Article

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What You Remit Matters: Remittance Preferences of Filipino Migrants in Japan

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Abstract:

This study explores the factors affecting migrants' remittance behavior, encompassing monetary and non-monetary forms, using micro-level primary data collected from the Filipino migrants in Japan. Unlike most existing literature, this study integrates non-monetary remittances in understanding remittance behavior, moving beyond a monetary-centric view. The results show that the decision to remit is strongly affected by the migrant's socioeconomic characteristics, with the self-interest motive as a ubiquitous underlying element. Furthermore, the findings highlight a higher prevalence of non-monetary remittance practice among women than men, suggesting that non-monetary remittances serve as an alternative avenue for the Filipino women in Japan to fulfill familial obligations back home despite economic disparities within their Japanese households. Additionally, the findings reveal that the location of residence in the home country matters for the remittance form, with rural and distant regions preferring monetary remittances. Clearly, the demarcation in migrants' preferences between monetary and non-monetary forms requires a revisit of existing policies in remittance services for migrants to maximize their contribution to overall economic development in migrants' communities.

Keywords: remittances, non-monetary remittances, Japan, Filipino migrants

1. Introduction

The transnational movement of people across borders presents a complex landscape of

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economic interactions, with remittances emerging as a pivotal financial conduit that significantly enhances the economic well-being of households in migrants' home countries. As an integral component of global financial flows, remittances serve not only as a lifeline supporting basic household needs but also as a source of savings and investment capital, potentially catalyzing entrepreneurial ventures. This multifaceted role of remittances underscores their importance in elevating living standards and their potential as a lever for economic development.

Since the first formal conceptualizations of models of remittance behavior in the 1980s, empirical studies have been abundant in various settings that have tried to model and test the underlying motives. The picture presented is, however, not so fully discussed. The main problem is that most studies have only provided a narrow, monetary-centric view of migrant behavior, focusing solely on the amount of money sent. Ignoring the non-monetary aspect of remittances may lead to misleading migration and remittance policies, as they fail to account for the full extent of migrants' contributions to their home countries. Non-monetary remittances encompass tangible goods, such as used cars, agricultural machinery, and computers, and intangible goods, including skills, expertise, and technical knowledge (Coffie, 2022; Apatinga et al., 2021). Migrant's non-monetary contributions can be just as valuable as monetary ones, if not more so. For example, a migrant who sends medical equipment to their home country can contribute to improving healthcare infrastructure, which can have long-lasting effects on the community's health and well-being. Likewise, migrants sending agricultural equipment to their rural communities can help local farmers improve their productivity. Thus, while monetary remittances are an essential part of migration and play a crucial role in improving the economic well-being of recipient families, it is equally vital to consider the non-monetary contributions that migrants make. By taking a more comprehensive view of remittance behavior, researchers can gain a deeper understanding to answer the following questions: 'What motivates migrants to diversify their remittance portfolios and integrate non-monetary forms? And if they decide to do so, are there significant differences in the factors influencing the transfer of monetary and non-monetary remittances among migrants?'. Answers to these questions will provide new insights to policymakers in designing more effective policies that better reflect the complex realities of migration and remittance.

Based on primary data collected from the Filipino migrants residing in Japan, this study fills the aforementioned research gap by providing empirical evidence to understand the underlying factors differentiating a migrant's monetary and non-monetary remittance behavior. The rationale for using the case of the Filipino diaspora in Japan is threefold. First, the Filipino migrant community in Japan has a long tradition of sending 'balikbayan' boxes laden with clothes, food, and gifts. While this practice has been explored in destinations like Canada and the United States (Patzer, 2018; Alburo, 2005; Mata-Codesal & Abranches,

2018), the unique experience of the Filipino migrants in Japan in terms of these non-mone-tary remittances deserves particular attention. Second, the migration corridor between the Philippines and Japan is distinctive due to their proximity, facilitating thus a more exchange of goods, knowledge, and skills. Lastly, the context of Japan serving as a source of technologically advanced equipment like agricultural machinery, used computers, cars, and appliances relative to the migrants' home country offers a distinctive perspective on the potential of these physical goods to serve as capital, which can be leveraged to stimulate entrepreneurship development.

Thus, the present study aims to assess the factors influencing the Filipino migrants' preference for monetary versus non-monetary remittances in Japan and their perceived impacts on family welfare back home. The study posits that there exist certain distinguishing factors that demarcate the decision-making framework of migrants concerning monetary and non-monetary remittances. Through an in-depth analysis of these distinctions, the study aims to substantiate the significance of integrating non-monetary remittances within the current body of literature on migration and remittances, thereby providing a more nuanced perspective.

The remainder of the paper is organized as follows. The next section reviews the literature on the migrant's motivations to remit. The succeeding sections introduce the data and research methodology and present an analysis of the empirical estimations. The last section concludes and discusses policy implications.

2. Why Do Migrants Remit: What We Know So Far

The motivations behind migrants' remittance behaviors are analyzed through various theoretical lenses, which highlight the complexity and multifaceted nature of remittance dynamics. Lucas and Stark's (1985) foundational study introduces the concept of tempered altruism within the spectrum of motivations for remittances, ranging from pure altruism to pure self-interest. This concept emphasizes a contractual agreement between migrants and their families, focusing on the mutual benefits derived from remittance transactions. This perspective is pivotal in understanding the nuanced motivations that drive remittance behavior, blending familial obligations with strategic self-interest. Subsequent research has built upon and expanded this framework, exploring the dual nature of remittance motivations. Studies by Osili (2007), Le (2011), and Mallick (2017), among others, have delved into the altruistic and self-interested motives underlying remittance flows, highlighting the role of family welfare, investment opportunities, and the migrant's considerations regarding return migration.

