not on their families in the Philippines.

The two moderating factors—meeting monetary goals and providing for family needs—also have implications for future policy measures. Any measures that will increase the financial returns of OFWs or reduce their costs will have a disproportionate positive effect on the allocation of remittances for investment. This is because investment is the residual claimant. Measures that hasten financial independence of OFWs—based on our results—will increase the amounts and the propensity to remit for investment purposes. Therefore, MECO should:

- Negotiate or otherwise find ways to reduce agent fees which claim a significant portion of the worker's early salary;
- Negotiate for a change in Taiwanese guest worker regulations to allow work contracts to permit a stay longer than 3 years.

However, limitations of this study include its inability to predict whether the migrant workers would actually remit money for investment purposes. Another limitation to this study is that it is based on convenience sampling and may not fully represent OFW remittance behavior and attitudes in Taiwan. Lastly, there is always the potential for response bias. Although respondents were assured that responses were anonymous and their responses and information would only be used for academic purposes, it is still possible that their responses do not accurately reflect their true beliefs. For example their attitudes towards the Philippine economy, since they were migrant workers who have to go out of the country just to find work they might have answered in a greatly biased way against the government but not reflectively on the Philippine economy.

Taiwan, with its large OFW community, strict guest worker law and its proximity to the Philippines, is well-suited for testing Philippine government initiatives to shift the allocation of remittances toward investment purposes. Although each OFW country environment is different, successful measures in Taiwan could be adapted to other locations and this could ultimately lead to higher Philippine economic growth and a reduction of Filipinos seeking work overseas. Results from the perspective of OFWs in Taiwan show policy makers that, with proper guidance and education, migrant Filipinos are capable of making decisions that will help the economy of the Philippines through proper guidance and education. By encouraging OFWs to shift a larger share of their earnings into remittances for investments, more Filipinos would be encouraged to stay in the country through newly established jobs and opportunities. The money invested in the Philippines would create a stronger economy based on indigenous growth. Our research indicates that policies to maintain a strong stable domestic economy coupled

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with measures to increase OFWs earning capacity (e.g., by reducing agent fees) would go a long way toward stimulating a stronger flow of growth-generating remittances for investment purposes.

### References

- Ajzen, I 1991, 'The theory of planned behavior', *Organizational Behavior and Human Decision Processes*, vol. 50, no. 1, pp. 179-211.
- Amuedo-Dorantes, C & Pozo, S 2006, 'Remittance receipt and business ownership in the Dominican Republic', *World Economy*, vol. 29, no. 7, pp. 939-956.
- Ang, A, Jha, S & Sugiyarto, G. 2009, '*Remittances and household behavior in the Philippines*', ADB Economics Working Paper No. 188, Asian Development Bank, Manila, Philippines.
- Brown, RPC 1997, 'Estimating remittance functions for Pacific island migrants', *World Development*, vol. 25, no. 4, pp. 613-626.
- Cai, Q 2003, 'Migrant remittances and family ties: A case study in China', *International Journal of Population Geography*, vol. 9, no. 6, pp. 471-483.
- Carling, J 2008, 'The determinants of migrant remittances', *Oxford Review of Economic Policy*, vol. 24, no. 3, pp. 581-598.
- Clark, K & Drinkwater, S 2007, 'An investigation of household remittance behaviour: Evidence from the United Kingdom', *The Manchester School*, vol. 75, no. 6, pp. 717-741.
- De La Briere, B, De Janvry, A, Lambert, S & Sadoulet, E. 1997, '*Why do migrants remit? An analysis for the Dominican Sierra*', FCND Discussion Paper no. 37, International Food Policy Research Institute, Washington, USA.
- Hair, JFJ, Anderson, RE, Tatham, RL & Black, WC 2006, '*Multivariate data analysis*', New Jersey, Prentice-Hall.
- Houle, R & Schellenberg, G 2008, '*Remittance behaviours among recent immigrants in Canada*', Ottawa, Statistics Canada Business and Labour Market Analysis.
- Lucas, REB & Stark, O 1985, 'Motivations to remit: Evidence from Botswana', *Journal of Political Economy*, vol. 93, no. 5, pp. 901-918.
- Mansour, W, Chaaban, J & Litchfield, J 2011, 'The impact of migrant remittances on school attendance and education attainment: Evidence from Jordan', *International Migration Review*, vol. 45, no. 4, pp. 812-851.
- Merkle, L & Zimmermann, KF 1992, 'Savings, remittances, and return migration', *Economics Letters*, vol. 38, no. 1, pp. 77-81.
- Meyer, W, Traikova, D, Buchenrieder, G, Mollers, J & Xhema, S 2010. 'Remitting from Germany to Kosovo - An empirical study based on the theory of planned behavior'. *World Bank International Conference on Poverty and Social Inclusion in the Western Balkans*. Institute for Agricultural Development in Central and Eastern Europe, Brussels, Belgium.
- Naufal, GS 2008. 'Why remit? The case of Nicaragua' (IZA Working Paper No. 3276). *In: Labor, I. F. T. S. O. (ed.) IZA Discussion Papers*.
- San Andres, EA 2006. 'An analysis of remittance recipient behaviour'. *Parallel Session on Familiar Themes, Fresh Perspectives, 44th Philippine Economic Society Annual Meeting*. Philippine Economic Society, Bangko Sentral ng Pilipinas Assembly Hall, Philippines.
- Sell, RR 1988, 'Egyptian international labor migration and social processes: Toward regional integration', *International Migration Review*, vol. 22, no. 3, pp. 87-108.
- World Bank. 2011. 'Migration and remittances factbook'. Available: <http://siteresources.worldbank.org/INTLAC/Resources/Factbook2011-Ebook.pdf>.

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Yang, D 2006, 'Why do migrants return to poor countries? Evidence from Philippine migrants' responses to exchange rate shocks', *Review of Economics and Statistics*, vol. 88, no. 4, pp. 715-735.