

## MIGRANT REMITTANCES IN THAILAND: ECONOMIC NECESSITY OR SOCIAL NORM?

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The remittances of internal migrants contribute in various ways to the well-being of their households of origin. This study examines the significance of selected socio-economic and demographic factors associated with remittance behaviour in Thailand as characterized by the propensity to remit and amount remitted. The extent to which remittances affect the living standard of households left behind is also appraised. The analyses suggest that in Thailand sending remittances is a practice rooted in altruism which enables out-migrants to retain personal contact with their households of origin for an extended time. Thus, it is widely exercised regardless of the economic needs of the household. At the same time, out-migration is an effective means for low-income households to quickly overcome shortages of income. The sustenance of poor households might have been difficult without remittances. From a macro-perspective, remittances contribute to the equalization of the income distribution among households having out-migrants.

**Keywords:** migration, migrants, remittances, household, income, Thailand, social norms, poverty, culture

Migration often generates flows of resources from migrants to their households of origin. The importance of such migrant remittances can hardly be ignored in many developing economies. Migrant remittances can be a valuable source of income for households of origin and a means of risk diversification. Remittances can significantly increase household savings, facilitate the purchase of goods and alter the local income distribution.

The Theory of New Economics of Migration postulates that sending remittances is an implicit contractual arrangement between migrants and the households left behind. In the absence of a well-functioning market, poor households attempt to minimize threats to their economic well-being by diversifying the allocation of household resources, including family labour (Stark 1982; Stark and Bloom 1985; Stark and Lucas 1988). Based on the conceptual framework set forth in the theory, the present study aims to deepen understanding of the ways internal migrants' remittances contribute to the well-being of the households of origin in the context of developing economies.

The approach for this objective is twofold. First, the paper examines the determinants of out-migrants' remittance behaviour in Thailand. It explores selected

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factors that affect the likelihood of out-migrants remitting to their household of origin and the magnitude of the remittances. Second, focusing on households that have out-migrants, the study appraises the extent to which remittances affect their living standards. If migration were a survival strategy for poor households, as the theory posits, out-migrants' remittance behaviour would be determined not only by their individual characteristics, but also by the characteristics of their household of origin. Furthermore, remittances may constitute a significant portion of income for those households that receive them. To date, the empirical verification of these postulations has been seriously limited, primarily by the lack of appropriate data.

### **Internal migration in Thailand**

Thailand is one of the developing countries that have achieved stunning economic success over the last few decades. Systematic planning for Thailand's economic and social development began in the early 1960s, with the introduction of the first national development plan, 1961–1964 (Tonguthai 1993). The country's strong economic growth in the 1960s was based largely on the expansion of agricultural exports (Phongpaichit 1993); since the 1970s, the Thai Government has actively promoted the service sector, especially tourism. These efforts were largely successful, and tourism became the major source of foreign exchange (Phongpaichit 1993). More recently, the economy has been reoriented towards manufacturing exports, stimulating unprecedented economic growth (Chalamwong 1998). Hence, by the early 1990s, Thailand had achieved an economic status following that of the Four Dragons in Asia: Hong Kong, the Republic of Korea, Singapore and Taiwan.

It is well documented that the expansion of the economy was accompanied by growing geographical mobility of people (Soonthorndhada 1987; Phongpaichit 1993; Nakanishi 1994; Pejaranonda, Sanitipaporn and Guest 1995; Watanabe 1997). Prior to the 1970s, relatively short-distance, rural-to-rural migration was the most dominant type of internal migration, as employment opportunities had been primarily available in the agricultural sector (United Nations 1982; Watanabe 1997). While rural-to-rural migration remains the main form of movement, in recent decades there have been increasing flows of people to urban destinations. In rural areas, the chance of acquiring additional farmland has declined, and there are few other sources of monetary income. At the same time, the urban labour market has grown in Bangkok, the capital of Thailand, and in its adjacent peripheral areas of Central region, where new industrial facilities are concentrated (Goldstein 1989; Watanabe 1997). Attractive job opportunities outside agriculture, coupled with widening rural–urban differentials in income, have prompted rural dwellers to start moving to urban centres in search of gainful employment.

Women have been active participants in the increased scale of population mobility. It is especially significant that autonomous mobility toward urban areas has risen among young single women (Soonthorndhada 1987; Phongpaichit 1993), as demands for additional labour have increased in a wide range of jobs in the manufacturing and service sectors. Female workers were preferred to male workers in these sectors because women could be employed at lower cost, they were more docile, and they were also considered suited to the repetitive tasks that are often required in factory jobs. Furthermore, a growing number of Thai women have completed primary education and have migrated to urban destinations for higher lev-

els of schooling (Pejaranonda *et al.* 1995). Societal norms that might elsewhere restrict young women from moving into urban areas and becoming wage earners are generally weak in Thailand.

## **Migrant remittances in developing economies**

### *Determinants of remittance behaviour*

The sending of remittances by migrants is widely observed in developing economies (Johnson and Whitelaw 1974; Oberai and Singh 1983, Chaudhuri 1993). Large income differentials between areas often facilitate outflows of people from poorer areas in search of employment in relatively affluent areas and in turn many migrants send resources back to their household of origin (Oberai and Singh 1983; Chaudhuri 1993). While few studies have empirically examined links between economic status of households and migrant remittances, some provide useful evidence on how individual characteristics of migrants may affect remittance flows. Review of the available literature suggests that among the factors possibly influencing the flow of remittances are migrants' income, education, family status, duration of migration, asset holdings and sex.

The literature on determinants of migrant remittances uniformly reports that the level of income of the migrant has a positive effect on the level of remittance (Johnson and Whitelaw 1974; Lucas and Stark 1985; Massey and Basem 1992; Lianos 1997). It is reasonable to expect that when migrants earn more, they feel less financial restraint and so remit more. There is also consistent evidence that a migrant's education has a positive effect on remittance flows (Johnson and Whitelaw 1974; Oberai, Prasad and Sardana 1989). Human capital in the form of education, labour force experience and possession of skills normally makes people more productive and higher-earning. Education contributes to current income, and may allow migrants to remit more to their households of origin or to invest in their home community. Furthermore, educated migrants may send back more money to repay investments made by others in their education (Lucas and Stark 1985).