For instance, Le (2011) acknowledges the dual nature of remittance behavior character-

ized by altruistic considerations and business-like interactions. The model introduces an investment variable to challenge the conventional notion that remittances are primarily directed toward consumption-related purposes. Results obtained show that remittances increase with the investment outcome surplus but not necessarily with the migrant's income. Rapoport and Docquier (2005) present a comprehensive discussion of different theoretical models that explain the diverse motivations behind remittances. They argue that migrants possess a combination of motives, resulting in heterogeneity in their reasons for sending money back to their home countries. Their argument implies that even within the same individual, multiple motivations for remitting may coexist. The model predicts that remittances are expected to increase with the migrant's level of education and the geographic distance between the host and home countries. Overall, the above papers underscore the importance of viewing remittance behavior through a multifaceted lens, acknowledging the complex interplay of factors which affect migrants' decisions to remit money back home.

In the empirical literature, factors that drive migrant remittances can be classified under two sources: the migrant's characteristics and those of the origin household. The first impacts the migrant's capacity to remit and is a function of his socio-economic characteristics. McCoy et al. (2007) provide a model with a net income constraint to analyze the migrant's capacity to remit. In the model, the determinants of remittances are based both on the migrant's motivation and capacity to remit, which is contingent on a positive net income. That is, as long as the subsistence needs and total costs of transferring remittances are equal or exceed the migrant's income, the migrant will choose not to remit. This result is similar to Osili (2007), where transfer rises with the migrant's current resources.

Ilahi and Jafarey (1999) show that remittances increase with the migrant's educational attainment and skill level. In contrast, Collier et al. (2011) argue that the probability of remitting decreases with a migrant's educational attainment. In some other studies, full-time employment is a determinant of remittance behavior (Brown & Poirine, 2005; Collier et al., 2011). Furthermore, time spent in the host country positively influences the amount of remittances (Mahuteau et al., 2010; Collier et al., 2011). However, many studies support the contrary, arguing that remittances decline with the length of stay due to greater social distance. This argument is linked with the remittance decay hypothesis, where the more extended period of stay in the host country lowers the incidence of remittance (Carling, 2008; Makina & Masenge, 2015) since, through time, close family members are likely to join the migrant (Meyer, 2020).

While these studies have provided insights into migrants' remittance behavior, focusing only on the financial transfers limits our understanding of the migrant's decision-making framework. In the context of this research, remittances take on a broader meaning, encompassing a diverse range of contributions by migrants to their families and communities in

their countries of origin, surpassing the confines of mere financial transactions. This expanded understanding of remittances moves beyond a narrow economic interpretation to include the transmission of goods, skills, experiences, ideas, technology, and knowledge, all of which foster the exchange of ideas within diaspora networks and their home countries (Coffie, 2022; Mueller, 2019; Dustmann & Kirkchamp, 2002). Arguably, non-cash transfers, such as goods and materials, are crucial in improving household welfare and living conditions (Apatinga et al., 2022). Furthermore, providing non-cash remittances such as food increases during commodity shortages (Tevera & Chikanda, 2009). Abubakar and Folawewo (2019) show that the effects of food remittances on investment activities were more favorable in rural areas than in urban areas. This is attributed to the surplus resources available in rural areas, which can be utilized for investment purposes.

3. Data and Methodology

The study utilizes micro-level primary data from a survey of the Filipino migrants in Japan conducted from August to October 2023. Given the absence of a comprehensive list of the Filipino migrants in Japan, the research relies on non-probability sampling techniques, specifically convenience and snowball sampling, to identify and recruit participants. A total of 323 respondents participated in the survey, with the majority coming from the Chubu, Kanto, and Kansai regions, home to most Filipinos in Japan, according to Japan's Ministry of Justice. The questionnaire is designed and pre-tested twice in July 2023. The final survey comprises 39 questions with the following sections: respondent's personal profile, remittance behavior, and business intention and ownership.

To look into the migrant's remittance behavior, questions about their monetary and non-monetary remittances are asked. In terms of their monetary remittance, individuals are asked to indicate how much they have sent in total over the past 12 months. Responses are coded as 'No remittance' (1), 'Less than 200,000 JPY' (2), and 'More than 200,001 JPY' (3). Non-monetary remittances, on the other hand, refer to either the goods sent by the migrant or their sharing of knowledge and information in terms of the household decision-making coded as 'Yes' (1) and 'No' (0). Furthermore, explanatory variables are retrieved based on previous literature divided into two broad categories: the migrant's capacity to remit and motivation to remit. First, two categorical variables that describe the migrant's capacity to remit are considered: his average monthly income and present occupation. In this case, positive net income and labor force participation increase the probability of remitting (McCoy et al., 2007).

Second, motivation to remit is measured whether the migrant intends to return to the country of origin, which, if significant and positive, would indicate that those planning to

Table 1. Descriptive statistics.

