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Gender and Remittance Flows in Viet Nam during Economic Transformation

This article attempts to uncover some of the underlying differences in remittance behaviours between men and women in Viet Nam.

Some of the interesting results found include a tendency for men to send remittances to other men, while women tend to send more to other women.

By Wade Donald Pfau and Giang Thanh Long*

Remittances are growing in importance in our globalizing world and, consequently, they are 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 those of non-recipients, how remittances impact poverty and the income

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distribution, if remittances are spent for consumption or investment purposes, and in order to access the role of remittances as an insurance mechanism. However, an issue that has received less attention is the role of gender in remittance decisions, from the perspective of both sending and receiving countries. In Viet Nam, the *doi moi* economic reforms that began 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 and the various subgroups of the population (Long and others, 2000). Viet Nam represents a case of transition from the traditional patriarchal social structure of Confucianism, to a structure of formal equality under socialism, and currently, with further changes taking place, to a market economy. Using the Viet Nam living standards surveys (VLSSs) for 1992-1993 and 1997-1998, which include information about remittance flows at the individual level, attempts are made to shed some light on the role of gender in remittance decisions in Viet Nam during the period of rapid economic transformation.

The authors of this article decided to focus their attention on this particular issue for a number of reasons. First, the survey data allow for a thorough examination of remittance flows at the individual level, whereas in many countries such data can be obtained only at the household level. Second, Viet Nam is undergoing a process of rapid economic change, and the two survey periods provide insight into the impact of economic transformation on migration and remittance flows. To understand those changes, it should be noted that, between the survey years, the poverty rate fell from 57.6 per cent to 37.4 per cent. Additionally, the real gross domestic product of Viet Nam grew by more than 8 per cent for each year between 1992 and 1997 (IMF, 2008). The growth of new industries and of the service sector reduced the importance of agriculture, leading to many changes occurring in the lives of the Vietnamese people. Foreign investment led to rural-urban migration and to the significant growth of both Ho Chi Minh City and Hanoi within just a few years in the mid-1990s (Long and others, 2000). Regarding older persons in Viet Nam, Giang and Pfau (2007) document how traditional living arrangements are breaking down as more elderly persons are living alone or in households with only other elderly persons, as this age group is increasingly losing the support of their children. This trend may also change the context of remittance flows.

Furthermore, the mid-1990s witnessed a change in the trend of migration from Viet Nam, as political motives increasingly gave way to economic motives. Much of the country's international migration has been driven by non-economic factors, at least before the early 1990s. Barbieri and others (1996) found that, of the

more than 1.2 million people who left Viet Nam between 1975 and 1993, 60 per cent were illegal refugees and 40 per cent were part of the Orderly Departure Programme set up by the Government of Viet Nam. Though it is not possible to clearly distinguish political motives from economic ones, many of those refugees were fleeing the Communist regime. Immigration data from the United States of America, the destination country for 62.1 per cent of Vietnamese emigrants between 1975 and 1993, makes this clearer (Barbieri and others, 1996). Niedzwiecki and Duong (2004) compiled data from the United States Immigration and Naturalization Service about Vietnamese immigration to that country between 1971 and 2001, classifying immigrants as either refugees or non-refugees. For refugees, the largest spike was in 1975 following the fall of Saigon, while another spike occurred in the early 1980s as the then communist Government strengthened its position against political opponents. While only a small number of non-refugee migrants arrived in the United States in the late 1980s and early 1990s, their numbers soared and more than 40,000 arrived in both 1991 and 1992. As such, between the two survey periods, one can witness how remittances may change as economic migration becomes more important.

In addition, while international remittances have been growing steadily, domestic remittances that took place between the two surveys were found to have grown even more rapidly. Weighted by remittance value, the share of total remittances from international sources fell from 71.7 per cent in 1992-1993 to 57.3 per cent in 1997-1998, whereas the share of remittances flowing from households within the same province grew from 18.9 per cent to 25.8 per cent. By contrast, remittances flowing between different provinces in Viet Nam grew from 9.4 to 17 per cent during the same period. For further information about the surge of international migration in the mid-1990s, see Long and others (2000).