Flows of remittances can be also seen as a function of migrants' family status or their relationships to people. One can reasonably expect that migrants with a spouse and children left behind are likely to remit more because of their families' immediate consumption needs. Several studies found that the number of children at home had a positive effect on both the propensity to remit and the amount of remittances (Johnson and Whitelaw 1974; Lucas and Stark 1985; Massey and Basem 1992). Household headship is also a strong predictor of remittance flows (Lucas and Stark 1985; Oberai *et al.* 1989; Massey and Parrado 1994); it is likely that being the head of a household of origin carries a greater obligation to provide for the needs of the family left behind.

Migrant remittances to households of origin usually continue over a considerable time (Oberai and Singh 1983; Oberai *et al.* 1989). However, there are mixed results in studies of the association between the duration of migration and the size of remittances (Johnson and Whitelaw 1974; Lucas and Stark 1985; Oberai *et al.* 1989). The inconsistencies in these results suggest that some as yet unmeasured traits, such as cultural settings, may affect remittance behaviour.

A lack of consistency also characterizes findings on the direction of association between the level of remittances and asset holdings of migrants in the place of ori-

gin. Where migrants already own physical property or businesses in their home community, they may be likely to invest their remittances more productively (Massey and Basem 1992). It can be also argued that the possession of farmland is a prerequisite to the investment of migrant earnings in agricultural production. A study in India, however, did not find a positive association between *per capita* possession of land and the size of remittances (Oberai *et al.* 1989).

Past studies suggest that female migrants were more closely attached to their households of origin than male migrants (Phongpaichit 1982; Trager 1984; Chant and Radcliffe 1992). This gender difference has been attributed to the difference between men and women in observing 'filial piety' or familial obligations. Chant and Radcliffe (1992) argue that women attach more importance to the family than men do or are more expected to fulfil obligations within the general framework of kinship. Hence, despite their relatively low earnings, female migrants are often more reliable sources of remittances than male migrants (Rodenburg 1993). In particular, when female migrants come from hard-pressed agricultural families, they may perceive themselves as the primary family breadwinners (Phongpaichit 1982). In Thailand, it is common to find that women, especially rural women, consider migration for work as their responsibility or duty to bolster family finances (Singhanetra-Renard and Prabhudhanitisarn 1992). Phongpaichit (1993) showed from survey data for Bangkok Metropolis that the proportion of female migrants sending remittances was higher than that of males, and female migrants were likely to send remittances more frequently than male migrants; she argued that this was because most of these female migrants were single and tended to have stronger ties with their families of origin than the men did.

The foregoing review of literature shows that a number of factors at different levels can explain the variation in both the propensity to remit and the size of migrant remittances. While some characteristics of households of origin may affect the remittance behaviour of migrants, the personal characteristics of migrants themselves can also determine the level of economic commitment to the household of origin. However, relatively few studies have empirically examined the determinants of remittance flows and some results are mixed. Further, the relative importance of the various factors is not clear. To examine this question, it is necessary to undertake a multivariate analysis of remittance behaviour, using a multilevel framework.

### *Importance of remittances to household of origin*

Because migration is often seen as a household sustenance strategy in developing countries, much of the research interest centres on how remittances affect the well-being of households left behind. Past studies have shown that remittances constitute a large portion of the recipient household's income, and that they may indeed ensure the very survival of some households (Oberai *et al.* 1989; Afsar 1998; Barham and Boucher 1998).

Another frequently raised question in the migration literature is whether remittances contribute to an eventual equalization of income among households in the community of origin. Some researchers argue that migrant remittances tend to reduce income inequality (Oberai *et al.* 1989; Taylor and Wyatt 1996; Guest 1998), others that remittances increase inequality (Barham and Boucher 1998). Evidence remains contradictory, and the answer is likely to depend on the economic circum-

stances of households from which migrants come, the types of migration and different phases in a community's migration history (Stark, Taylor and Yitzhaki 1988; Russell 1992; Taylor 1999).

While an increase in household income is one direct and immediate outcome of remittances, the precise effect of remittances also depends on how the money is spent. Conclusions drawn from available remittance-use studies have been surprisingly consistent: remittances were seen to be mostly used to satisfy recipient households' consumption needs and investment did not usually have high priority (Oberai and Singh 1983; Massey and Parrado 1994). It was also concluded that migration of a family member provided above all a way to acquire capital in a situation of emergency or market failure; possibly, however, the size of remittances generated by internal migration was not large enough to allow households to make productive use of the money. The evidence available from Indonesia showed that remittances acquired from international labour migration were primarily used for the acquisition of land and housing improvements (Hugo 1995). Children's education was another important use of remittances.

## **Data and operationalization**

### *Data*

The major source of data used in this study is the 1992 National Migration Survey of Thailand (NMS), conducted by the Institute for Population and Social Research of Mahidol University, Thailand. The survey was carried out between late May and mid-September in 1992. During this wet season, seasonal migrants (mostly farmers) are expected to be in their household of origin (Chamrathirong *et al.* 1995). Thus, the data represent long-term or permanent migrants as well as temporary migrants whose work is less seasonal. The data poorly represent out-migrants who are farmers with their own land, and poor households in which seasonal migrants originate.

The NMS employed two sets of questions: the household questionnaire and the individual questionnaire.<sup>1</sup> The present study analyses the data obtained from the household questionnaire, which has the following advantageous features: first, unlike many other migration surveys, which are smaller-scale and focused on selected areas or subregions, the NMS can yield nationally representative data: the Survey used a multistage cluster sample of households, designed to be both nationally and regionally representative (Chamrathirong *et al.* 1995). Of a total 7,537 households interviewed, 1,476 households had one or more out-migrants.

Second, the Survey gathered data at the individual as well as the household level. The household questionnaire elicited basic social, economic and demographic data for each current household member, allowing investigation of household size and demographic composition. The NMS also gathered data on a broad range of household characteristics, including total income, type of housing, possession of various durable goods, availability of electricity, ownership of house and the size of land owned.