Variables	Description	Mean	Std. dev.	Min	Max
Dependent Variable	es				
Non-monetary remittances	=1 if the migrant sends goods and shares knowledge and skills to house- hold: =0 otherwise		0.48	0	1
Monetary remittances	=1 if the migrant does not send mone- tary remittances; =2 if migrant sends less than 200,000 JPY; =3 if migrant sends more than 200,001 JPY		0.67	1	3
Migrant Characteris	stics				
Age	ge = 1 if 20-30 years old; = 2 if 31-40 years old; = 3 if 41-50 years old; = 4 if 51-60 years old; = 5 if 61 or over		1.01	1	5
Marital status	=1 if married; =0 if otherwise	0.53	0.50	0	1
Tertiary education	acation = 1 if completed university education or higher; = 0 if otherwise		0.490	0	1
Gender	= 1 if female; 0 = otherwise	0.625	0.485	0	1
Residence in the origin*	=1 if Luzon; =2 if Visayas; =3 if Mindanao	1.41	0.752	1	3
Length of stay in Japan	=1 if less than 10 years; =2 if between 11-15 years; =3 if more than 15 years	1.55	0.84	1	3
Capacity to remit					
Average monthly income	=1 if less than 100,000 JPY; =2 if 100,001 JPY-200,000 JPY; =3 if 200,001 JPY-300,000 JPY; =4 if 300,001 JPY-400,000 JPY; =5 if 400,001 JPY-500,000 JPY; =6 if more than 500,001 JPY	2.42	1.21	1	6
Present occupation	=1 if unemployed/dependent/retired/ student; =2 if skilled worker/factory worker; =3 if services/entertainer; =4 certified care workers; =5 self-em- ployed/business; =6 skilled professional	3.121	1.90	1	6
Motivation to remit					
Intention to return	=1 if without intention to return; =2 not yet decided; =3 with intention to return	2.26	0.73	1	3
	N	323			

^{*} Note: The place of residence is categorized based on the three main islands of the Philippines. Luzon is where the capital city of Manila is located.

return one day remit more than those who do not. In addition, migrant characteristics such as age, marital status, education, sex, residence in the Philippines (PH), and duration of stay are included as explanatory variables. A basic description of the variables of the data set is presented in Table 1.

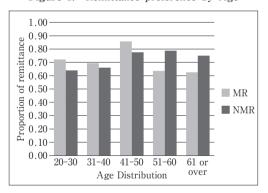
The survey data shows that a significant majority comprises middle-aged females who are married and have completed tertiary education. Moreover, a substantial portion of the participants falls under the category of skilled labor, primarily employed in manufacturing companies, with a monthly income ranging from 100,001 to 200,000 JPY. Regarding remit-

tances, most participants transfer amounts less than 200,000 JPY and actively send non-monetary remittances. Although a significant portion of the respondents expressed their intention to return to their country of origin, a considerable number remain undecided and uncertain about their future.

For a more intuitive understanding of the data, preliminary results of analyses by major indicators are presented in Figures 1 to 6. The probability of remittance is computed based on the number of respondents who remit monetary and non-monetary remittances divided by the total number of respondents falling into a category. For example, the percentage of "female remitters" of monetary remittances is based on the total number of females, which is 202. Thus, 146 out of 202 females, or 72% of all females, send monetary remittances.

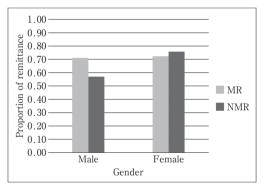
Figure 1 shows that the proportion of respondents under 50 prefer to send cash remittances. However, as they age, the preference for non-monetary remittances becomes apparent. In terms of sex, there is a gender disparity in the preference for monetary versus non-monetary forms. Specifically, Figure 2 shows that a higher percentage of female remitters prefer non-monetary remittances such as goods. In contrast, males prefer monetary transfers as they may prioritize financial support for their families back home.

Figure 1. Remittance preference by Age



Source: Author's calculation based on field survey data (2023).

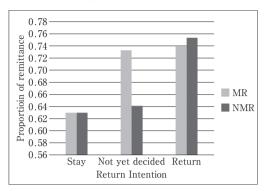
Figure 2. Remittance preference by Gender



Source: Author's calculation based on field survey data (2023)

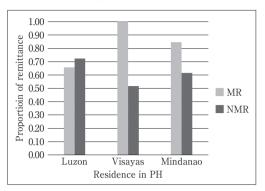
Furthermore, migrants who have return intentions have a higher preference for non-monetary remittances (see Figure 3). Interestingly, the area of residence in the Philippines shows a distinct pattern regarding the form of remittances transferred, as shown in Figure 4. For instance, migrants residing in Luzon, the economic and political center of the country and where Manila is located, tend to send more non-monetary remittances compared to those whose families live in the Visayas and Mindanao islands. This preliminary finding suggests that migrants' preference is influenced by their proximity to the center of economic activities.

Figure 3. Remittance preference by Return Intention



Source: Author's calculation based on field survey data

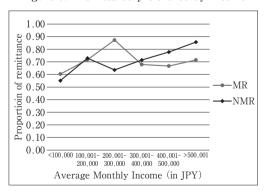
Figure 4. Remittance preference by Location of Residence



Source: Author's calculation based on field survey data (2023).

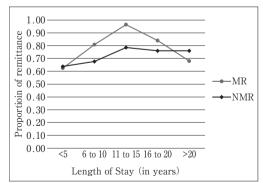
In Figure 5, the probability of remittances by monthly income shows an interesting trend. The analysis shows that at lower income levels, migrants prefer sending monetary remittances to their families back home. However, as their income increases, there is a higher probability of sending non-monetary remittances, such as goods and services, that can meet the specific needs of their loved ones. This evidence suggests that higher income levels propel migrants to diversify their remittances into different forms, which can offer more value and utility to their families. Regarding migration duration, the probability of remittance shows an upward pattern from 0 to 15 years for both forms of remittance (see Figure 6). Beyond this, the likelihood of cash remittances starts to decline, while the probability of non-monetary remittances remains relatively stable. Interestingly, migrants who have stayed more than two decades exhibit a greater inclination to send non-monetary remittances.

Figure 5. Remittance preference by Income



Source: Author's calculation based on field survey data (2023).

Figure 6. Remittance preference by Length of Stay



Source: Author's calculation based on field survey data (2023).

