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# **Gender and Remittance Flows in Vietnam During Economic Transformation**

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## **Abstract**

Since the 1990s, Vietnam has experienced a dramatic growth in remittance flows. This paper uses the Vietnam Living Standard Surveys for 1992/93 and 1997/98 to study the role of gender in these remittance flows, both from the perspective of receiving and sending remittances. Knowing about gender differences will help to better explain the impact of remittances and to understand the nature of gender roles during a time of economic transformation. We find important distinctions, such as a responsibility among women for the intergenerational transfers of remittances (particularly between parents and children) while men tend to take more responsibility for intragenerational remittances. As well, after controlling for other factors and sharing remittances between spouses who live together, we find evidence that women have a higher likelihood to both send and receive remittances.

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## Introduction

Remittances are growing in importance in our globalizing world and are consequently receiving greater attention from researchers. At the microeconomic level, researchers tend to use household surveys to examine why people send remittances, how the characteristics of remittance recipients compare to non-recipients, how remittances impact poverty and the income distribution, how remittances are spent for consumption or investment purposes, and the role of remittances as an insurance mechanism. However, an issue that has received less focus is the role of gender in remittance decisions, from the perspective of both sending and receiving. In Vietnam, the *Doi moi* economic reforms beginning in 1986 have led to large-scale economic transformation in the country, and gender has emerged as an important distinction for understanding how economic growth benefits society but may also have differential impacts on various subgroups of the population. (Long *et al.*, 2000). Vietnam represents a case of transition from the traditional patriarchal social structure of Confucianism, to a structure of formal equality under socialism, and now to further changes as Vietnam adopts a market economy. Using the Vietnam Living Standard Surveys (VLSS) for 1992/93 and 1997/98, which include information about remittance flows at the individual level, we attempt to shed some light on the role of gender in remittance decisions in Vietnam during a time of rapid economic transformation.

Our attention focuses on gender in Vietnam for a number of reasons. First, the survey data allow for a deep look at remittance flows at the individual level, whereas in many countries such data can only be found at the household level. Second, Vietnam is undergoing a process of rapid economic change, and the two survey periods allow us to see how economic transformation is impacting migration and remittance flows. To understand these changes, note that between the survey years, the poverty rate fell from 57.6 percent to 37.4 percent. Additionally, Vietnam's real GDP grew by more than 8 percent for each year between 1992 and 1997 (International Monetary Fund, 2008). The growth of new industries and the service sector reduced the importance of agriculture, leading to many changes in the lives of the Vietnamese population. Foreign investment led to rural-urban migration and significant growth of Ho Chi Minh City and Hanoi in just a few years during the mid 1990s (Long *et al.*, 2000). In the context of Vietnam's elderly, Giang and Pfau (2007) document how traditional living arrangements are breaking down as more elderly are living alone or in households with only other elderly, and elderly are increasingly losing the support of living with their children, which may also change the context of remittance flows.

Furthermore, the mid 1990s witnessed a change in the trend of migration from Vietnam, as political motives increasingly gave way to economic motives. For Vietnam, much of its international migration has been driven by non-economic factors, at least before the early 1990s. Barbieri *et al.* (1996) identify that of the more than 1.2 million people who left Vietnam between 1975 and 1993, 60 percent were illegal refugees and 40 percent were part of the Orderly Departure Programme set up by Vietnam's government. Though it is not possible to distinguish between politics and economics as the true motive for emigration, it was the case that many of these refugees were fleeing

the Communist government. United States immigration data, which represented the destination of 62.1 percent of Vietnamese emigrants between 1975 and 1993, makes this more clear (Barbieri *et al.*, 1996). Niedzwiecki and Duong (2004) accumulate data from the US Immigration and Naturalization Service about Vietnamese immigration to the United States between 1971 and 2001, separated as either refugees or non-refugee immigrants. For refugees, the largest spike occurred in 1975 with the fall of Saigon, and another spike occurred in the years around 1980 as the Communist government strengthened its position against political opponents. Meanwhile, there were few non-refugee immigrants until the late 1980s and early 1990s, when a spike occurred in immigration numbers and more than 40,000 Vietnamese non-refugee immigrants arrived to the United States in each of 1991 and 1992. As such, between the two survey years, we can witness how remittances may change as economic migration becomes more important.

Additionally, even while international remittances have been growing, between the two surveys we find that domestic remittances have grown even more rapidly. Weighted by remittance value, the share of total remittances from international sources fell from 71.7 percent in 1992/93 to 57.3 percent in 1997/98, while the share of remittances flowing from households within the same province between the surveys grew from 18.9 percent to 25.8 percent, and remittances flowing between provinces in Vietnam grew from 9.4 percent to 17 percent. For explanation, Long *et al.* (2000) note that internal migration grew dramatically starting in the mid 1990s (page 80).