It is clearly instructive to examine the nature of remittances in Viet Nam. In this paper, remittances are examined especially from the perspective of gender. The authors 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 those to other men or to women. The analysis is then further extended by considering the gender flows for different types of relationships – between senders and receivers – to answer such questions as whether sons or daughters are more likely to send remittances to parents, whether children tend to send those sums to their fathers or to their mothers, and whether parents tend to send those to their sons or to their daughters, and so forth. The next issue considered is that of remittance flows for married couples in order to ascertain which member of the married couple tends to send and receive more

remittances. This leads us to consider an alternative measure of remittance flows, in which one assumes that any remittances sent or received by a married person living with his/her spouse will be divided and shared equally with that person. This reasonable assumption is found to have important implications for the subsequent regression analysis, in which one seeks 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, interesting patterns include the tendency of men to send remittances to other men, and the tendency of women to send them 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 them to women. Additionally, evidence suggests 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 such transfers within the same generation. Also, for married couples who live together, this analysis found that there is a tendency for the husband to be more responsible for sending and receiving remittances, whereas women are less likely to receive remittances and only slightly more likely to send remittances, if one assumes that spouses living together share the remittance amount. Based on this 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

This section reviews the literature available on the following three issues: reasons remittances are sent; the role of gender in remittance-related decisions; and general studies of remittances in Viet Nam. Theories about migration and remittances can be divided into economic and non-economic motives. Massey and others (1993) reviewed economic motives based on the neoclassical economic theory that identifies the cause of migration as wage differentials, so that the net flow of migrants is expected to be from low-wage areas to high-wage areas. More recently, the new economics of migration have extended the analysis to the household level, with migration being considered as a way to reduce risk by diversifying income sources and providing insurance against local shocks when market failures prevent even the availability of such schemes.

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 noted earlier, Viet Nam 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) explained how culture and social networks may influence the migration and remittance decisions made by different genders, citing that, in Thailand, daughters are more likely to send remittances than sons as a result of differing cultural expectations and family power. As for Viet Nam, Long and others (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 in-laws. Similarly, in studying the remittances from migrants in Thailand, Osaki (2003) found statistically significant evidence that female migrants were more likely than males to send remittances to their origin household by a factor of 1.241 to send remittances to their origin household. Osaki explains this as possibly resulting from closer relationships and obligations existing between females and their origin households in Thailand compared with those between males and their origin households.

Several studies on remittances in Viet Nam are available to researchers. For instance, Le and Nguyen (1999) used the 1992-1993 VLSS to study domestic and international remittance flows in and to and from Viet Nam. The authors found that, after controlling for other factors, female-headed households are more likely to receive remittances compared with male-headed households. A study that discusses aspects of remittances with regard to their role in supporting the elderly population is that of Knodel and others (2000). An interesting question posed in that article is whether the elderly are disadvantaged by not having a child of a particular sex. Results are conflicting, though with regard to the issue of material support, they found weak evidence that elderly persons without sons in the north of the country are less likely to receive support, and no evidence in the south. Also of relevance, Friedman and others (2003) examined gender differences in the well-being of the elderly in Viet Nam, including in support for the elderly from family members. They found that transfers between generations do not show much variation between genders after controlling for other factors such as marital status and age. Finally, Barbieri (2006) found that elderly women (aged 60 and above) are more likely than elderly men to receive remittances from their children.

Data

In this article, the authors use the 1992-1993 VLSS and 1997-1998 VLSS.¹ These surveys were conducted by the General Statistics Office of Vietnam, along with other international agencies, as a part of the Living Standards Measurement Study of the World Bank. Detailed descriptions of these surveys can be found in numerous research reports, such as those by the World Bank (2000 and 2001).

Unless otherwise noted, the calculations are made using sample weights to make the data representative of the entire Vietnamese population, in both 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 1992-1993 VLSS includes 4,800 households with 24,068 individuals, whereas the 1997-1998 VLSS includes 6,002 households with 28,633 individuals. At the household level, those surveys provided extensive data on sources of income, business and agricultural enterprises, detailed household expenditures, the ownership of consumer durables, poverty incidence, poverty alleviation programmes 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. Reports on the surveys provide information on specific details about each remittance a household receives and sends. For remittances received, the information includes which member received it, the relationship of the remittance sender with the receiver, and the gender of the sender (only in the 1997-1998 VLSS). In addition, information is provided on where the sender lives, including the country if the remittance came from overseas, and whether the location is in an urban or rural area. The value of the remittances sent and received is also provided. Based on details on both remittances received and remittances sent by each household, it can be determined whether the household is a net receiver or sender, and the flow of remittances in both directions can be examined.