Third, the NMS identified out-migrants, who were former usual residents of the sample households but were living elsewhere at the time of the survey. The Survey identified a total of 5,609 out-migrants. Specific questions were asked of members remaining in the household, regarding the basic socio-demographic characteristics of the out-migrants, as well as the value of money or goods that the household

received from and sent to them during the previous year. Thus, this set of information provides origin-based data for out-migrants, and the information can be used to examine the contribution of migrant remittances to the well-being of households that receive them.

### *Definitions and operationalization of data*

In micro-level studies, migration can be defined in widely different ways. Definitions of key terms used in this study are given below.

**Out-migrants or migrants:** persons who were 15 years old and over, who had been usual residents of a sample household and had moved to another subdistrict (*tambon*) more than one month but less than two years before the time of survey.<sup>2</sup> The NMS draws no exact cutoff point for the migration period. The present study uses, unless otherwise noted, a two-year cutoff and focuses on more recent migrants. The use of a two-year migration period should reduce recall errors among proxy respondents about the attributes or situation of out-migrants at the place of destination. Children were omitted as they are unlikely to migrate autonomously.

**Remittances:** information on remittances comes from two specific questions about the amount of money that household members received per month and the estimated value of goods received during the last year. These amounts exclude pocket transfers, that is, cash and goods brought with out-migrants on their visits, since no question was included in the NMS on pocket transfers. Therefore, the reported data may underestimate the total capital flows, and provide a conservative estimate of migrant remittances. It is likely that pocket transfers vary considerably among migrants and recipient households. The present study includes remittances only if the sender is identified as an out-migrant. Cases sending more than 5,000 Baht or goods worth more than 3,000 Baht were excluded because of possible errors in data recording and potential effects on the regression model (46 cases out of 5,609). For the main body of the analysis, a single monthly indicator of remittances is created by combining the amount of money received and the monthly average of the estimated value of goods received.

**Family status of out-migrants:** no information on family structure of out-migrants at the place of destination was gathered by the NMS. In order to assess a migrant's ties to the household of origin, a family-status variable was created by combining two kinship variables: out-migrant's relationship to head of household of origin and marital status of out-migrant. This variable consists of four categories: (1) migrating household head, (2) unmarried child of the head of household, (3) married child of the head of household, including son- or daughter-in-law of the head, and (4) others. Note that in the multivariate analyses, migrating household heads are included in 'others'. Although the effect of headship on remittance behaviour is an important and interesting aspect to investigate, the sample number of migrating household heads is very small and not adequate to treat as a category.

## **Empirical analyses**

### *Remittances made by out-migrants*

Table 1 presents numbers of out-migrants, percentages remitting and the mean amount remitted by remitting out-migrants by duration of migration (this part of the analysis uses data for all out-migrants covered in the NMS). Overall, 27 per cent

**Table 1 Out-migrants sending remittances by duration of migration, Thailand, 1992**

	Total	Time since migrants left their households of origin						
		0–5 mths	6–11 mths	12–23 mths	24–35 mths	3–4 years	5–9 years	10+ years
Total number of out-migrants	5,540 <sup>a</sup>	1,438	839	977	499	539	696	552
No. of out-migrants remitting <sup>b</sup>								
sending money	1,497	263	208	301	160	170	211	184
sending goods	1,381	252	197	282	149	154	186	161
	575	56	56	115	63	76	108	101
% of out-migrants remitting <sup>b</sup>								
sending money	27.0	18.3	24.8	30.8	32.1	31.5	30.3	33.3
sending goods	24.9	17.5	23.5	28.9	29.9	28.6	26.7	29.2
	10.4	3.9	6.7	11.8	12.6	14.1	15.5	18.3
Mean value of remittances (Baht) <sup>b</sup>								
sending money	763.3	857.1	841.9	765.5	793.6	815.2	651.5	590.6
sending goods	783.3	874.1	863.8	773.7	800.3	839.8	676.2	612.9
	106.1	92.1	88.2	106.4	122.7	121.7	108.3	89.9

a Excludes 46 outlier cases sending more than 5,000 Baht or goods worth more than 3,000 Baht and 23 cases with missing information on migration duration.

b Includes out-migrants who sent both money and goods.

Source: 1992 National Migration Survey of Thailand.

of out-migrants had sent remittances in cash or goods to their households of origin during the year preceding the survey. Money was more commonly sent than were goods; 25 per cent of migrants had sent cash, and 10 per cent had remitted goods; eight per cent of migrants had sent both money and goods (not shown). The amount sent per remitting out-migrant averaged 763 Baht per month. The value of cash remitted far exceeded that of goods: the mean cash remittance was 783 Baht, whereas the average value of remitted goods was only 106 Baht.

The percentage of migrants who remit rose as duration of migration increased: from 18 per cent among most recent migrants, those who had been away less than six months, to 25 per cent among those away for 6–11 months. For those away one year or more, the percentage remitting exceeded 30 per cent. The proportion of migrants sending cash stabilizes after one year away, whereas the proportion sending goods shows continuous increases. One possible explanation is that the immediate needs of origin households for cash may have been met in the early period of migration, and therefore out-migrants may have started sending goods by reducing the amount of cash to send. Also, some goods may be available at the place where out-migrants currently reside, but not in the place of origin, so that migrants may continue sending them.

In contrast to the propensity to remit, the amounts remitted by out-migrants showed a declining trend over duration away. The mean value of remittances was highest, 857 Baht per month, among most recent out-migrants. This may be indica-

tive of the maximum that migrants can afford for remittances, given their income-generation capacity at destination. The larger remittances by recent out-migrants may reflect the possibility that those making remittances during the early period of their migration come from households that have more immediate needs for cash. It is also possible that some out-migrants had to repay immediately money borrowed to cover the cost of migration. Although the mean value of remitted goods increased during the first three years, the overall trend in the size of remittances was downward.

In sum, the NMS data reveal that in Thailand remittance flows continue for a long time after the migrants have moved out the household of origin. The proportion remitting was relatively small during the early period of migration, but then increased over time. This suggests that migrants need some time to settle and acquire experience at their destination, before they are able to remit. The fact that about one-third of out-migrants were still remitting after ten years away points to the stability of remittance behaviour, as well as to the ensuing dependence of some households on remittances. Indeed, remittances may be crucial for the sustenance of some households, as a significant proportion of out-migrants had remitted relatively large amounts of money even during the early period of their migration. One should bear in mind, however, that the migrants who sent remittances constituted only a minority of all migrants, and that the majority did not remit. Possible reasons for non-remittance include the absence of a pressing need to remit, and the use of earnings solely to support their own life at the place of destination. The data do not elucidate such mechanisms.