Consequently, it is instructive to examine the nature of remittances in Vietnam. In this paper, we examine remittances from the perspective of gender. We will look at the flow of remittances between genders to answer such questions as whether men are more likely than women to send or receive remittances, and whether men tend to send to other men or to women. Then, we will extend this analysis further by considering the gender flows for different types of relationships between senders and receivers to answer questions, such as whether sons or daughters are more likely to send to their parents, whether children tend to send to their fathers or their mothers, and whether parents tend to send remittances to their sons or to their daughters, and so forth. The next issue we consider is about remittance flows for married couples to see which member of the married couple tends to send and receive remittances. This leads us to consider an alternative measure of remittance flows, in which we assume that any remittances sent or received by a married person living with their spouse will be divided and shared equally with that spouse. We find that this reasonable assumption has important implications for our subsequent regression analysis, in which we seek to determine the role of gender in sending and receiving remittances at the individual level after controlling for other important characteristics, such as marital status, working status, migrant status, region, urban/rural location, age, position in the income distribution, and education.

Briefly, some interesting patterns that we find include that men have a tendency to send remittances to other men, while women tend to send more to other women. This is the case in absolute terms for domestic remittances, but is somewhat offset for

international remittances, as men are more likely to send to women. Additionally, we have found evidence to suggest that women tend to be more responsible for the intergenerational transmission of remittances (particularly between parents and children), while men tend to take responsibility for transfers within the same generation. Also, for married couples who live together, we find that there is a tendency for the husband to be more responsible for sending and receiving remittances, and we find that men are less likely to receive remittances and only slightly more likely to send remittances if we can assume that spouses living together will share the remittance amount. With the same assumption, the regression analysis shows that, when controlling for other factors, women actually have a higher probability than men to both send and receive remittances.

### **Literature Review**

In this section, we consider the literature related to three issues: explanations for why remittances are sent, the role of gender in remittance decisions, and studies of remittances in Vietnam. Theories about migration and remittances can be separated between economic and non-economic motives. Massey *et al.* (1993) review economic motives including first the neoclassical economic theory that identifies the cause of migration as wage differentials, so that the net flow of migrants should be from low wage to high wage areas. More recently, the new economics of migration has extended the theory to the household level, in which migration represents a way to reduce risk by diversifying income sources, and especially migration can provide insurance against local shocks when market failures otherwise prevent the availability of such insurance. With decisions made at the household level, remittances could play an important role for this theory, and migration can take place even in the absence of wage differentials.

As for non-economic motives, remittances may be driven by altruism, in which the sender does so out of a selfless desire to help recipients (Lucas and Stark, 1985). Also, as we noted, Vietnam represents a special case in which much of the early international migration was driven by non-economic factors, which could impact remittance decisions as well. Also Curran and Saguy (2001) explain how culture and social networks may influence the migration and remittance decisions made by different genders, citing, for example, that in Thailand daughters are more likely to send remittances than sons on account of different cultural expectations and family power. As for Vietnam, Long *et al.* (2000) relate that parents do not show a gender preference in the choice of living with adult unmarried children, but have a clear preference to live with married sons over married daughters, implying that married women tend to be expected to care for their parents-in-law (page 15, 25). Relatedly, in studying the remittances from migrants in Thailand, Osaki (2003) found statistically significant evidence that female migrants were more likely by a factor of 1.241 than males to send remittances to their origin household. She explains this as possibly resulting from closer relationships and obligations between females and their origin households in Thailand.

A few studies about remittances in Vietnam are available to researchers. For instance, Le and Nguyen (1999) use the 1992/93 VLSS to study domestic and international remittance flows in Vietnam. They find that, after controlling for other

factors, female headed households are more likely to receive remittances. A study that discusses aspects of remittances with regard to their role in supporting the elderly population is Knodel *et al.* (2000). An interesting question posed by this paper is whether the elderly are disadvantaged by not having a child of a particular sex. The results are conflicting, though with regard to the issue of material support they find weak evidence that elderly without sons in the north are less likely to receive support, and no evidence in the south. Also of relevance, Friedman *et al.* (2003) examine gender differences in elderly well-being in Vietnam, including support for the elderly from family members. They find that transfers between generations do not show much variation across genders after controlling for other factors such as marital status and age. Finally, Barbieri (2006) finds that elderly women (aged 60 and older) are more likely than elderly men to receive remittances from their children.

### **Data**

In this paper, we use the 1992/93 VLSS and 1997/98 VLSS.<sup>1</sup> These surveys were conducted by the General Statistics Office of Vietnam (GSO), along with other international agencies, as a part of the World Bank's Living Standard Measurement Surveys. Detailed descriptions of these surveys can be found in numerous research reports, such as World Bank (2000 and 2001). Unless otherwise noted, our calculations will use sample weights to make the data representative of the entire Vietnamese population, both in urban and rural areas and across different regions.