Results

Characteristics of remittance flows in Viet Nam

Prior to the analysis of gender and remittances in Viet Nam, general information about remittances for the country is presented. Evidence suggests that, between 1992-1993 and 1997-1998, there was a small but increasingly significant role for remittances in terms of the percentage of households sending and receiving them. About 20.7 per cent of households (weighted by household size) received remittances in 1992-1993, and this number increased to 22.7 per cent in 1997-1998. Most of those households received remittances from domestic sources, while in both surveys, some 5.6 per cent of households received remittances from a sender abroad. Meanwhile, in 1992-1993, 16.5 per cent of

households sent remittances to domestic residents. This number grew to 18.3 per cent by 1997-1998. A mere 0.1 per cent of households sent remittances to family members living abroad.

Table 1. Percentage of households that sent and received remittances

	1992-1993	1997-1998
Households that received:		
No remittances	79.3	77.3
Domestic remittances	16.1	17.8
International remittances	5.6	5.6
Households that sent:		
No remittances	83.4	81.6
Domestic remittances	16.5	18.3
International remittances	0.1	0.1
Households that sent and/or received		
No remittances	66.7	63.7
Only received	16.7	17.9
Only sent	12.5	13.6
Both received and sent	4.1	4.8

Source: Authors' calculations are based on the Viet Nam living standards surveys of 1992-1993 and 1997-1998.

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

Remittance flows between genders

Remittance flows can be examined for only the 1997-1998 survey, since it is the only one that identifies the gender of the person who sent the remittance to each recipient. Overall, females received 54.9 per cent of the total remittance amounts and sent 48.1 per cent of the remittances. Regarding the flow of remittances between genders, at first glance it may seem as though there is no correlation as to who sends to whom. However, a Pearson chi-square test does demonstrate a statistically significant difference at the 0.1 per cent level: even though males send

more remittances to females than females do to males, they are more likely, compared with females, to send remittances to other males. Similarly females are more likely to send remittances to other females.

Table 2. Remittance flows between genders in 1997-1998, remittances weighted by value received, for people aged 20 and over

		Total remittances (in percentage)		
		Sender		
		Male	Female	Total
Recipient	Male	23.5	21.6	45.1
	Female	28.3	26.6	54.9
	Total	51.9	48.1	
		Domestic remittances (in percentage)		
		Sender		
		Male	Female	Total
Recipient	Male	31.4	17.8	49.2
	Female	26.6	24.2	50.8
	Total	58.0	42.0	
		International remittances (in percentage)		
		Sender		
		Male	Female	Total
Recipient	Male	17.7	24.4	42.0
	Female	29.6	28.4	58.0
	Total	47.3	52.7	

Source: Authors' calculations are based on the Viet Nam Living Standards Survey, 1997-1998.

Table 2 shows the gender relationships for domestic remittances and international remittances separately. For remittances coming from domestic sources, females sent 42 per cent of the total value and received 50.8 per cent of the total value. For international sources, females sent a larger percentage (52.7 per cent) of the remittance value than males. Females received about 58 per cent of the remittances. As for flows between genders, in both cases significant differences exist. 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 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 men. This is an interesting result that the authors will explore further, also by considering the relationships between senders and receivers.

Remittance flows by relationship status and gender

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 given for people aged 20 and older in 1997-1998, 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/stepchildren receive the largest amount of remittances (45.3 per cent of the value), followed by siblings, nieces and nephews (18.9 per cent), and parents (17.7 per cent). Spouses, other relatives, non-relatives, grandchildren and grandparents each receive less than 10 per cent. Meanwhile, for international remittances, child recipients represent the largest category (36.9 per cent), though siblings, nieces and nephews are a very close second (33.4 per cent). The category of other relatives ranks third (12.2 per cent), whereas the shares flowing to parents or spouses have both fallen to 5.7 per cent.