### *Contextual models of determinants of remittance behaviour*

This section explores the determinants of remittance behaviour of migrants. The propensity of migrants remitting to their household of origin is examined using a logistic regression model, whereas an ordinary least squares (OLS) model is used to identify factors determining the amount remitted.

Use of the two-year cutoff to define an out-migrant reduced the sample size from 5,609 to 2,564 persons. After excluding cases having high remittances, as well as cases for which data for categorical variables were missing,<sup>3</sup> a sample of 2,258 out-migrants was available for the analyses. As the proportion of out-migrants sending goods to their origin household was small, a single indicator of remitters, those sending either cash or goods, is used. The sample was made up of 569 remitters (25.2 per cent) and 1,689 non-remitters (74.8 per cent).

Factors included in the analyses are chosen either because prior empirical research found them to be important to remittance behaviour, or for theoretical reasons. Migrants' remittance behaviour is assumed to be dependent upon two sets of variables: the out-migrants' individual characteristics and the characteristics of the household of origin. The individual-level variables are sex, age, education, duration of migration, reason for migration, type of migration, main economic activity (as a proxy for income), and family status. The household-level variables are numbers of children, adults, and elderly in a household, household income, index of durable goods,<sup>4</sup> ownership of house, amount of land owned, and availability of electricity. The means and standard deviations of these variables are shown in Table 2 for out-migrants and for remitters.

Among individual characteristics, key variables are sex of out-migrant, family



**Table 2 Description of variables in multiple regression analyses**

Variable	Measurement	Propensity to remit		Amount of remittances	
		Mean	S.D.	Mean	S.D.
<b>Dependent variable</b>					
Remittance status	1 = remitted, 0 = not remitted	0.25	0.43		
Value of remittances	Baht			796.66	771.25
<b>Characteristics of out-migrants</b>					
Sex	1 = female, 0 = male	0.41	0.49	0.44	0.50
Age	Years	26.11	10.20	25.12	8.65
Years of education	Years	7.47	3.82	6.87	3.38
Duration of migration	Months	11.22	8.98	13.52	8.93
Reason for migration	1 = work-related, 0 = other	0.50	0.50	0.75	0.43
Type of migration					
Urban to urban	1 = yes , 0 = no	0.28	0.45	0.20	0.40
Rural to urban	1 = yes , 0 = no	0.30	0.46	0.47	0.50
Others		0.41	0.49	0.34	0.47
Main economic activity					
Agriculture		0.28	0.45	0.18	0.38
Manufacturing	1 = yes , 0 = no	0.24	0.43	0.39	0.49
Others	1 = yes , 0 = no	0.49	0.50	0.43	0.50
Family status					
Child of head, unmarried <sup>a</sup>	1 = yes , 0 = no	0.39	0.49	0.55	0.50
Child of head, married <sup>b</sup>		0.28	0.45	0.27	0.44
Others <sup>c</sup>	1 = yes , 0 = no	0.32	0.47	0.18	0.39
<b>Characteristics of household of origin</b>					
Number of children		1.11	1.14	1.02	1.05
Number of adults		2.69	1.57	2.53	1.63
Number of elderly		0.39	0.64	0.43	0.65
Monthly income of household					
< 2,000 Baht		0.33	0.47	0.46	0.50
2,000-5,999 Baht	1 = yes , 0 = no	0.33	0.47	0.28	0.45
6,000+ Baht	1 = yes , 0 = no	0.35	0.48	0.25	0.43
Index of durable goods <sup>d</sup>		7.07	3.89	6.63	3.69
Own house	1 = yes , 0 = no	0.80	0.40	0.85	0.36
Size of land owned	1 = 6+ Rai <sup>e</sup> , 0 = less	0.42	0.49	0.40	0.49
N		2,258		569	

- a Refers to head of household of origin; including those who are currently married, but not living together.
- b Refers to head of household of origin; including son or daughter in law.
- c Including head of household of origin.
- d Mean number of durable goods owned by household.
- e One Rai equals approximately 2.2 acres.

Source: 1992 National Migration Survey of Thailand.

status and reason for migration. Thai women traditionally have been economically active, earning supplemental money for their households. Past studies also suggest that the movement of young unmarried females is reinforced by cultural expectations in Thai society that daughters provide support for their parents. Therefore, it is reasonable to hypothesize that female out-migrants are more likely to send remittances than are males. Similarly, being a child of the head of the origin household is expected to be an important predictor of remittance behaviour, given the respect that children have for their old parents. With regard to reason for migration, migrants who left the origin households explicitly to seek better income or work opportunity are expected to remit more than those who moved for family-related reasons. Many are likely to have migrated precisely in order to improve the economic condition of their household by means of remittances, rather than for self-aspiration.

Among the characteristics of the households of origin, particular importance is attached to a set of variables that measure its economic status. These include the household monthly income, the index of durable goods, ownership of house, and amount of land owned. It is expected that migrants originating in poorer households, as measured by these variables, will be more likely to remit and to send larger amounts to support their family left behind, if, as previous research suggests, migration of family members is a survival strategy for poor households.

*Propensity to remit.* Table 3 reports the results of the logistic regression analysis: with remittance status as the binary dependent variable indicating whether or not the out-migrant had sent remittances in the year preceding the survey. A variety of factors are significant in predicting the decision to remit, including sex. Female out-migrants were 1.2 times more likely than male out-migrants to remit to their household of origin. Family status of migrant denotes the ties between migrants and their origin household more directly. Table 2 shows that the majority of remitting out-migrants were children of the heads of origin households. Table 3 shows that children of the head, whether married or not, had a much higher propensity to remit than those in 'other' relationships with the head of origin households. The level of commitment in making remittances was higher if the children were unmarried, although the difference was not statistically significant.

Table 3 also shows that migrants who moved out of the household of origin for work-related reasons were 3.6 times more likely to remit than those who left home for other reasons. This finding supports the hypothesis that migrants tend to seek a job elsewhere with the explicit intention of providing for the economic needs of the household.