The surveys are organized by household, but they also include some characteristics for each individual in the household, such as age, gender, relationship to household head, marital, working, and migrant status, salary, health, and education. The 1992/93 VLSS includes 4,800 households with 24,068 individuals, and the 1997/98 VLSS includes 6,002 households with 28,633 individuals. At the household level, these surveys provide extensive data on sources of income, business and agricultural enterprises, detailed household expenditures, ownership of consumer durables, poverty incidence, poverty alleviation programs, and housing conditions.

Remittances are defined in the surveys as the amount of money and monetary value of in-kind benefits received by a household from people not living in the household (family or friends), which do not require repayment. We know specific details about each remittance a household receives and sends. For remittances received, this information includes which member received it, the relationship of the remittance sender to the receiver, the gender of the sender (only in 1997/98 VLSS), and where the sender lives, including which country if the remittance came from overseas, and whether the location is urban or rural. We also know the value of the remittance. The corresponding information is available for remittances sent. Because we have details about both remittances received and sent by each household, we can determine whether

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<sup>1</sup> Household surveys are also available for 2002 and 2004, namely Vietnam Household Living Standard Survey (VHLSS), but the information about remittances is much more limited in these later surveys, which only indicate the total amount of remittances received by each household, divided into domestic and international remittances.

the household is a net receiver or sender, and we can study the flow of remittances in both directions.

## **Results**

### ***Characteristics of Remittance Flows in Vietnam***

To begin the analysis gender and remittances in Vietnam, we first present some general information about remittances for the country. Between 1992/93 and 1997/98, we find evidence of a small but growing role for remittances in terms of the percentage of households sending and receiving them. First, regarding the households that received remittances, 20.7 percent of households (weighted by household size) received remittances in 1992/93, and this increased to 22.7 percent in 1997/98. Most of these households received remittances from domestic sources, but in both surveys 5.6 percent of households received remittances from abroad. Meanwhile, in 1992/93, 16.5 percent of households sent remittances to domestic residents, and this grew to 18.3 percent by 1997/98. Just 0.1 percent of households sent remittances abroad.

// Table 1 about here //

### ***Remittance Flows between Genders***

Next, we examine remittance flows between genders. This can be done only for the 1997/98 survey, because it is the only survey that identifies the gender of the person who sent the remittance to each recipient. Overall, females received 54.9 percent of the total remittance amounts and sent 48.1 percent of remittances. As far as the flow of remittances between genders, at first glance it may seem as though there is no correlation regarding which gender sends to which. However, a Pearson  $\chi^2$  test does demonstrate a statistically significant difference at the 0.1 percent level: even though males send more remittances to females, males are more likely relative to females to send remittances to other males, while females are more likely to send remittances to other females.

// Table 2 about here //

Table 2 also shows the gender relationships for domestic remittances and international remittances separately. For remittances arriving from domestic sources, females sent 42 percent of the total value, and received 50.8 percent of the value. As for international sources, women actually sent a larger percentage of the remittance value than men (52.7 percent), and received 58 percent of the remittances. As for flows between genders, in both cases there are significant differences. For domestic remittances, the trend is clear in absolute terms, as men are more likely to send to other men, and women are more likely to send to other women. However, the opposite result emerges for international remittances. In this case, men are relatively more likely to send to women, and women are relatively more likely to send to other men. This is an interesting result that we will explore further by also considering the relationships between senders and receivers.

### ***Remittance Flows by Relationship Status and Gender***

// Table 3 about here //

Tables 3 and 4 provide further details about the flow of remittances between genders, categorized by the relationship of the receiver to the sender. This information

is provided for people aged 20 and older in 1997/98, and is shown separately for domestic and international remittances. First, Table 3 shows the proportion of total remittances received by each relationship category, for eight different categories. For domestic remittances, children/children-in-law receive the largest amount of remittances (45.3 percent of the value), followed by siblings and nieces or nephews (18.9 percent), and parents (17.7 percent). Spouses, other relatives, nonrelatives, grandchildren, and grandparents each receive less than 10 percent. Meanwhile, for international remittances, child recipients are still the biggest category (36.9 percent), though siblings and nieces or nephews is in a much closer second position (33.4 percent). The category of other relatives moves into the third position (12.2 percent), whereas the share flowing to parents or spouses have both fallen to 5.7 percent.