Table 3. Breakdown of remittances by relationship status of recipient, remittances weighted by value received in 1997-1998 for persons aged 20 and over

	Domestic remittances		International remittances	
	Proportion of total value	Ranking	Proportion of total value	Ranking
Child, stepchild	45.3	1	36.9	1
Sibling, niece, nephew	18.9	2	33.4	2
Parent, mother-in-law, father-in-law	17.7	3	5.7	4
Spouse	9.0	4	5.7	5
Other relative	4.5	5	12.2	3
Non-relative	3.6	6	2.0	7
Grandchild	0.5	7	4.2	6
Grandparent	0.5	8	0.0	8

Source: Authors' calculations are based on the Viet Nam Living Standards Survey, 1997-1998.

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.

Table 4. Breakdown of remittances by relationship status and gender of sender and receiver in 1997-1998, remittances weighted by value received for people aged 20 and over

Relationship of recipient	Gender of recipient	Domestic remittances (percentage)			International remittances (percentage)		
		Gender of sender			Gender of sender		
		Male	Female	Total	Male	Female	Total
Child, stepchild	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
	Total	51.0	49.0		40.3	59.7	
Sibling, niece, 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
	Total	65.7	34.4		50.9	49.1	
Parent, mother-in-law, father-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
	Total	41.1	58.9		50.7	49.3	
Spouse	Male	0.0	0.3	0.3			
	Female	99.7	0.0	99.7			
	Total	99.7	0.3				
Other relative	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
	Total	66.3	33.7		39.8	60.2	
Non-relative	Male	78.5	3.5	82.0			
	Female	6.3	11.8	18.0			
	Total	84.7	15.3				

Source: Authors' calculations are based on the Viet Nam Living Standards Survey, 1997-1998.

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

Table 4 shows the gender breakdown by relationship category for domestic and international recipients. First, for domestic remittances remitted to children, 46.6 per cent are received by females, and 49 per cent of these amounts are sent by mothers. Those remittances are usually split almost equally between sons and daughters, although fathers display a stronger tendency to send remittances to their

sons rather than to their daughters. Nonetheless, overall remittance flows to children are split relatively evenly between genders, with a small preference for sons. However, remittances that flow in the opposite direction, from children to parents, show a different pattern. In this case, mothers are more likely to receive remittances (67.7 per cent of the total) compared with fathers, and daughters are also generally more likely to send remittances to parents (58.9 per cent) compared with sons. Rather significantly, of the remittances sent to parents, 49 per cent of the total amount represent funds that flow from daughters to their mothers. In terms of size, this is followed by flows from sons to their fathers (22.4 per cent), and then by flows from sons to their mothers (18.7 per cent), and lastly by flows from daughters to their fathers (9.9 per cent). Thus, while men do tend to send more remittances than women overall, it appears that women share a particular responsibility in providing their parents, and especially their mothers, with remittances.

Meanwhile, for remittances flowing within the same generation, males tend to dominate both sending and receiving.² Males are more likely to send to their siblings or nieces and nephews, and are also more likely to receive from siblings or uncles and aunts. For this category, 46.7 per cent of total remittances flow from males to males, which probably suggests that brothers tend to help each other in this regard. Males also tend to send and receive much more of the remittance flows in the categories of other relatives and non-relatives. Regarding remittance flows between spouses, an exception on the receiving end can be noted, since almost all remittances flow from husbands to their wives. An overall trend in domestic remittance flows is that women tend to be responsible for the intergenerational transmission of remittances, while men tend to be more responsible for those within the same generation (spouses and siblings), as well as with other relatives and non-relatives.

As for international remittances, table 4 shows that women living abroad are more likely to send remittances to their children and to other relatives than men are. Also, daughters, mothers and other female relatives are more likely to receive remittances from abroad than men are. Another interesting point is that sons are much more likely to send to their fathers, while 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

For the remainder of the analysis, a scenario in which spouses share remittances is considered. For spouses living together, it may be somewhat arbitrary to try to assess 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, husbands are more likely to both receive and send remittances (though this tendency diminished between the survey years). In this scenario, “spouses share” means that any remittance sent or received by a married person who lives with their spouse is split and shared equally with the spouse. Among married couples, this tends to increase the percentage of men and women who send or receive remittances, and it particularly boosts the numbers for wives.