All the other individual variables were significant determinants of the propensity to remit. Age had a positive effect; education had an unexpected negative effect. A possible interpretation is that out-migrants with better education tend to originate in households which have less need to be supported by out-migrants. In fact, some of these out-migrants may be students, so that they are unlikely to make remittances. Rural-to-urban migrants were more likely to remit than those who migrated to rural destinations. The propensity to remit was higher if migrants were not engaged in agriculture, possibly because migrants who wish to maximize remittances seek non-agricultural work with higher pay.

Among the variables used to measure the economic status of the household of origin, monthly income of the household and amount of land owned showed the

**Table 3 Multiple regression estimates of the propensity to remit and amount of remittances, Thailand, 1992**

Variable	Propensity to remit			Amount of remittances	
	B	S.E.	Exp(B)	B	S.E.
<b>Characteristics of out-migrants</b>					
Sex (female)	0.216*	0.106	1.241	-87.953	59.447
Age	0.016*	0.006	1.016	13.350***	4.085
Years of education	-0.065***	0.106	0.937	15.844	9.336
Duration of migration	0.046***	0.006	1.047	-4.473	3.365
Reason for migration (work)	1.293***	0.123	3.645	294.958***	78.602
Type of migration					
Urban to urban	-0.080	0.159	0.923	127.180	93.310
Rural to urban	0.338**	0.129	1.402	-26.645	70.022
Others	-	-	-	-	-
Main economic activity					
Agriculture	-	-	-	-	-
Manufacturing	0.914***	0.149	2.495	32.694	85.671
Others	0.556***	0.146	1.744	-12.923	86.661
Family status					
Child of head, unmarried <sup>a</sup>	0.239	0.141	1.270	154.745	83.519
Child of head, married <sup>b</sup>	-	-	-	-	-
Others	-0.869***	0.160	0.420	249.807**	95.659
<b>Characteristics of household of origin</b>					
Number of children	-0.102*	0.047	0.903	1.797	28.352
Number of adults	-0.010	0.037	1.010	9.660	20.198
Number of elderly	0.104	0.085	1.109	-137.054**	48.784
Monthly income of household					
< 2,000 Baht	-	-	-	-	-
2,000-5,999 Baht	-0.697***	0.133	0.498	-67.640	72.821
6,000+ Baht	-0.871***	0.175	0.419	-334.060***	95.324
Index of durable goods <sup>c</sup>	0.030	0.017	1.031	22.584*	9.690
Ownership of house (own)	-0.024	0.156	0.976	-185.272*	89.005
Size of land owned (6+ Rai) <sup>d</sup>	-0.445***	0.115	0.641	21.414	62.884
Constant	-2.389***		Intercept	164.661	183.182
-2 Log likelihood	2,360.01		R squared	0.148	
Goodness of fit	2,597.31				
Degrees of freedom	19				
N	2,258		N	569	

\* p < .05, \*\* p < .01, \*\*\* p < .001.

a Refers to head of household of origin; including those who are currently married, but not living together.

b Refers to head of household of origin; including son or daughter in law.

c Mean number of durable goods owned by household.

d One Rai equals approximately 2.2 acres.

Source: 1992 National Migration Survey of Thailand.

expected effects. Out-migrants were less likely to remit to middle- and high-income households than to low-income households, and more likely to remit to households owning less land. Hence, the decision or obligation to remit significantly depends on the economic circumstances of the household of origin. These findings support the theoretical framework which views out-migration of family members as a family survival strategy of poor households.

The demographic characteristics of origin households are in general poor predictors of remittance behaviour of out-migrants. There was a negative association between the probability of remitting and the number of children in the origin household, but the level of significance was not high.

*Amount of migrant remittances.* The study now turns to the magnitude of remittances involved, based on the 641 migrants who had remitted in the year before the survey. On average, remitting out-migrants had sent 797 Baht per month to their household of origin. Table 3 provides results of the OLS regression analysis. The value of monthly remittances was used as the dependent variable.<sup>5</sup>

Relatively few of the explanatory variables were significant. An important finding was that, once other variables are controlled for, there was no statistically significant difference by sex: female migrants' economic contributions to their origin households were substantially equal to those of males. The family-status variable showed that migrants other than the children of the head sent significantly higher amounts in remittances than the married child of the head. This is explained by the fact that migrating household heads, who remit conspicuously high amounts, were included in the 'others' category. It is worth noting that, though they are not statistically significant, married children of the head tend to send smaller remittances than unmarried children, probably because of the need to support their immediate family at the current place of residence.

With regard to reason for migration, migrants who left for work-related reasons sent 295 Baht more than migrants who left for other reasons. The result suggests that, as hypothesized, much migration in search of a job was a deliberate strategy to earn supplemental cash for the household left behind. Age was another individual variable that strongly influenced the amounts remitted. Net of other variables entered in the model, increases in age led to increases in the value of remittances.

There was no significant difference in the value of remittances by type of migration. Although the foregoing analysis revealed that rural-to-urban migrants were more likely to remit than others, they did not send a larger amount. It is possible that migrants of rural origin are unlikely to find highly paid professional or administrative occupations in urban destinations, especially given such a short period since migration. In addition, because of generally high living costs in urban areas, a large portion of their incomes may be allocated for their own living, instead of sending money back home.

As expected, the income of the origin household was inversely related to the amount remitted: these results confirm that out-migrants are responsive to the economic needs of the origin household. The coefficient of the index of durable goods was significant and positive, indicating that households with more durable goods were likely to have received larger remittances. Migrants sent less to home-owning households than to non-owners. However, it cannot be determined from these data whether the acquisition of these durable goods and ownership of house predates the remittances or the remittances allowed their purchase. The value of remittances

**Table 4 Mean remittances and mean household income by whether remittances received, Thailand, 1992**

	Households not receiving remittances	Households receiving remittances
Mean remittances per month (Baht)	0.0	1,179.1
Mean household income per month (Baht)	5,216.4	3,321.7
Mean household income with remittances (Baht)	5,216.4	4,500.8
Remittances as a percentage of overall income	0.0	26.2
Mean number of out-migrants	1.5	1.8
N	762	672

Source: 1992 National Migration Survey of Thailand.

was virtually unrelated to the demographic characteristics of the household, except that the number of elderly appeared to be a negative predictor.