// Table 4 about here //

Table 4 shows the gender breakdown by relationship category for domestic and international recipients. First, for domestic remittances, for recipients who are children, 46.6 percent of the remittances are received by females, and 49 percent of the remittances are provided by mothers to their children. The remittances from mothers are split almost equally between sons and daughters, but fathers display a stronger tendency to send remittances to their sons than to their daughters. Nonetheless, overall remittance flows to children are split relatively evenly between genders, with a small preference towards sons. On the other hand, remittances that flow in the opposite direction, from children to their parents, show a different pattern. In this case, mothers are more likely to receive remittances than are fathers (67.7 percent of the total), and daughters are also more likely to send remittances to parents than are sons (58.9 percent). Rather significantly, of the remittances sent to parents, 49 percent of the total amount represents funds that flow from daughters to their mothers. Following in size, 22.4 percent flows from sons to their fathers, 18.7 percent flows from sons to their mothers, and 9.9 percent flows from daughters to their fathers. Thus, while men do tend to send more remittances than women overall, it appears that women share a particular responsibility for providing remittances to their parents and especially to their mothers.

Meanwhile, for remittance flows within the same generation, males tend to dominate both sending and receiving.<sup>2</sup> Males are more likely to send to their siblings or nieces and nephews, and they are also more likely to receive from siblings or uncles and aunts. For this category, 46.7 percent of the total remittances flow from males to males, which probably suggests that brothers do help each other with remittances. Males also tend to send and receive much more of the remittance flows for the categories of other relatives and nonrelatives. As for remittance flows between spouses, we find an exception on the receiving side, since almost all remittances flow from husbands to their wives. An overall trend we can discern about domestic remittance flows is that women tend to be responsible for the intergenerational transmission of remittances,

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<sup>2</sup> Most of these categories do not distinguish between generations, but we think it is a fair generalization that these categories tend to be more representative of flows within the same generation. Nonetheless, it is a generalization.



while men tend to be more responsible for the same generation (spouses and siblings), as well as other relatives and nonrelatives.

As for international remittances, Table 4 shows that women living abroad are more likely to send remittances to their children and to other relatives. Also, daughters, mothers, and other female relatives are more likely to receive remittances from abroad. Another interesting result is that sons are much more likely to send to their fathers, and daughters are more likely to send to their mothers, although remittances flowing to parents from abroad are split almost equally overall between the genders.

#### ***Flows to and from Married Couples***

// Table 5 about here //

For the remainder of the analysis, we will make reference to a scenario in which spouses share remittances. For spouses who are living together, it may be somewhat arbitrary which spouse is responsible for sending or receiving a particular remittance, and the choice among genders may merely reflect social customs. Table 5 shows that among married couples who are living together (this excludes transfers between spouses), husbands are more likely to both receive and send remittances (though this tendency diminishes between the survey years). In an alternative scenario which we consider for the remaining analysis, “spouses share” means that any remittance sent or received by a married person who lives with their spouse will be split and shared equally with that spouse. Among married couples, this will tend to increase the percentage of men and women who send or receive remittances, and it will particularly boost the numbers for wives.

#### ***Characteristics of Remittance Recipients and Senders by Gender***

// Table 6 about here //

In Table 6, we consider socioeconomic characteristics for the likelihood to send and receive remittances delineated by gender, including the individual’s marital, working, and migrant status, region of the country, urban/rural location, age, position in the income distribution, and education level. Regarding the overall rates by gender, we can observe a gradual increase in percentages of men and women sending and receiving remittances between the two surveys. In 1992/93, 9.7 percent of males and 8.9 percent of females received remittances. By 1997/98, these numbers grew to 10.7 and 10.5 percent, respectively. At the same time, the percent of males sending remittances grew from 9.1 percent to 10.3 percent, and the percent of females sending grew from 4.5 percent to 5.6 percent. As discussed in the previous section, if we consider the possibility that spouses who live together share the remittance, then females receive remittances more frequently than males, and much of the gender gap in percentages sending is eliminated.

For the marriage category, widowed women enjoy the highest likelihood to receive remittances. In 1992/93, 19.7 percent of widowed women received remittances, and this number rose to 27 percent in 1997/98. The percentage of widowed men receiving remittances also rose in 1997/98 to 23 percent from a much lower 2.6 percent in 1992/93. In addition, perhaps it is surprising to note that married men are more likely to receive remittances than are married women, and they are also more likely to send

remittances. However, we have discussed how this could be misleading if husbands tend to be responsible for remittance activities while sharing the proceeds or burden with their wives. If we assume that spouses living together share the remittance values, then the gaps between genders are mostly closed, and married women are actually slightly more likely to receive on account of their receipt of remittances from spouses who are not living in the household.