The empirical strategy to test the probability of remittances involves the estimation of Equations (1) and (2). In modeling the migrant's monetary remittance behavior, an Ordered

Probit framework is considered, given that the data is coded in intervals, which is quite similar to the study of Collier et al. (2011). The equation for the migrant's level of monetary remittances is expressed as:

$$R_i^M = \beta_0 + \beta_1 X_i + \beta_2 c_i + \beta_3 m_i + \varepsilon_i \tag{1}$$

where R_i^M is a continuous non-negative random variable; X_i is a vector of the migrant's demographic characteristics such as age, sex, marital status, residence in the origin country, duration of stay, and education; c_i reflects the migrant's capacity to remit which includes income and occupation; and m_i indicates the migrant's motivation to remit reflected by the migrant's intention to return home. The dataset shows that the dependent variable falls within a specific range on the real number line. It takes a value of 1 if no remittances are sent, 2 if the migrant remits less than 200,000 JPY, and 3 if the remittance is more than 200,001 JPY. Assuming standard normal errors, consistent estimates of β through maximum likelihood estimation (MLE) are derived. The interpretation of the regression parameters' signs allows for ascertaining whether the variables are associated with increased or decreased remittances.

On the other hand, to examine the migrant's propensity to remit non-monetary forms to the home country where the remittance decision is a binary choice, the Probit estimation is utilized. Thus, the Probit model estimated is described as follows:

$$R_i^N = \gamma_0 + \gamma_1 X_i + \gamma_2 C_i + \gamma_3 m_i + \varepsilon_i \tag{2}$$

where the observable variable R_j^N is binary and takes value 1 when the migrant sends non-monetary remittances and 0 otherwise. However, given these considerations, it is essential to acknowledge a limitation inherent in the study—the challenge of assigning a monetary value to these non-monetary forms of remittances. While the survey effectively captures the binary coding of 'Yes' or 'No' for non-monetary contributions, quantifying these intangible exchanges' economic impact or value remains elusive. Considering this limitation, the study encourages a nuanced interpretation of non-monetary remittances, emphasizing their qualitative impact on households rather than attempting to quantify their worth in strictly monetary terms.

4. Empirical Results and Discussions

This section provides a comprehensive understanding of the factors influencing the migrant's remittance behavior between monetary and non-monetary forms presented in Table 2. Regression results on the probability of cash remittances are presented in Model (1) of Table 2. First, results show that obtaining a college degree significantly influences a mi-

Table 2. Estimation results on the likelihood of sending monetary and non-monetary remittances.

	Likelihood of sending remittances						
* * * * * * * * * * * * * * * * * * * *	(1)Monetary F	Remittances	(2) Non-monetary	2)Non-monetary Remittance			
Independent Variables	Coefficient	SE	Coefficient	SE			
Migrant characteristics							
Tertiary education (completed = 1)	0.198*	0.155	-0.326*	0.188			
Age (reference: 20-30 years old)							
31-40 years old	-0.108	0.188	-0.0132	0.205			
41-50 years old	0.157	0.265	0.194	0.339			
51-60 years old	-0.598*	0.330	0.137	0.419			
61 or over	-0.523	0.447	-0.00837	0.592			
Gender (female = 1)	0.153	0.146	0.532***	0.177			
Marital status (married = 1)	-0.315*	0.170	0.00718	0.185			
Residence in PH (reference: Luzon)							
Visayas	0.355**	0.172	-0.484*	0.255			
Mindanao	0.319*	0.178	-0.0464	0.225			
Length of stay (reference: <10 year							
11-15 years	0.822***	0.255	0.0696	0.322			
>15 years	0.272	0.242	-0.0697	0.343			
Capacity to remit		**					
Average monthly income (reference	· < 100 000 IPV						
100,001-200,000 JPY	0.422**	0.176	0.534***	0.206			
	1.112***	0.170					
200,001-300,000 JPY			0.405	0.282			
300,001-400,000 JPY	0.866**	0.344	0.448	0.350			
400,001-500,000 JPY	0.653	0.470	0.513	0.554			
>500,001 JPY	0.885*	0.471	0.865*	0.503			
Present Occupation	*/						
(reference: unemployed/student/retire		0.010	0.000	0.040			
Skilled labor/Factory worker	0.652***	0.219	-0.288	0.243			
Services/entertainment	0.768**	0.351	0.0191	0.472			
Certified Care worker	0.785**	0.305	0.323	0.355			
Self-employed/own business	0.923*	0.477	0.327	0.544			
Skilled professional	0.0760	0.264	-0.00676	0.291			
Motivation to remit							
Return intention (reference: not yet							
Yes	0.436***	0.145	0.402**	0.182			
No	-0.0375	0.227	-0.0274	0.244			
/cut1	0.621**	278					
/cut2	2.034***	286					
Constant			-0.0204	0.315			
Wald Chi2	80.1	7	35.9	93			
Prob>Chi2	0.00	00	0.04	19			
Pseudo R2	0.10	19	0.09	14			
Obs		;	323				

^{***}Significant at 1%, **5%, and *10% level.

Source: Author's calculation based on field survey data (2023).

grant's remittance behavior at a 10% level. Migrants who have completed their tertiary education are more likely to have higher incomes and better job opportunities in the host country, which enables them to send more remittances to their families or communities in their country of origin (Ilahi & Jafarey, 1999). They have more financial resources and stronger motives to remit, making them ideal candidates for remittance payments. On the contrary, compared to the reference range, the age variable is significantly negative for individuals within the 51-60 age group, a result in contrast with previous studies on remittance behavior (Brzozowski et al., 2017; Dustmann & Mestres, 2010). This finding is reported in Merkle and Zimmerman (1992), where the amount of remittances seems to increase with age, but beyond a certain age, a tendency to decline appears. The result is also attributed to the assumption that personal ties to recipient homes become more distant with age, supporting the remittance decay hypothesis. Furthermore, the results reveal that gender has no impact on the probability of remitting.