*Effects of migrant remittances on household of origin*

The foregoing analysis reveals that while various factors are involved, the remittance behaviour of out-migrants is particularly responsive to the economic needs of their households of origin. An important question that emerges is whether remittances really matter in raising the living standard of the household of origin. Focusing on households with out-migrants, this section determines whether and to what extent remittances affect the well-being of households left behind.

Table 4 compares out-migrant households receiving and not receiving remittances. Out of the 1,434 households having out-migrants,<sup>6</sup> 672 households or 46.9 per cent had received remittances during the year before the survey. Thus, from a household perspective, out-migration of household members often leads to a remittance linkage. On average, a household receiving remittances had 1.8 out-migrants, compared with 1.5 out-migrants for a household not receiving remittances. The larger number of out-migrants for households receiving remittances may indicate that the needs for supplementary income facilitated the out-migration of family members.

The amount of remittances that a household received averaged 1,179 Baht per month, and comprised 26 per cent<sup>7</sup> of the total income including remittances. Contrary to expectation, the total income level of households receiving remittances did not exceed that of households not receiving remittances. This result suggests that remittances are needed by these households to achieve a living standard closer to other households, rather than to attain further upward mobility.

Do all remittance-receiving households benefit equally, regardless of their economic background? Table 5 presents the percentage of households receiving remittances and the mean remittances a household received by level of household income excluding remittances. The analysis shows that remittances are received by households of all income levels, but the effect of remittances is much larger on low-

**Table 5** Effects of remittances on out-migrant household income distribution, Thailand, 1992

Monthly household income (Baht)	% receiving remittances	Mean remittances received <sup>a</sup>	Households with specified income			
			Excluding remittances		Including remittances	
			%	Cumulative %	%	Cumulative %
<500	85.4	1,516.7	13.8	13.8	3.7	3.7
500–999	60.9	962.7	11.2	25.0	8.5	12.2
1,000–1,499	52.7	1,031.4	11.6	36.6	12.7	24.9
1,500–1,999	44.8	1,100.6	8.7	45.3	9.5	34.4
2,000–2,999	33.8	1,072.8	13.8	59.1	17.2	51.6
3,000–4,999	31.6	1,039.2	15.0	74.1	20.0	71.6
5,000+	34.2	1,164.3	25.9	100.0	28.6	100.0
Total	46.9	1,179.1	100.0		100.0	
Gini coefficient				0.604		0.550
N	1434	672	1434		1434	

a Mean size of remittances among households receiving remittances.

Source: 1992 National Migration Survey of Thailand.

income households. Among the poorest households earning less than 500 Baht, the overwhelming majority or 85 per cent were receiving remittances. The proportion of households receiving remittances declined as income increased, except for a slight increase for the highest income group. The heavy reliance of low-income households on migrant remittances is also obvious from the mean remittances received by a household. For households with income of less than 1,000 Baht, remittances were likely to exceed income from other sources. In Thailand, a social welfare system directly targeting the poor has not been fully established. Without migrant remittances, the maintenance of these households would be very difficult. It should be noted, however, that more than one out of three households earning 5,000 Baht and over were also receiving remittances, although the mean amount of remittances was smaller in relation to their income. These results suggest that, in Thailand, on the one hand migrant remittances play an important role for sustenance of poor households, but on the other hand, sending remittances may be a part of social norm linking household members and their migrating kin, and widely practised regardless of income levels.

Table 5 also presents the distribution of household income excluding and including remittances. The data show that, because remittances enabled many poor households to improve their relative position in the income distribution, the proportion of households in the lower income groups decreased considerably. At the aggregate level, remittances helped to equalize the income distribution among all households having out-migrants. The Gini coefficient<sup>8</sup> was 0.604 for household income without remittances and 0.550 for household income with remittances:

**Table 6** Percentage distribution of out-migrant households by use of remittances and sex of remitting out-migrants, Thailand, 1992

Main use of remittances	All households receiving remittances	Sex of remitting out-migrants <sup>a</sup>		
		Males	Females	Both
Living cost	83.7	87.2	77.0	84.8
Investment	4.0	2.9	6.2	3.7
Tuition and fees	3.7	2.9	5.1	3.7
Others	0.4	0.0	1.7	0.0
Not stated	8.1	7.0	10.1	7.8
Total	100.0	100.0	100.0	100.0
N	672	276	178	218

a Cramer's V =0.107.

Source: 1992 National Migration Survey of Thailand.

migrant remittances brought the distribution of household income about nine per cent closer to equality.<sup>9</sup>

The NMS household questionnaire also asked how the money that the household received from out-migrants was mainly used; Table 6 summarizes remittance use patterns among households receiving them. As many as 84 per cent of the households receiving remittances report that they spent the money mainly to supplement their daily living costs.<sup>10</sup> Expenditure for tuition and investment were the next most common, but each of them was the main use by just four per cent of households. There was virtually no association between the patterns of remittance use and the sex of the out-migrants.

Regrettably, as the answers to this question are so broadly categorized, the precise nature of expenditure patterns cannot be further explored. The use of remittances for living costs may range widely from purchases of daily food and clothes to the payment of rent or medical expenses. This study uses a two-year migration period to define out-migrants, so the results may be interpreted to indicate that the money sent from these recent migrants was used first to satisfy immediate households needs, rather than to spend for investment or education which often require a lump sum of money; still, it is possible that migrant remittances have freed other funds for such a use or for savings. The NMS did not ask whether and to what extent remittances were saved. Without such information, the long-term implications of remittances for the well-being of recipient households cannot be sufficiently understood.

### Summary and discussion

In Thailand, while the majority of migrants do not send remittances in the form of cash or goods, more than a quarter of them do, and they continue to send remittances for a long time after they have moved out of their household of origin. The

regularity of the transfer of remittances underscores the importance of assessing the role of remittances both for the remitters and for the recipient households. The real well-being of migrants and their households cannot be fully understood by considering reported nominal income alone.

