



# Remittances from Sweden

AN EXPLORATION OF SWEDISH SURVEY DATA

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This is a preliminary version of the working paper.

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## Abstract

The present study explores data on transfers of gifts/economic support to relatives from a recent Swedish Household Income Survey (HEK) compiled by *Statistics Sweden*. It provides the first analysis of demographic determinants of remittances from Sweden based on official household survey and register data. By exploring a data set that also includes non-migrant households, it presents a unique comparison of patterns of gift-giving and intra-family support between migrant and non-migrant households.

We argue that data from the Household Income Survey can be used to obtain an empirically based estimation of the determinants of remittances from Sweden. According to our results, the flows of remittances to developing countries from Sweden appear to be relatively small in comparison with remittance flows from other developed countries. The article analyses these transfers of gifts/economic support in relation to different kinds of income, education, age, time since migration, acquisition of citizenship and family situation.

Analyses are made for three types of country groups: developing countries, non-developing countries and Sweden. Whereas the general propensity to give economic support to relatives is similar among native Swedes and migrants from developing and non-developing countries, the patterns of gift-giving and intra-family economic support differ significantly over the life course between individuals from different country groups. Native Swedes tend to give gifts and economic support to relatives at higher ages and when they have adult children who have moved away from home. Migrants from developing countries tend to be younger and have children living at home. The propensity of native Swedes to remit increases with increasing income. Among migrants born in developing countries, other factors than income seem to be more decisive for the propensity to remit. Diverging patterns of remittances between migrants from developing countries and the other groups indicate that remittances are strongly related to phases in the individual life course that vary with the individual migration history.

**Key words:**  
remittances, intra-family transfers, life course

## Institutet för Framtidsstudier: Arbetsrapport Remitteringar från Sverige

En undersökning av svensk registerdata

## Sammanfattning

Rapporten undersöker data om gåvor/ekonomiskt stöd mellan hushåll från SCB:s årliga undersökning om hushållens ekonomi (HEK). Rapporten presenterar en första analys av de demografiska faktorer som påverkar remitteringar från Sverige. Analysen bygger på en databas som innehåller uppgifter om migranter såväl som infödda svenskar, vilket ger rapporten en unik bild av skillnaderna mellan invandrare och infödda när det gäller att ge gåvor och ekonomiskt stöd till anhöriga och släktingar.

I rapporten argumenterar vi för att data från HEK kan användas för att göra en uppskattning av vilka faktorer som påverkar remitteringar från Sverige. Våra resultat indikerar att flödet av remitteringar från Sverige är relativt litet. Vi analyserar hur benägenheten att ge gåvor eller ekonomiskt stöd till anhöriga och släktingar skiljer sig åt mellan individer med avseende på skillnader i inkomst, utbildning, ålder, tid i Sverige, medborgarskap och familjesituation. Vi jämför individer födda i utvecklingsländer med dem som är födda i Sverige och i andra icke-utvecklingsländer.

Skillnaderna när det gäller den allmänna benägenheten att ge gåvor eller ekonomiskt stöd till anhöriga eller släktingar är liten mellan infödda svenskar och invandrare. Däremot skiljer sig benägenheten att ge gåvor eller ekonomiskt stöd över livsbanan mellan individer från olika grupper av länder. Infödda svenskar och svenska invånare födda i icke-utvecklingsländer tenderar att ge gåvor och ekonomiskt stöd till anhöriga vid en högre ålder och när de har vuxna barn som har flyttat hemifrån. Invandrare från utvecklingsländer som ger gåvor eller ekonomiskt stöd till anhöriga tenderar att vara yngre och ha barn som bor hemma. Infödda svenskars benägenhet att ge gåvor och ekonomiskt stöd ökar med stigande inkomst. Bland invandrare från utvecklingsländer verkar det vara andra faktorer än inkomst som är avgörande för benägenheten att remittera. Dessa skillnader i benägenheten att ge gåvor mellan individer födda i olika typer av länder visar att remitteringar är starkt relaterade till olika faser i den individuella livsbanan (*life course*) som påverkas av personernas migrationshistoria.

**Lisa Pelling, Charlotta Hedberg och Bo Malmberg**  
i december 2010

## Introduction

Migrant remittances continue to spur both public and academic interest. Despite the global financial crisis, the sum of migrant remittances to developing countries surpassed World Bank expectations and reached an estimated 316 billion USD in 2009 (Ratha et al., 2010). Interest in remittances is often motivated by the potential of remittances to contribute to development (World Bank, 2006; UNDP, 2009). Though not a development panacea<sup>1</sup>, remittances can make an important contribution to the reduction of poverty (Page and Plaza, 2006; Gupta et al., 2009). There are estimations showing that a 10 percent increase in remittances decreases the share of people living in poverty by 3.5 percent (Adams and Page, 2005). Flows of migrant remittances to developing countries are more than twice as large as the flows of official development assistance (World Bank, 2006).

Despite the fact that Sweden prides itself in being an important donor of development aid, there is virtually no knowledge about the transfers of funds made by international migrants in Sweden (Pelling, 2009). The scarcity of knowledge on the volume and determinants of remittances from Sweden limits the possibilities to enhance the development impact of these money transfers.

Although the results are inconclusive, the impacts of remittances on receiving households, communities and countries are relatively well researched. Less attention has been paid to the effects of sending remittances on the senders. The preference and/or obligation of international migrants to support family and relatives in their country of origin has implications also for migrants' standard of living in host countries, for instance by influencing decisions on housing and employment (Houle & Schellenberg, 2008). More knowledge on the determinants of remittance sending is therefore relevant for policy makers in the field of immigrant integration.