Next, we can discuss several categories at the same time, on account of the similar patterns for them. For remittance receipt, non-working people, migrants, those living in urban areas, and those higher in the income distribution tend to receive with greater likelihood than their counterparts. However, for income distribution the trend is less clear in the lower parts of the distribution. Additionally, for these categories, men tend to receive remittances more frequently than women, except for urban females who receive more frequently than urban males. The fact that non-working men receive more remittances than non-working women could reflect the idea that males who are not working may be particularly more vulnerable than non-working female counterparts. As for sending remittances, working people, migrants, rural males and urban females, and those higher in the income distribution tend to send more remittances than their counterparts, and it is again the case that men tend to send more remittances than women among these categories. More specifically regarding migrant status, we find that for both genders migrants are more likely to both send and receive remittances than are non-migrants. Similarly, while male migrants are more likely to send remittances than to receive, female migrants are more likely to receive than to send. It is also worth mentioning that for the three regions of the country, there are no clear overall trends. The only trend to emerge is that men in the central region do seem more likely to receive remittances than in the north or south.

With regard to age and education, meanwhile, we find evidence of nonlinear patterns. First, the probability of receiving remittances increases gradually with age for both men and women, and we can observe what appears to be tendency for remittances to flow from the young to the old. In 1992/93, only 4 percent of men and 5.1 percent of women between ages 20 and 29 receive remittances. These numbers increase, such that 35.5 percent of men and 15.9 percent of women aged 70 to 79 receive remittances. For ages 80 and older, the percentage of men declines to 25.5 percent, while that of women increases to 19.4 percent. Older men are more likely to receive remittances than their female counterparts. And these trends continue in 1997/98. In this case, 1.9 percent of men and 2.8 percent of women aged 20 to 29 receive remittances, while the percentages for both genders peak between ages 70 and 79 with 37.5 percent of men and 25.8 percent of women receiving remittances. As for sending remittances, the age distribution follows a more pronounced inverted-U shape for both genders, with the percentages sending remittances peaking between ages 40 and 59. Finally, increasing education is associated with a higher probability of sending remittances for both men and women, though the patterns for receiving remittances are not as clear. Mostly, men and women with no formal education are more likely to receive remittances than all but

their university educated counterparts, except for men in 1997/98, and those with primary or secondary education fall between the two extremes.

To summarize, we find evidence that the percentage of males who receive remittances is slightly larger but similar to females, but the percentage of males sending remittances is more noticeably higher. Beyond this, a number of trends emerged: widows tend to receive more remittances while married people tend to send more; working people are more likely to send but less likely to receive remittances; migrants are more likely to send and receive remittances; there is more remittance activity in urban areas, but less clear patterns by regions; and there are clear age patterns for sending and receiving remittances. Additionally, those who are higher in the income distribution and who are more educated are more likely to send remittances, but patterns are less clear for receiving remittances.

### ***Determinants of Sending or Receiving Remittances***

As a final part of this analysis, we seek to determine whether gender plays an important role in the decision to send or receive remittances after controlling for other factors. This will allow us to determine whether the trends just discussed will still hold after controlling for the effects of any confounding factors. Here, we will focus on the VLSS 1997/98 data with a logit model, as the trends are similar between the two survey years. Table 7 presents summary statistics for the variables of the logit model, while Table 8 explains determinants of whether or not a person receives or sends a remittance.

// Table 7 about here //

We will consider four dependent variables at the individual level: remittances received; remittances received after modifying so that spouses living together share the remittance; remittances sent; and remittances sent when spouses share. For people aged 20 and older in the 1997/98 survey and after using population weights, we find that 10.7 percent of people received remittances, and that this increases to 16.5 percent when spouses share. The percentages sending remittances are smaller, as 7.8 percent of people send remittances, and 13.5 percent send after considering that spouses share. As discussed before, a large amount of remittances come from overseas, and since such people are not part of the sample universe, the percentages receiving remittances will tend to be larger than the percentages sending.

As for the explanatory variables, for people aged 20 and over, 46.7 percent are male; 70.5 percent are married; 78.7 percent are working; 31 percent are migrants; and 31.2 percent live in urban areas. The average age of this population is about 42. Geographically, 26.2 percent live in the central region, 31.6 percent in the north, and 41.9 percent in the south. As for highest educational attainment, 10.9 percent had no formal education, 33.3 percent were educated at primary school, 50.2 percent obtained secondary education, and 3.1 percent enjoyed university educations.

// Table 8 about here //

With regard to gender, Table 8 shows important differences between our baseline case and when we assume that married couples who live together share their remittances, because the majority of remittances for married couples are connected to the husband. For instance, we find that women have a lower probability than men to

receive and send remittances, though the difference is not statistically significant in the case of recipients. However, when spouses share their remittances, women become more likely to receive and send remittances at statistically significant levels. When spouses share, women are 3.7 percentage points more likely to receive remittances, and 1.4 percentage points more likely to send remittances than are men.