The unique data available from the NMS made it possible to explore the determinants of remittance behaviour more fully than is usually reported in migration literature. It is noteworthy that women in Thailand not only have been active participants in migration streams, but also have played an important role in making financial contributions to their origin households. Female migrants were more likely than male migrants to remit to their household of origin, probably because women generally retain closer ties with kin and more closely observe family obligations than men do. Making remittances to parental households was also common behaviour. Such altruistic behaviour may be a reflection of normative expression of gratitude and respect toward the migrants' parents for raising them, a social norm which remains relatively strong in Thailand. Indeed, remittances were widely received by households of all income levels.

The study revealed that poor economic status of origin households is also an important explanatory variable for remittance behaviour. In Thailand, migrants who left the origin households to seek job opportunities elsewhere showed a higher propensity to remit and a higher amount of remittances than those who migrated for other reasons. Flows of remittances were particularly directed toward households of lower economic status, especially those with relatively small incomes. Remittances made by out-migrants can be crucial resources for the origin household to overcome capital constraints or to ensure its income. These findings from the analysis reinforce the premises of the New Economics of Migration which posits that the migration of family members is often a survival strategy of households in poor developing economies.

The effect of migrant remittances on household income was far from marginal. As an immediate addition, remittances greatly increase the income level of households which receive them. The present study found that the relative effect of remittances in increasing total income was much greater for low-income households than for better-off households; the sustenance of poor households might have been difficult without migrant remittances. Since remittances are received by more poor households than better-off households, they also contribute to a reduction of income inequality.

The results shown in the present study point to several broad policy implications which can maximize the positive effects of migration and curb avoidable out-migration. First, remittance flows to origin households are substantial and are an essential supplement for sustenance to many households; however, this supplement can in turn foster long-term dependency of households on remittances. Because in Thailand the role of migration in improving overall household welfare through remittances is largely limited to providing extra income, other direct strategies need to be formulated to improve the household economy. The government, for instance, may need to allocate sufficient resources to stimulate the local economy through rural or regional development, so that people can have better income-generating opportunities that are less dependent on migration. Empowerment of remaining household members through education and occupational training may also facilitate the economic self-sufficiency of households.



Second, the poorest households may be a group that requires special attention in formulating a development strategy. Migrants more often originate in relatively poor households; the analysis in the present study indicated that they are the households that will get the most benefit from remittances. However, as proved during the Asian economic crisis in 1997, the job opportunities available for migrants can fluctuate greatly depending on the economic climate of the country. While out-migration of family members can remain an important option for the sustenance of those families, separate programs may be necessary to combat their poverty and protect them from the uncertainty associated with dependence on migrant remittances.

Finally, policy interventions may be envisaged to ascertain equal employment opportunities and appropriate wages for male and female migrant workers at places of destination. The study clearly showed that migrants are sensitive to the economic needs of origin households and many of them could make a substantial contribution to households of origin by sending remittances. Human capital of migrants should be efficiently used at the destination, so that their origin households can benefit effectively from the out-migration of their members. Especially, female migrants showed a higher propensity to remit than male migrants and they remitted as much as male migrants did. In Thailand, women are still disadvantaged in terms of wages in most occupations (National Statistical Office 1998): exploitation of cheap, young, female migrant workers is often documented. Improvement of the plight of female migrant workers, through enforcement of labour legislation, may deserve special attention.

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### **Notes**

- 1 After collecting the data on households and their members, the NMS randomly selected 3,771 individuals, aged 15 to 44 years, for detailed interview. The individual questionnaire sought information about the amount of remittances that an individual sent, it did not collect information on the characteristics of recipients or of recipient households. Therefore, the individual questionnaire data do not make it possible to examine the economic linkages between out-migrants and their households of origin.
- 2 Visiting out-migrants at the time of survey were treated as out-migrants, not as usual residents.
- 3 Where data were missing for numeric variables, mean values were imputed. If one excludes all cases with missing values (categorical and numeric), some 20 per cent of the total sample will be lost.
- 4 The questionnaire asked about possession of the following 24 specific items: radio without tape player, radio with tape player, electric fan, electric iron, electric rice cooker, TV, refrigerator, video player, stereo set, washing machine, air conditioner, electric water pump, electric sewing machine, non-electric sawing machine, telephone, gas stove, bicycle, motorcycle, pick-up truck, motor van, non-electric water pump, tractor, *itan/itoy/*

- itak* (traditional pick-up vehicle), and boat. The index of durable goods is the number of items possessed, giving equal weight to each. Thus, the index ranges from zero to 24.
- 5 Because of skewed distribution of amount of remittances, an attempt was made to recode the data into a scale and run a model. However, this procedure did not improve the explanatory power of the model.
  - 6 After cases with very high values of remittances were excluded, a total of 1,434 households were available for analysis. Variables are weighted to obtain nationally representative estimates.
  - 7 A study by Guest (1998) on rural northeastern Thailand reports a similar proportion for households having migrants who had been away for two years.
  - 8 The Gini coefficient ranges between zero and one, with zero interpreted as no inequality.
  - 9 Migrant remittances also helped to reduce income inequality for all households, including households not having out-migrants. The Gini coefficient declined slightly, from 0.628 for income excluding remittances to 0.622 for income including remittances.
  - 10 The survey on rural northeastern Thai households carried out in 1994 revealed that many of the uses of migrant remittances are associated with daily living expenses, especially the purchases of food (Guest 1998: 306).