Additionally, married migrants are less likely to remit than unmarried ones, which is explained by the likelihood that many Filipino migrants in Japan may have Japanese spouses and already established families. In such cases, married migrants may prioritize fulfilling financial responsibilities within their household, including covering domestic expenses and directly supporting their family's needs, reducing the need for remittances. Thus, they may have less disposable income to send back to their origin country than unmarried migrants with fewer dependents or lower living costs. Moreover, time spent abroad positively affects the remittance behavior of the Filipino diaspora in Japan. This assertion is consistent with the findings of Mahuteau et al. (2010), who argue that a longer period spent abroad can increase remittance flows. The coefficient of 11–15 years of stay is significant and positive, which suggests that, over time, the fixed costs of settlement decrease, and the accumulated experience and skills acquired by migrants contribute to higher earnings.

Looking at the effect of income and labor force status on the migrant's remittance behavior to ascertain capacity to remit, the finding is in line with existing empirical results where wage earners are more likely to send higher amounts of remittances than those who are not in the labor force, such as students, dependents, and retired (Osili, 2007; Collier et al., 2011; Mahuteau et al., 2010). This is unsurprising, as higher earnings and stable employment are strong determinants of a migrant's remittance behavior (Amuedo-Dorantes & Pozo, 2023; Ratha, 2003). Lastly, the findings indicate that migrants with an intention to return are more inclined to remit higher levels of monetary remittances, which are significant at a 1% level. This aligns with the findings of Collier et al. (2011), Pinger (2010), Brzozowski et al. (2017), and Dustmann and Metres (2010), demonstrating that migrants deciding to return exhibit a higher probability of remitting, with increased remittance amounts corresponding to a longer duration spent abroad. This result indicates evidence of self-interest as a significant motivational factor.

On the other hand, the same table provides the results for the Probit model on the likelihood of remitting non-monetary forms of remittances (See Model 2). Gender is significantly positive at 1%; that is, being a female increases the likelihood of sending non-monetary remittances by 55.7%. This result corroborates with Camposano (2012), who argues that the act of sending goods by Filipino migrant women in Hong Kong to their families back in the Philippines is a gendered process that reconnects these migrant women back into the emotional economy of the household. Furthermore, a college degree significantly and negatively influences the probability of sending non-monetary remittances. The argument is that better-educated migrants are less likely to be affected by social pressure to remit (Dustmann & Mestres, 2010). Within the context of the Filipino diaspora, the study reveals a diverse demographic profile. Although most respondents are wage earners with stable income sources, a notable subset comprises students pursuing post-graduate degrees. This segment of the sample, typically in their late 20s or early 30s, faces a distinct financial scenario. Unlike their employed counterparts, these students are not obligated or pressured to send remittances to their families in the Philippines, as they rely on scholarships and income from part-time jobs.

Looking at the migrant's motivation, the results reveal that migrants who intend to return are more likely to send non-monetary remittances to their families back home at a 5 % significance level. These may be in the form of consumption goods, such as clothes, food, sweets, and other gifts; capital goods, such as machinery, equipment, tools, or vehicles; or the transfer of intangible assets, such as skills and knowledge gained from working abroad. While this aspect of remittances has not yet received much attention, it is interesting to note that migrants view this as contributing to the well-being of their families and communities back home. This inclination may stem from their aspiration to prepare for future reintegration, make investments, or contribute positively to their origin country, which is significant evidence of the migrant's self-interest motive. Sending consumption goods might be a means for migrants to express affection, gratitude, or generosity towards their relatives or friends. In the case of the Filipino diaspora, sending 'balikbayan' boxes filled with clothes, food, sweets, and other gifts to their families in the Philippines serves as a means of reconnecting with their roots and homeland, albeit symbolically (McCallum, 2022).

4.1 Is there a significant difference between factors that influence migrant's remittance preferences?

Table 3 provides a summary of the different factors influencing migrants' remittance behavior, encompassing both monetary and non-monetary forms based on the results presented in tables 1 and 2. Notably, the migrant's income level emerges as a consistently positive and significant factor for both forms of remittances, aligning with findings from existing literature (Osili, 2007; Collier et al., 2011; Mahuteau et al., 2010). This result underscores the

Table 2	Differentials	:		haharian	L		1:-+	iobloo
rabie 5.	Dillerentials	Ш	remittance	Dellavioi	IJΥ	111111101	predictor	variables.

Variables	Monetary Remittances	Non-Monetary Remittances		
Average monthly income	+	+		
Return intention	+	+		
Age (51-60)	_	ns		
Marital status	_	ns		
Length of stay	+	ns		
Present occupation	+	ns		
Gender	ns	+		
Tertiary education	+	_		
Residence in the Philippines	+	_		

Note: ns denotes 'not significant'.

pivotal role of financial capacity in motivating migrants to contribute to their home countries, whether in the form of cash or non-monetary items. Similarly, the impact of return intention on remittance behavior is significant and positive for both monetary and non-monetary forms. This result suggests that, alongside altruistic motivations, a self-interest motive is prevalent within the migrant cohort, where the intention to return positively correlates with a higher probability of remitting, irrespective of the form chosen. Conversely, age, marital status, length of stay, and occupation emerge as significant determinants specifically for monetary remittances, showcasing their influence on financial contributions. Interestingly, these factors do not exert a significant influence on non-monetary remittances, indicating a divergence in the determinants for these two forms of contributions.