The main emphasis of this paper is on gender, but we can briefly note the trends with other explanatory variables. First, for receiving remittances, when spouses share, married people, those not working, migrants, those living in urban areas, those in higher income quintiles, and those with higher education are all more likely to receive remittances with significance at the 5 percent level. Additionally, the age variable shows a nonlinear and inverted-U shape, and the central region receives more remittances than the north or south. As for sending remittances, we find statistically significant relationships that married, working, migrants, and rural people tend to send more remittances. Also, age again shows an inverted-U pattern, people in the southern region send less remittances than the north or central regions, and those in the higher end of the income distribution and with more education send more remittances as well.

### **Concluding Remarks**

This paper has attempted to uncover some of the underlying differences in remittance behavior for men and women in Vietnam. Some interesting results we have found include a tendency for men to send remittances to other men, while women tend to send more to other women. This is the case in absolute terms for domestic remittances, but is somewhat offset for international remittances, as men are more likely to send to other women. Additionally, we have found evidence to suggest that women tend to be more responsible for the intergenerational transmission of remittances (particularly between parents and children), while men tend to take responsibility for transfers within the same generation. For married couples who live together, we also found that there is a tendency for the husband to be more responsible for sending and receiving remittances. We also find that men are less likely to receive remittances and only slightly more likely to send remittances than are women, if we could assume that spouses living together would share the proceeds of their remittances. By using a logit regression analysis, we found that, when controlling for other factors, women actually had a higher probability than men to both send and receive remittances, if we could assume that spouses share the remittances.

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**TABLE 1**  
**Percentage of Households Sending and Receiving Remittances**

	<b>1992/93</b>	<b>1997/98</b>
<b>Households Receive Remittances From:</b>		
No Remittances	79.3%	77.3%
Domestic Remittances	16.1%	17.8%
International Remittances	5.6%	5.6%
<b>Households Send Remittances To:</b>		
No Remittances	83.4%	81.6%
Domestic Remittances	16.5%	18.3%
International Remittances	0.1%	0.1%
<b>Households That Send And/Or Receive Remittances:</b>		
No Remittances	66.7%	63.7%
Only Receive	16.7%	17.9%
Only Send	12.5%	13.6%
Both Receive and Send	4.1%	4.8%

Note: Columns in the top two sections of the table do not sum to 100 percent because households receiving or sending both domestic and international remittances are counted twice.

Source: Authors' calculations from VLSS 1992/3 & 1997/8

**TABLE 2**  
**Remittance Flows Between Genders in 1997/98,**  
**Remittances Weighted by Value Received,**  
**for people aged 20 and over**

**TOTAL REMITTANCES**

		Sender		row totals
		Male	Female	
Recipient	Male	23.5%	21.6%	45.1%
	Female	28.3%	26.6%	54.9%
column totals		51.9%	48.1%	

**DOMESTIC REMITTANCES**

		Sender		row totals
		Male	Female	
Recipient	Male	31.4%	17.8%	49.2%
	Female	26.6%	24.2%	50.8%
column totals		58.0%	42.0%	

**INTERNATIONAL REMITTANCES**

		Sender		row totals
		Male	Female	
Recipient	Male	17.7%	24.4%	42.0%
	Female	29.6%	28.4%	58.0%
column totals		47.3%	52.7%	

Source: Authors' calculations from VLSS 1997/8

**TABLE 3**  
**Breakdown of Remittances by Relationship Status of Recipient,**  
**Remittances Weighted by Value Received,**  
**in 1997/98, for people aged 20 and over**

	<b>Domestic Remittances</b>		<b>International Remittances</b>	
	Proportion of Total Value	Ranking	Proportion of Total Value	Ranking
Child / Child-in-law	45.3%	1	36.9%	1
Sibling, Sibling-in-law, Niece or Nephew	18.9%	2	33.4%	2
Parent / Parent-in-law	17.7%	3	5.7%	4
Spouse	9.0%	4	5.7%	5
Other relatives	4.5%	5	12.2%	3
Nonrelatives	3.6%	6	2.0%	7
Grandchild	0.5%	7	4.2%	6
Grandparent	0.5%	8	0.0%	8

Note: Relationship categories are in italics when there were less than 30 instances of that relationship category, making it inappropriate to try to generalize further about the category.

Source: Authors' calculations from VLSS 1997/8



**TABLE 4**  
**Breakdown of Remittances by Relationship Status,**  
**and Gender of Sender and Receiver in 1997/98,**  
**Remittances Weighted by Value Received, for people aged 20 and over**