Table 5. Gender and remittance flows, remittances weighted by value received for married couples living together, in percentage

	Recipients	Senders
1992-1993		
Husband	69.0	77.8
Wife	31.0	22.2
1997-1998		
Husband	61.5	75.9
Wife	38.5	24.1

Source: Authors’ calculations are based on the Viet Nam living standards surveys of 1992-1993 and 1997-1998.

Characteristics of remittance recipients and senders by gender

In Table 6, socio-economic characteristics affecting the likelihood to send and receive remittances are delineated by gender, including the individual’s marital, working and migrant status, region of residence, urban or rural residence, age, position in income distribution, and education level. Regarding the overall rates by gender, a gradual increase in the percentages of men and women sending and receiving remittances can be observed between the two surveys. In 1992-1993, 9.7 per cent of males and 8.9 per cent of females received remittances. By 1997-1998, these numbers had grown to 10.7 and 10.5 per cent, respectively. At the same time, the percentage of males sending remittances grew from 9.1 per cent to 10.3 per cent. Similarly, that of females grew from 4.5 per cent to 5.6 per cent. As discussed in the previous section, if one considers the possibility that spouses living together share the remittance, then females receive remittances more frequently than males do and much of the gender gap in percentages sending is eliminated.

Table 6. Likelihood of receiving and sending remittances in Viet Nam by category and gender, of persons aged 20 and over, in percentage

		1992-1993				1997-1998			
		Received		Sent		Received		Sent	
		Males	Females	Males	Females	Males	Females	Males	Females
Overall		9.7	8.9	9.1	4.5	10.7	10.5	10.3	5.6
Overall (spouses share)		13.8	15.6	12.0	11.5	14.9	17.7	13.7	13.2
Marital status of receiver/sender	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
Work status of recipient/sender	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
Migrant status	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
Region	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
Urban/rural status	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
Age of recipient/sender	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
Income distribution	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

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Table 6. (Continued)

		1992-1993				1997-1998			
		Received		Sent		Received		Sent	
		Males	Females	Males	Females	Males	Females	Males	Females
Education	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 are based on the Viet Nam living standards surveys of 1992-1993 and 1997-1998.

In the marital status category, widowed women enjoy the highest likelihood of receiving remittances. In 1992-1993, 19.7 per cent of widowed women received remittances, and this number rose to 27 per cent in 1997-1998. The percentage of widowed men receiving remittances also rose in 1997-1998, to 23 per cent from a much lower 2.6 per cent in 1992-1993. In addition, it is interesting to note that married men are more likely to receive remittances than are married women. They are also more likely to send remittances. However, this could be misleading to some extent since, as explained earlier, husbands tend to be responsible for remittance activities while sharing the proceeds or burden with their wives. If one assumes 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 remittances on account of spouses not living in the household.

Regarding the receiving of remittances, non-working people, migrants, persons living in urban areas and persons in higher income brackets are more likely to receive remittances than their counterparts. The trend is less clear, however, in the lower income categories. Additionally, for these categories, men tend to receive remittances more frequently than women, except for women living in urban areas, who receive more frequently than male urban dwellers. 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 more vulnerable than their non-working female counterparts. Working people, migrants, rural males and urban females, and those higher in the income distribution category tend to send more remittances than their counterparts. Men tend to send more remittances than women. Among migrants, it appears that both female and male migrants are more likely to send and receive remittances than non-migrants. While male migrants are

more likely to send remittances than to receive them, female migrants are more likely to receive them than to send them. It is also worth mentioning that, throughout the three regions of Viet Nam, there do not seem to be any distinct overall trends, apart from the fact that men in the central region appear more likely to receive remittances than those living in the north or south of the country.