Likewise, the findings reveal a pronounced disparity in remittance preferences among migrants based on their educational attainment, particularly those who have completed tertiary education. That is, tertiary education holders exhibit a higher likelihood of sending monetary remittances while concurrently demonstrating a diminished probability of sending non-monetary remittances. Migrants holding degrees are often found in more stable and lucrative employment opportunities, contributing to higher income earnings. The preference of these migrants for specific choices or behaviors may be linked to their disposable income, indicating that their financial stability allows them greater flexibility and options in decision-making.

Interestingly, the gender of migrants plays a crucial role in shaping their non-monetary remittance behaviors, while its impact on monetary remittances appears to be not significant. This observation underscores the existence of a gendered dimension within the realm of remittance practices, reflecting a broader societal understanding that the act of sending goods or skills may be perceived as more aligned with femininity (Camposano, 2012). However, when examining the case of Filipino women, or 'Filipinas,' migrating to Japan, it is essential to contextualize their experiences separately from those in other destinations, such as Hong Kong, as discussed in Camposano (2012). While the practice of sending non-

monetary remittances may exhibit similarities, the motivations and contextual nuances differ significantly.

First, Filipinas began migrating to Japan in the early 1980s under temporary work visas, primarily as entertainers. Over time, many of these women transitioned into settling in Japan as wives of Japanese men (Ong & Lopez, 2022). Within this context, numerous studies have highlighted a persistent discrepancy: despite obtaining permanent residency status in Japan, Filipinas are often perceived as 'weak' and 'dependent' housewives, still reliant on their husbands' financial support (Almonte, 2001; Suzuki, 2000). Amidst the economic disparities prevalent within Japanese households, including wage discrepancies, limited employment opportunities, or cultural norms that restrict women's participation in the workforce, many Filipinas find themselves in a position where they have no option but to rely on the financial support provided by their husbands, which may not always suffice to meet their familial obligations, particularly the need to send money back home to support their families in the Philippines (Almonte, 2001; Suzuki, 2000; Ong & Lopez, 2022). Consequently, sending non-monetary remittances emerges as a vital means for these women to support their families back home. This context highlights how non-monetary remittances serve as an alternative avenue for the Filipina migrants to fulfill familial obligations and retain a sense of agency within familial dynamics. Unlike monetary remittances, which may be constrained by financial limitations or cultural norms, non-monetary contributions allow these women to provide tangible support while navigating the intricacies of their socio-economic status in the host country.

Moreover, it is worth noting that many of these Filipina migrants are now in their 50s, reaching a stage in life where the prospect of returning and retiring becomes increasingly viable. Many Filipinas expressed fears or worries about becoming a burden to their Japanese children as they aged (Ong & Lopez, 2022), alongside a prevailing belief in the greater care and support available in their homeland (Almonte, 2001). In this context, sending non-monetary remittances takes on a more profound significance. It serves not only as a means of supporting their natal families in the present but also as a strategic investment for their future retirement back home. By sending goods, skills, or other non-monetary forms of support, these migrants are essentially laying the groundwork for their eventual transition back to their home country, ensuring a semblance of financial stability and a support network upon their return. Thus, non-monetary remittances can be viewed as a forward-looking strategy, enabling the Filipina migrants to navigate the complexities of migration and retirement planning in a transnational context.

Furthermore, the geographic location of a migrant's residence in the Philippines is a pivotal factor significantly shaping the migrant's remittance preference. Specifically, this influence is positive and significant at 5% and 10% levels for monetary remittances for individuals from more rural and distant regions such as Visayas and Mindanao, indicating an

apparent inclination toward sending financial transfers from these areas (see Table 2). In contrast, the influence is negative and significant at a 10% level for non-monetary remittances for migrants whose families are in the Visayas island compared to those in Luzon. This variable unveils a nuanced distinction, proving to be a critical determinant in shaping the nature of remittances, specifically drawing a clear demarcation between monetary and non-monetary behaviors. In essence, the geographic location of a migrant's residence emerges as a decisive factor, dictating whether the remittance takes the form of financial transfers or non-monetary items such as gifts or goods.

First, the preference of migrants residing in Visayas and Mindanao for monetary remittances over non-monetary remittances is due to the costs associated with each form of remittance. Digital transactions using e-wallets and bank transfers for cash remittances only cost from 200 JPY to 3,000 JPY, regardless of the region in the Philippines. This remittance method is also more convenient and faster as it can be completed online without the need for physical transportation of goods. Conversely, sending 'balikbayan' boxes as non-monetary remittances can be significantly more expensive. Shipping costs for the boxes can range from 5,000 JPY to 15,000 JPY per box, depending on the destination. This cost discrepancy can be a crucial factor in determining migrants' remittance preferences. Also, the shipping process can be long and complicated, with a higher risk of delays, loss, or damage to the goods. Thus, cash remittances are more practical and cost-effective for those residing in areas with high shipping costs.

Second, drawing on official data provided by the Philippine Statistics Authority (PSA) in 2021, it becomes apparent that the Visayas and Mindanao islands face the highest incidence of poverty, with 30.8% and 33.9%, respectively, compared to Luzon with 14.9%. This reality highlights a critical context for understanding remittance preferences, as these regions are characterized by elevated economic challenges and a pressing need for additional income support. Against this backdrop, migrants' inclination to send monetary remittances to households in Visayas and Mindanao aligns with the practical necessity of addressing immediate needs and sustaining daily lives in areas grappling with heightened economic vulnerabilities. The choice to send cash rather than non-monetary forms of support may be influenced by the immediate and tangible impact that financial assistance can have on alleviating the day-to-day challenges faced by families in economically vulnerable regions. Monetary remittances provide a flexible and readily usable form of support, allowing families to allocate resources according to their most pressing needs, such as food, education, or healthcare (Tabuga, 2007; Brinkerhoff, 2016). This evidence aligns with the fundamental objective of remittances to enhance the economic well-being of recipient households (Amuedo-Dorantes, 2014). While non-monetary remittances, such as goods or skills, may hold long-term transformative potential, the urgency of addressing immediate needs often takes precedence in regions with high poverty incidence.