Relationship of Recipient	Gender of Recipient	DOMESTIC REMITTANCES			INTERNATIONAL REMITTANCES		
		Gender of Sender		row totals	Gender of Sender		row totals
		Male	Female		Male	Female	
Child / Child-in-law	Male	29.2%	24.2%	53.4%	16.7%	29.6%	46.3%
	Female	21.8%	24.8%	46.6%	23.6%	30.1%	53.7%
	column totals	51.0%	49.0%		40.3%	59.7%	
Sibling, Sibling-in-law, Niece or Nephew	Male	46.7%	19.8%	66.5%	23.6%	26.7%	50.3%
	Female	19.0%	14.5%	33.5%	27.4%	22.4%	49.7%
	column totals	65.7%	34.4%		50.9%	49.1%	
Parent / Parent-in-law	Male	22.4%	9.9%	32.3%	33.7%	14.9%	48.6%
	Female	18.7%	49.0%	67.7%	17.1%	34.4%	51.5%
	column totals	41.1%	58.9%		50.7%	49.3%	
Spouse	Male	0.0%	0.3%	0.3%			
	Female	99.7%	0.0%	99.7%			
	column totals	99.7%	0.3%				
Other relatives	Male	51.6%	15.1%	66.7%	6.8%	14.4%	21.2%
	Female	14.7%	18.6%	33.3%	33.0%	45.8%	78.8%
	column totals	66.3%	33.7%		39.8%	60.2%	
Nonrelatives	Male	78.5%	3.5%	82.0%			
	Female	6.3%	11.8%	18.0%			
	column totals	84.7%	15.3%				

Note: The results for relationship categories with less than 30 instances of remittances have been excluded from the table.

Source: Authors' calculations from VLSS 1997/8

**TABLE 5**  
**Gender and Remittance Flows,**  
**Remittances Weighted by Value Received,**  
**for Married Couples Living Together**

		<b>1992/93</b>	
		Recipients	Senders
Husband		69.0%	77.8%
Wife		31.0%	22.2%

  

		<b>1997/98</b>	
		Recipients	Senders
Husband		61.5%	75.9%
Wife		38.5%	24.1%

Source: Authors' calculations from VLSS 1992/3 & 1997/8

**TABLE 6**  
**Likelihood to Receive and Send Remittances in Vietnam**  
**by Categories and Gender, for people aged 20 and Over**

		1992/93				1997/98			
		Receive		Send		Receive		Send	
		Percent Males	Percent Females	Percent Males	Percent Females	Percent Males	Percent Females	Percent Males	Percent Females
<b>Overall</b>		9.7%	8.9%	9.1%	4.5%	10.7%	10.5%	10.3%	5.6%
<b>Overall (spouses share)</b>		13.8%	15.6%	12.0%	11.5%	14.9%	17.7%	13.7%	13.2%
<b>Marital Status of Receiver / Sender</b>	Married	11.1%	7.7%	11.2%	4.7%	12.6%	8.4%	13.1%	6.5%
	Widowed	2.6%	19.7%	5.2%	6.0%	23.0%	27.0%	3.0%	5.5%
	Otherwise Not Married	1.5%	5.6%	0.9%	2.7%	2.0%	5.2%	0.8%	2.0%
	Married (spouses share)	16.2%	17.3%	14.8%	14.7%	18.0%	19.0%	17.6%	17.8%
<b>Work Status of Recipient / Sender</b>									
	Not Working	18.1%	12.5%	4.8%	2.9%	20.8%	17.7%	5.1%	3.9%
	Working	8.6%	8.2%	9.7%	4.8%	8.6%	8.3%	11.4%	6.0%
<b>Migrant Status</b>									
	Non-migrant	8.8%	7.9%	7.5%	3.4%	9.7%	8.7%	8.6%	4.2%
	Migrant	12.9%	11.6%	14.3%	7.3%	13.8%	14.9%	15.5%	9.0%
<b>Region</b>									
	North	9.0%	9.1%	9.8%	4.7%	9.6%	9.7%	10.1%	6.0%
	Central	11.8%	8.4%	9.3%	4.0%	13.4%	10.9%	13.4%	5.3%
	South	9.4%	9.1%	8.5%	4.6%	10.2%	10.9%	8.5%	5.3%
<b>Urban / Rural Status</b>									
	Rural	9.1%	7.6%	9.3%	3.5%	10.2%	8.7%	10.6%	4.6%
	Urban	12.2%	13.4%	8.9%	7.9%	12.2%	15.6%	9.4%	8.1%
<b>Age of Recipient / Sender</b>	20 - 29	4.0%	5.1%	3.5%	1.7%	1.9%	2.8%	1.2%	1.9%
	30 - 39	8.0%	7.2%	10.3%	5.6%	8.2%	8.4%	11.6%	7.1%
	40 - 49	8.7%	10.1%	15.8%	6.6%	8.9%	10.1%	16.8%	8.5%
	50 - 59	13.3%	10.4%	14.7%	7.7%	12.9%	13.0%	18.3%	8.4%
	60 - 69	17.9%	15.7%	11.3%	5.4%	26.9%	19.3%	13.4%	4.8%
	70 - 79	35.5%	15.9%	5.6%	1.8%	37.5%	25.8%	7.0%	1.9%
	80 and older	25.5%	19.4%	1.8%	1.0%	36.8%	19.1%	3.5%	2.2%
<b>Income Distribution</b>	1st Quintile	8.0%	6.5%	3.8%	1.1%	7.8%	6.4%	6.1%	1.9%
	2nd Quintile	8.7%	7.9%	7.2%	2.7%	10.1%	7.2%	7.4%	2.8%
	3rd Quintile	8.6%	8.2%	9.4%	3.4%	9.3%	9.5%	10.1%	5.7%
	4th Quintile	11.2%	9.5%	11.3%	5.3%	12.7%	13.2%	13.0%	6.5%
	5th Quintile	12.1%	12.3%	13.7%	9.6%	14.7%	18.0%	16.5%	12.7%
<b>Education</b>	No Education	11.0%	9.4%	6.4%	3.6%	8.6%	13.6%	3.1%	2.3%
	Primary Education	9.3%	6.5%	9.6%	5.1%	13.7%	10.4%	6.7%	4.4%
	Secondary Education	8.9%	9.3%	10.0%	5.0%	9.4%	9.1%	12.2%	7.3%
	University Education	13.1%	2.4%	18.2%	13.3%	14.1%	14.2%	24.1%	16.3%