## References

- Afsar, Rita. 1998. Rural–urban migration and development: evidence from Bangladesh. Pp. 318–356 in R. Bilsborrow (ed.), *Migration, Urbanization and Development: New Directions and Issues*. Norwell MA: United Nations Population Fund and Kluwer Academic Publishers.
- Barham, Bradford and Stephen Boucher. 1998. Migration, remittances, and inequality: estimating the net effects of migration on income distribution. *Journal of Development Economics* 55: 307–331.
- Chalamwong, Yongyuth. 1998. Dilemmas of rapid growth: international migration and cross-border flows in Thailand. Pp. 167–176 in Organization for Economic Co-operation and Development, *Migration and Regional Economic Integration in Asia*. Paris: Organization for Economic Co-operation and Development.
- Chant, Silvia and Sarah A. Radcliffe. 1992. Migration and development: the importance of gender. Pp. 1–29 in Silvia Chant (ed.), *Gender and Migration in Developing Countries*. London and New York: Belhaven Press.
- Chamrathirong, Apichat, K. Archavanitkul, K. Richter, P. Guest, V. Thongthai, W. Boonchalaksi, N. Piriathamwong and P. Vong-Ek. 1995. *National Migration Survey of Thailand*. IPSR Publication No.188. Mahidol University, Nakhon Pathom, Thailand: Institute for Population and Social Research.
- Chaudhuri, Jayasri Ray. 1993. *Migration and Remittances: Inter-Urban and Rural–Urban Linkages*. New Delhi: Sage Publications.
- Goldstein, Sidney. 1989. Changing forms of migration to big cities: Bangkok and Shanghai compared. Pp. 273–287 in *International Population Conference*, vol. 2. New Delhi: International Union for the Scientific Study of Population.
- Guest, Philip. 1998. Assessing the consequences of internal migration: methodological issues and a case study on Thailand based on longitudinal household survey data. Pp. 275–218 in R. Bilsborrow (ed.), *Migration, Urbanization and Development: New Directions and Issues*. Norwell MA: United Nations Population Fund and Kluwer Academic Publishers.
- Hugo, Graeme. 1995. International labor migration and the family: some observations from Indonesia. *Asia and Pacific Migration Journal* 4 (2–3): 273–302.
- Johnson, G.E. and W.E. Whitelaw. 1974. Urban–rural income transfers in Kenya: an estimated-remittances function. *Economic Development and Cultural Change* 22(3): 473–479.

- Lianos, Theodore P. 1997. Factors determining migrant remittances: the case of Greece. *International Migration Review* 31(1): 72–87.
- Lucas, Robert E.B. and Oded Stark. 1985. Motivations to remit: evidence from Botswana. *Journal of Political Economy* 93(5): 901–917.
- Massey, Douglas S., J. Arango, G. Hugo, A. Kouaouci, A. Pellegrino and J.E. Taylor. 1993. Theories of international migration: a review and appraisal. *Population and Development Review* 19(3): 431–466.
- Massey, Douglas S. and Lawrence C. Basem 1992. Determinants of savings, remittances, and spending patterns among U.S. migrants in four Mexican communities. *Sociological Inquiry* 62(2): 185–207.
- Massey, Douglas S. and Emilio Parrado. 1994. Migradollars: the remittances and savings of Mexican migrants to the USA. *Population Research and Policy Review* 13(1): 3–30.
- Nakanishi, Toru. 1994. Urban labor markets in the Philippines and Thailand. Pp. 355–386 in *Urbanization and Urban Poor in Developing Countries*. IDE Research Series No.447. Tokyo: Institute of Developing Economies.
- National Statistical Office (NSO). 1998. *Statistical Booklet on Thai Women and Men 1997*. Bangkok.
- Oberai, A.S. and H.K. Manmohan Singh. 1983. *Causes and Consequences of Internal Migration: A Study in the Indian Punjab*. Delhi: Oxford University Press.
- Oberai, A.S., Pradhan H. Prasad and M.G. Sardana. 1989. *Determinants and Consequences of Internal Migration in India*. Delhi: Oxford University Press.
- Pejaranonda, Chintana, Sureerat Sanitipaporn and Philip Guest. 1995. Rural–urban migration in Thailand. Pp. 171–143 in *Trends, Patterns and Implications of Rural–Urban Migration in India, Nepal and Thailand*. Asian Population Studies Series No. 138. New York: United Nations.
- Phongpaichit, Pasuk. 1982. *From Peasant Girls to Bangkok Masseuses*. Women, Work and Development Series, No. 2. Geneva: International Labour Office.
- Phongpaichit, Pasuk. 1993. The labour market aspects of female migration to Bangkok. Pp. 178–191 in United Nations, *Internal Migration of Women in Developing Countries*. New York: United Nations.
- Rodenburg, Janet. 1993. Emancipation or subordination? Consequences of female migration for migrants and their families. Pp. 273–289 in United Nations, *Internal Migration of Women in Developing Countries*. New York: United Nations.
- Russell, Sharon Stanton. 1992. Migration, remittances and development. *International Migration* 30(3/4): 267–288.
- Singhanetra-Renard, Anchalee and Nitaya Prabhudhanitisarn. 1992. Changing socio-economic roles of Thai women and their migration. Pp. 154–173 in S. Chant (ed.), *Gender and Migration in Developing Countries*. London and New York: Belhaven Press.
- Soonthornhadha, Amara. 1987. *Circular Mobility of Female Labourers and Economic Development in Thailand*. V.R.F. Series No.140. Tokyo: Institute of Developing Economies.
- Stark, Oded. 1982. Research on rural-to-urban migration in LDCs: the Confusion Frontier and Why We Should Pause to Rethink Afresh. *World Development* 10(1): 63–70.
- Stark, Oded and David E. Bloom. 1985. The new economics of labor migration. *American Economic Review* 75(2): 173–178.
- Stark, Oded and Robert E.B. Lucas. 1988. Migration, remittances and the family. *Economic Development and Cultural Change* 36(3): 465–481.
- Stark, Oded, J. Edward Taylor and Shlomo Yitzhaki. 1988. Migration, remittances and inequality: a sensitivity analysis using the extended Gini index. *Journal of Development Economics* 28: 309–322.
- Taylor, J. Edward. 1999. The new economics of labour migration and the role of remittances in the migration process. *International Migration* 37(1): 63–88.

- Taylor, J. Edward and T.J. Wyatt. 1996. The shadow value of migrant remittances, income and inequality in a household-farm economy. *Journal of Development Studies* 32(6): 899–912.
- Tonguthai, Pawadee. 1993. Thailand. Pp. 96–18 in United Nations, *Urbanization and Socio-economic Development in Asia and the Pacific*, Asian Population Studies Series, No.122. New York: United Nations.
- Trager, Lilian. 1984. Family strategies and the migration of women: migrants to Dagupan City, Philippines. *International Migration Review* 18(4): 1264–1277.
- United Nations. 1982. *Migration, Urbanization and Development in Thailand*. ST/ESCAP/211. Bangkok: Economic and Social Commission for Asia and the Pacific.
- Watanabe, Machiko. 1997. Tai: kokunai jinko idou to sangyo kozo henka (Thailand: internal migration and structural change of industry). *Ohara Shakai Mondai Kenkyujo Zasshi* 466: 1–19.