Although these outcomes align with expectations, this geographical divergence adds a layer of complexity to our understanding of remittance behaviors, implying that localized economic conditions, logistical considerations, and infrastructural disparities play a pivotal role in shaping the choices made by migrants. This nuanced insight, which reveal the differential impact of geographic location on migrant's remittance preference, emphasizes the imperative for tailored region-specific policies and targeted interventions. In essence, region-specific policies are essential for ensuring that the diverse remittance behaviors driven by distinct geographical contexts are acknowledged and strategically leveraged to benefit migrants and their home communities.

5. Conclusions

This paper examined the determinants of monetary and non-monetary remittances among the Filipino migrants in Japan. Specifically, it highlights the significant differences that shape the migrant's decision-making framework in their choice of remittance form. The paper employed primary data from a survey of the Filipino migrants living and working in Japan. The empirical analysis utilized an Ordered probit model to analyze the factors influencing monetary remittances and a Probit estimation to delve into the likelihood of sending non-monetary remittances, such as goods or skills. The findings reveal significant differences in the factors shaping a migrant's remittance preferences. The migrant's age, marital status, duration of stay, and current occupation are identified as influential factors affecting monetary remittances. At the same time, these aspects exhibit no significant impact on non-monetary remittances, indicating a disparity in the determinants influencing these two types of contributions. Moreover, a university degree differentiates migrants' behavior between monetary and non-monetary forms, where migrants with university degrees are more likely to send monetary remittances than their counterparts.

Furthermore, the study sheds light on the gendered dimension of non-monetary remittance practices. It reveals a higher prevalence of non-monetary remittances among women than men, suggesting that more than economic prosperity, women use remittances as a way of maintaining or strengthening their emotional and social ties with their families and communities shaped by gender roles and expectations in society. Thus, adopting a gender perspective is crucial for developing and providing relevant and efficient remittance services for migrants.

Additionally, the findings underscore a noteworthy disparity in remittance preferences among migrants on the influential role of the migrants' location of residence in their home country, revealing a distinctive demarcation in the choice between monetary and non-monetary forms. This geographical distinction implies that the factors influencing remittance

decisions are intricately tied to the migrants' regional context. Specifically, individuals residing in more rural and distant regions exhibit a pronounced preference for monetary remittances. This inclination can be attributed to factors such as the costs associated with different remittance methods and the pressing needs of recipient households in these regions.

The analysis presented in this study allows for a better understanding of the migrant's remittance behavior and preferences. Considering these insights, a strategic policy recommendation is imperative. Policymakers should recognize and encourage the diversification of remittance channels, specifically emphasizing the potential of non-monetary remittances in the form of physical capital goods, such as used agricultural equipment, which can contribute to rural development. This policy necessitates the development of clear guidelines and incentives, such as tax exemption policies for migrants who send technologically advanced equipment, machinery, and other tangible assets intended for productive purposes back to their home countries. To facilitate this, collaboration between the host and home countries should be fostered, streamlining customs processes and ensuring the smooth transportation of goods. By fostering an environment that encourages the strategic allocation of resources through non-monetary remittances, policymakers can unlock a new avenue for sustainable development within migrant-sending countries.

Notes

- 1) Migrant domestic workers in Hong Kong makeup 10% of the workforce, and more than half of these workers are Filipino women (Lim & Visaria, 2020).
- 2) Remittance rates for amounts ranging from 10,000 JPY to 200,000 JPY are available online at www.wise.com/jp/send-money/send-money-to-philippines.
- 3) A sample comparison of shipping rates of Transtech Co. Ltd. can be accessed at https://www.balikbayanbox.jp/sp/en/services/balikbayanbox.html.

References

Abubakar, Ohiomoje Iyemifokhae, and Abiodun Folawewo. 2019. The impact of remittances on household investment in Nigeria. *International Journal of Business and Economic Development*, 7(2), 38–59. www.ijbed.org

Alburo, Jade. 2005. Boxed in or out? *Balikbayan* boxes as metaphors for Filipino American (Dis) Location. *Ethnologies*, 27(2), 137–157. https://doi.org/10.7202/014044ar

Almonte, Sherlyne. 2001. The plight of Filipino women in Japan: Limitations and challenges for the Philippines education. *Hiroshima University Graduate School of Education Bulletin*, 3(50), 159–165.

Amuedo-Dorantes, Catalina. 2014. The good and the bad in remittance flows. *IZA World of Labor*. Amuedo-Dorantes, Catalina, and Susan Pozo. 2023. The widespread impacts of remittance flows. *IZA World of Labor* 2023: 97 doi: 10.15185/izawol.97. v2.

Apatinga, Gervin, Alex Asiedu, and Faustina Obeng. 2021. The contribution of non-cash remittances to the welfare of households in the Kassena-Nankana District, Ghana. *African Geographical Review*, 41(2), 214–225. https://doi.org/10.1080/19376812.2020.1870511.