Source: Authors' calculations from VLSS 1992/3 &amp; 1997/8

**TABLE 7**  
**Summary Statistics**

		<b>1997/98</b>
	Mean	Std. Dev.
Received Remittances	10.7%	0.309
Received Remittances (spouses share)	16.5%	0.371
Sent Remittances	7.8%	0.268
Sent Remittances (spouses share)	13.5%	0.341
Gender (male=1)	46.7%	0.499
Marital Status (married=1)	70.5%	0.456
Work Status (working=1)	78.7%	0.410
Migrant Status (migrant=1)	31.0%	0.463
Urban / Rural (urban=1)	31.2%	0.463
Age	42.1	16.3
Region		
Central	26.2%	0.439
North	31.6%	0.465
South	41.9%	0.493
Income Distribution		
Bottom Quintile	19.9%	0.400
2nd Income Quintile	19.9%	0.400
3rd Income Quintile	19.9%	0.400
4th Income Quintile	19.9%	0.400
Top Income Quintile	20.3%	0.402
Education		
No Education	10.9%	0.312
Primary Education	33.3%	0.471
Secondary Education	50.2%	0.500
University Education	3.1%	0.172

Notes: "Spouses share" represents our modification in which spouses who live together share the remittance with one another, rather than having it just count for one spouse.

Source: Authors' calculations from VLSS 1997/8

**TABLE 8**  
**Logit Model of Remittance Determinants in 1997/98, for people aged 20 and over**

	Receive	Receive (spouses share)	Send	Send (spouses share)
Prob(Male)	8.1%	10.6%	5.9%	7.2%
Prob(Female)	7.6%	14.4%	3.7%	8.6%
Difference	-0.5%	3.7%	-2.2%	1.4%
<u>Explanatory Variables</u>				
Gender (male=1)	0.063	-0.318***	0.495***	-0.190***
Marital Status (married=1)	-0.139*	0.749***	0.609***	1.548***
Work Status (working=1)	-0.393***	-0.359***	0.487***	0.406***
Migrant Status (migrant=1)	0.075	0.099*	0.456***	0.472***
Urban / Rural (urban=1)	0.075	0.151**	-0.706***	-0.723***
Age	0.079***	0.067***	0.107***	0.100***
Age Squared	-0.001***	-0.000***	-0.002***	-0.002***
Region dummies (North is omitted)				
Central	0.189**	0.219***	0.079	0.102
South	0.016	0.008	-0.196*	-0.283***
Income Distribution (bottom quintile is omitted)				
2nd Income Quintile	0.161	0.165*	0.194	0.219*
3rd Income Quintile	0.212*	0.171*	0.687***	0.716***
4th Income Quintile	0.521***	0.493***	0.979***	1.053***
Top Income Quintile	0.708***	0.705***	1.612***	1.750***
Educational Status (Secondary Education is omitted)				
No Education	-0.569***	-0.527***	-0.933***	-0.696***
Primary Education	-0.294***	-0.230***	-0.542***	-0.403***
University Education	-0.132	-0.014	0.315*	0.277*
Constant	-5.374***	-4.962***	-7.885***	-7.436***
N	16005	16005	16005	16005
pseudo-R <sup>2</sup>	0.111	0.122	0.143	0.171

Notes: (1) Levels of Significance: \* < 0.05, \*\* < 0.01, \*\*\* < 0.001 (2) Probabilities that males and females receive or send remittances are calculated at the mean values of the other explanatory variables. (3) "Spouses share" represents our modification in which spouses who live together share the remittance with one another.

Source: Authors' calculations from VLSS 1997/8