With regard to age and education, there is evidence of non-linear patterns. First, the probability of receiving remittances increases gradually with age for both men and women and this appears to be a tendency for all remittances flowing from young to old generations. In 1992-1993, only 4 per cent of men and 5.1 per cent of women aged 20 to 29 received remittances. These numbers increase, so that about 35.5 per cent of men and 15.9 per cent of women aged 70 to 79 received remittances. For ages 80 and above, the percentage of men declines to 25.5, while that of women increases to 19.4. Older men are more likely to receive remittances than are their female counterparts. These trends can also be observed in the VLSS 1997-1998. In this case, 1.9 per cent of men and 2.8 per cent of women aged 20 to 29 received remittances, while the percentages for both genders peaked between the ages of 70 and 79, with 37.5 per cent of men and 25.8 per cent of women receiving remittances. As for sending remittances, the age distribution follows a more pronounced inverted-U shape for both genders, with the percentages for those sending remittances reaching a peak between the ages of 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.

To summarize, evidence indicates that the percentage of males who receive remittances is roughly similar to that of females, being only slightly higher, while the percentage of males sending remittances is noticeably higher than that of females. In addition, a number of trends emerge: widows tend to receive more remittances; married people tend to send more; working people are more likely to send but less likely to receive any; migrants are generally more likely to send and receive remittances; there are more remittance transactions in urban areas, but no clear pattern per region; and there are clear age patterns for sending and receiving remittances. In addition, those who are higher in the income distribution and are more educated are more likely to send remittances, yet patterns are less clear for those receiving remittances.

Determinants of sending or receiving remittances

In the final part of the analysis, the authors 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 a determination of whether the trends discussed above still hold after controlling for the effects of any confounding factor. Here, one focuses on the VLSS 1997-1998 data with a logit model, as the trends are similar for 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. Summary statistics

	1997-1998	
	Mean	Standard deviation
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
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

Source: Authors' calculations are based on the Viet Nam Living Standards Survey, 1997-1998.

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

Four dependent variables at the individual level are considered: remittances received; remittances received after modifying so that spouses living together share the sum remitted; remittances sent and remittances sent when they are shared by spouses. For people aged 20 and older in the 1997-1998 survey, and after using population weights, the authors found that 10.7 per cent of people received remittances, and that this figure increased to 16.5 per cent when spouses' share was also considered. The percentages for sending remittances are smaller, as 7.8 per cent of people sent remittances, and, after considering spouses' share, 13.5 per cent sent them. As previously discussed, a large amount of remittances come from overseas, and since such people are not part of the sample universe, the percentages receiving remittances tend to be larger than the percentages sending them.

As for the explanatory variables, among people aged 20 and over, 46.7 per cent are male, 70.5 per cent are married, 78.7 per cent are working, 31 per cent are migrants and 31.2 per cent live in urban areas. The average age of this population is about 42 years. Geographically, 26.2 per cent live in the central region of Viet Nam, 31.6 per cent in the north of the country and 41.9 per cent in the south. As regards educational attainment, 10.9 per cent had not received any formal education, 33.3 per cent had received primary-level education, 50.2 per cent had received secondary-level education and 3.1 per cent had received university-level education.

With regard to gender, table 8 shows important differences between baseline cases and results obtained when it is assumed that married couples who live together share their remittances. This is because the majority of remittances for married couples are remitted by the husband. For instance, the authors found 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 men are.

Although the main emphasis of this paper is on gender, the trends with other explanatory variables are also briefly noted. First, concerning the receiving of remittances, when spouses share remittances, married people, people not working, migrants, people living in urban areas, people in higher income quintiles, and people with higher education are all more likely to receive remittances with a significance at the 5 per cent level. In addition, the age variable shows a non-linear, inverted-U shape, and the central region of Viet Nam receives more remittances than the north or south of the country. Regarding the sending of remittances, it appears that married, working, migrant and rural people tend to send significantly more remittances. Also, age again shows an inverted-U pattern, while persons

residing in the southern region send fewer remittances than those in the north or central regions. Persons in the higher end of the income distribution and those having a higher level of education send more remittances as well.

Table 8. Logit model of remittance determinants in 1997-1998, for people aged 20 and over

	Received	Received (spouses' share)	Sent	Sent (spouses' share)
Percentage of male	8.1	10.6	5.9	7.2
Percentage of female	7.6	14.4	3.7	8.6
Difference	-0.5	3.7	-2.2	1.4
Explanatory variables				
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	16 005	16 005	16 005	16 005
pseudo-R ²	0.111	0.122	0.143	0.171

Source: Authors' calculations based on the Viet Nam Living Standards Survey 1997-1998.