Brinkerhoff, Jennifer. 2016. Institutional reform and diaspora entrepreneurs: The in-between advan-

- tage. Oxford University Press: Oxford.
- Brown, Richard, and Bernard Poirine. 2005. A model of migrants' remittances with human capital investment and intrafamilial transfers. *International Migration Review*, 39(2), 407-438.
- Brzozowski, Jan, Marta Gruszka, Malgorzata Majka, Justyna Szymańska, and Cezary Ulasiński. 2017. International return migration and remittances: The regional perspective. *Ekonomista*, 47-66.
- Camposano, Clement. 2012. Balikbayan boxes and the performance of intimacy by Filipino migrant women in Hong Kong. *Asian and Pacific Migration Journal*. https://doi.org/10.1177/01171968 1202100104
- Carling, Jørgen. 2008. The determinants of migrant remittances. Oxford Review of Economic Policy, 24(3), 581–598. http://www.jstor.org/stable/23606904
- Coffie, Amanda. 2022. Channels for financial and non-financial remittances from the Ghanaian diaspora toward development. *International Development Policy / Revue internationale de politique de développement* DOI: https://doi.org/10.4000/poldev.4818.
- Collier, William, Matloob Piracha, and Teresa Randazzo. 2011. Remittances and return migration. *Review of Development Economics*, 22(1), 174-202. https://doi.org/10.1111/rode.12335
- Dustmann, Christian, and Josep Mestres. 2010. Remittances and temporary migration. *Journal of Development Economics*, 92(1), 62–70.
- Dustmann, Christian, and Oliver Kirchkamp. 2002. The optimal migration duration and activity choice after re-migration. *Journal of Development Economics*, 67, 351–372.
- Ilahi, Nadeem, and Saqib Jafarey. 1999. Guestworker migration, remittances, and the extended family: evidence from Pakistan. J Dev Econ. Apr; 58(2), 485-512. doi: 10.1016/s0304-3878(98)00122-9. PMID: 12348944.
- Le, Thanh. 2011. Remittances for economic development: The investment perspective. *Economic Modelling*, 28(6), 2409–2415. https://doi.org/10.1016/j.econmod.2011.06.011
- Lucas, Robert, and Oded Stark. 1985. Motivations to remit: Evidence from Botswana. *Journal of Political Economy* 93(5), 901-918.
- Mahuteau, Stephane, Matloob Piracha, and Massimiliano Tani. 2010. Selection policy and immigrants' remittance behavior. *IZA Discussion Paper* No. 4874, Bonn: Institute for Study of Labor.
- Makina, Daniel, and Andries Masenge. 2015. The time pattern of remittances and the decay hypothesis: Evidence from migrants in South Africa. *Migration Letters*, 12(1), 79–90. https://doi.org/10.59670/ml.v12i1.258
- Mallick, Hrushikesh. 2017. Determinants of workers' remittances: An empirical investigation for a panel of eleven developing Asian economies. *World Economy*, 40(12), 2875–2900. https://doi.org/10.1111/twec.12519
- Mata-Codesal, Diana, and Maria Abranches. 2018. Food parcels in international migration: Intimate connections. *Cham: Palgrave Macmillan*.
- Meyer, Silke. 2020. Home is where I spend my money: Testing the remittance decay hypothesis with ethnographic data from an Austrian-Turkish community. *Social Inclusion*, Cogitatio Press, 8(1), 275–284.
- McCallum, Derrace. 2022. Affectionate remittances: Materialism and care in Filipino transnational families in Japan. *Current Sociology*, 70(6), 843–859. https://doi.org/10.1177/00113921211034895.
- Mccoy, Adam, Mudziviri Nziramasanga, and Jonathan Yoder. 2007. An empirical examination of the factors affecting remittances by Mexican migrants in the United States. Paper presented at the American Agricultural Economics Association Annual Meeting: Portland, Oregon.
- Merkle, Lucie, and Klaus Zimmermann. 1992. Savings, remittances, and return migration, Economics

- Letters, 38(1), 77-81.
- Mueller, Charlotte. 2019. Research on diaspora knowledge transfer within a temporary return program. *Migrant Knowledge*, October 16, 2019.
- Ong, Michelle, and Mario Ivan Lopez. 2022. Filipina migrants and the embodiment of successful aging: Individual quests for wealth, health, and meaningful interdependence. Southeast Asian Studies, 2022, 11(1), 49–77.
- Osili, Una. 2007. Remittances and savings from international migration: Theory and evidence using a matched sample. *Journal of Development Economics*, 83(2), 446–465. https://doi.org/10.1016/i.ideveco.2006.06.003.
- Patzer, Helena. 2018. Unpacking the balikbayan box. Long-distance care through feeding and food consumption in the Philippines. *Studia Socjologiczne*.
- Pinger, Pia. 2010. Come back or stay? Spend here or there? Return and remittances: The case of Moldova. *International Migration*. 48(5), 142–173.
- Rapoport, Hillel, and Frederic Docquier. 2005. The economics of migrants' remittances. In S-C. Kolm, & J. Mercier Ythier (Eds.), Handbook of the Economics of Giving, Altruism and Reciprocity (Vol. 2, pp. 1135–1198). North-Holland Publ Co. https://doi.org/10.1016/S1574-0714(06) 02017-3.
- Ratha, Dilip. 2003. Workers' remittances: An important and stable source of external development finance. Global Development Finance, World Bank, Washington DC.
- Suzuki, Nobue. 2000. Women imagined, women imaging: Re/presentations of Filipinas in Japan Since the 1980s. *U. S.-Japan Women's Journal. English Supplement, 19,* 142–175. http://www.jstor.org/stable/42772167
- Tabuga, Aubrey. 2007. How do Filipino families use the OFW remittances?. *Policy Notes, No. 2007–12.* Makati, Philippines: Philippine Institute for Development Studies.
- Tevera, Daniel, and Abel Chikanda. 2009. Migrant remittances and household survival in Zimbabwe (rep., pp. 1-37). Waterloo, ON: Southern African Migration Programme. SAMP Migration Policy Series No. 51.