Notes: Levels of significance: * < 0.05, ** < 0.01, *** < 0.001; probabilities that males and females receive or send remittances are calculated at the mean values of the other explanatory variables; "spouses' share" represents the modification in which spouses who live together share the remittance with one another.

Concluding remarks

This article attempts to uncover some of the underlying differences in remittance behaviours between men and women in Viet Nam. Some of the interesting results 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. In addition, the authors found evidence suggesting 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 living together, a tendency could be identified for the husband to be more responsible for sending and receiving remittances. The authors also found that men are less likely to receive remittances and only slightly more likely to send remittances than women are, if it can be assumed that spouses living together share remittances. By using a logit regression analysis, the authors found that, when controlling for other factors, women actually had a higher probability than men to both send and receive remittances, if it can be assumed that spouses share the remittances.

Endnotes

1. Household surveys are also available for 2002 and 2004, namely the Viet Nam Household Living Standards Survey, but the information about remittances is much more limited in these surveys, which indicate only the total amount of remittances received by each household, divided into domestic and international remittances.
2. Most of the categories do not distinguish between generations; however, it is fair to assume that these categories tend to be more representative of flows within the same generation. Nonetheless, it is a generalization.

Reference

- Barbieri, Magali (2006). "Doi moi and the Elderly: Intergenerational Support under Strain of Reforms", paper presented at the Population Association of America 2006 Annual Meeting, Los Angeles, United States, 30 March -1 April 2006.
- Barbieri, Magali and others (1996). "Demographic trends in Vietnam", *Population: an English Selection*, vol. 8, pp. 209-234.
- Curran, Sara R. and Abigail C. Saguy (2001). "Migration and cultural change: a role for gender and social networks?", *Journal of International Women's Studies*, vol. 2, No. 3, pp. 54-77.
- Friedman, Jed and others (2003). "Gender dimensions of support for elderly in Vietnam", *Research on Aging*, vol. 25, No. 6, pp. 587-630.
- Giang, Thanh Long and Wade Donald Pfau (2007). "The elderly population in Vietnam during economic transformation: an overview", in Giang Thanh Long and Duong Kim Hong, eds., *Social Issues under Economic Transformation and Integration in Vietnam, Volume 1* (Hanoi, Vietnam Development Forum), pp. 185-210.
- International Monetary Fund (IMF) (2008). *World Economic Outlook: Financial Stress, Downturns, and Recoveries* (Washington, D.C., IMF).
- Knodel, John E. and others (2000). "Intergenerational exchanges in Vietnam: family size, sex composition, and the location of children", Population Studies Center Research Report No. 98-430, pp. 89-104.
- Le, Minh Tam and Duc Vinh Nguyen (1999). "Remittances and the distribution of income", in Dominique Haughton and others, eds., *Health and Wealth in Vietnam: an Analysis of Household Living Standards* (Singapore, Institute of Southeast Asian Studies), pp. 167-181.
- Long, L. D. and others (2000). *Changing Gender Relations in Vietnam's Post Doi Moi Era*, Policy Research Report on Gender and Development Working Paper Series No. 14 (Washington D.C., World Bank).
- Lucas, Robert E. B. and Oded Stark (1985). "Motivations to remit: evidence from Botswana", *Journal of Political Economy*, vol. 93, No. 5, pp. 901-918.
- Massey, Douglas S. and others (1993). "Theories of international migration: a review and appraisal", *Population and Development Review*, vol. 19, No. 3, pp. 431-466.
- Niedzwiecki, Max and T. C. Duong (2004). *Southeast Asian American Statistical Profile* (Washington, D.C., Southeast Asia Resource Action Center).
- Osaki, Keiko (2003). "Migrant remittances in Thailand: economic necessity or social norm?", *Journal of Population Research*, vol. 20, No. 2, pp. 203-222.
- World Bank (2000). "Vietnam Living Standards Survey (VNLSS), 1992-1993: Basic Information", Poverty and Human Resources Division (updated from 1994 version) (Washington, D.C., World Bank).
- _____ (2001). "Vietnam Living Standards Survey (VNLSS), 1997-1998: Basic Information", Poverty and Human Resources Division (Washington, D.C., World Bank).