The aim of this paper is to shed light on determinants of remittances from Sweden by analysing data compiled by *Statistics Sweden* in their annual Swedish Household Income Survey (HEK). The Household Income Survey contains data

on the transfer of gifts and economic support between relatives. These transfers include remittances from Sweden that exceed a certain amount.

### Our research questions are :

- 1) What determines the probability for Swedish migrants and migrant households to make transfers of gifts/economic support to relatives?
- 2) What differences and similarities can be observed between migrants from developing countries, migrants from non-developing countries and native-born individuals when it comes to the transfer of gifts/economic support to relatives?

This introduction is followed by an overview of relevant research, followed by a presentation and discussion of the data and variables we have used for this report. We apply a life course perspective on the results' section, taking a look at how the propensity to give gifts/economic support are influenced by income, education, age, time since migration, acquisition of citizenship and family situation. We then show how different factors or determinants relate to each other in a statistical model. The last section contains conclusions and suggestions for further research.

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 1 For critical views on the development impacts of remittances see for instance Chaim et al (2008a and 2008b).

## Towards a life course perspective on remittances

Research on the patterns of gift-giving and economic support among migrants and non-migrants can be related to a large and growing body of research on migrant remittances, or private transfers made by migrants to their countries of origin.<sup>2</sup> On the macroeconomic level, important empirical determinants of remittances are stock of migrants, wage levels and economic situation in the host country, as well as exchange rates and relative interest rates between the host country and the country where remittances are sent (see Hangen-Zanker and Siegler 2007 for an overview). The availability of formal financial services for the transfer of remittances also influences the amount of remittances that are officially recorded (Freund and Spatafora, 2005).

On the micro level, both altruist and self-interested motives to remit have been confirmed in the literature based on empirical evidence from different regions and immigrant groups. As argued by Orozco et al (2006), both motives may operate simultaneously. In their ground-breaking article, Lukas and Stark (1985) argued that remittances are guided by 'tempered altruism' or 'enlightened self-interest', implying that altruistic and self-interested or contractual motives are not necessarily exclusive. Instead, they might complement each other (Orozco, Lowell & Schneider, 2006). Carling (2008) argue that the hitherto prevailing focus on determining the balance between altruism and self-interest motives to remit has been unfortunate, because it fails to take into account the contextual complexities of migration and remittance decisions. The context of migration, variations in the nature of families and households and normative settings all influence the motivations to send money home (Carling, 2008; pp 584-585).

A number of different factors combine to explain the flow of remittances from individual households. In addition to income, the theoretical literature looks at microeconomic determinants such as age, education, gender, marital status, household size and length of stay in the host country as well as plans to return (Holst et al 2008, also see Carling, 2008, Hagen-Zanker and Siegel, 2007 and Rapoport and Docquier, 2005 for overviews). In this paper, we relate our findings to a *life course perspective*. In a life course perspective, the determinants of the propensity to remit are analysed in relation to stages in the individual life course<sup>3</sup>.

Rather than a coherent body of theory, life course research is an interdisciplinary area of study. One important

2 The most commonly used definition of remittances is taken from the IMF Balance of Payments manual. Until a recent revision (a new Balance of Payments Manual came into force in 2010) workers' remittances were defined as 'current private transfers from migrant workers who are considered residents of the host country to recipients in their country of origin' (Ratha and Xu, 2009).

3 The use of the term life course has increasingly replaced the term 'life cycle' in recognition of the fact that people do not follow the same sequence of life stages, and that the life course is cohort-specific, that is, 'it is a function of the demographic, social and political conditions of a particular period and place' (Warnes, 1992; p 177-178)

assumption guiding life course research is that earlier life history has strong impacts on outcomes later in life (Mayer, 2009). Focus is placed on the timing, sequence and structure of major life course events, such as beginning or completion of education, nest-leaving, migration, partnering, marriage, birth of the first child, entrance on the labour market, etc., and how this structures population groups (Bailey, 2008).

Migration is known to be strongly related to different stages in the life course (Warnes, 1992; Fischer and Malmberg, 2001). The importance of life course events on migration makes it relevant to relate the patterns of remittance sending to a life course perspective. As pointed out by Clark and Drinkwater, remittances are 'intrinsically linked to the migration process' (2006; p. 734). The linkages between decisions to migrate and decisions to remit (see also Carling, 2008) imply that motives to remit will also vary over the life course.

One case in point is how motivations to migrate and to remit vary with age. It is well known that the propensity to migrate is highest among young people.<sup>4</sup> Though less studied, it has been established that the propensity to migrate increases again around the age of retirement. In populations with high standard of living and high life expectancy, there is another peak of residential mobility above the ages of 75 (Warnes, 1992; p 180-182).<sup>5</sup> There is evidence that young people send higher sums of remittances than older people, in particular if they are married with their families left behind at home (Black, 2003). Clark and Drinkwater (2007), however found that ethnic minority households in England and Wales with relatively high average age of adults showed a larger propensity to remit than younger households, possibly reflecting that incomes tend to increase with age and time spent in the country of destination. After a certain age the propensity to remit tends to decrease. This can be connected with the fact that pensioners earn less than those still at work, but it has also been connected to the fact that ties to the country of origin grow weaker over time (Holst et al., 2008). Age at the time of migration is also likely to be an important variable.

Studying six immigrant groups in the Netherlands, Snel et al. (2006, quoted by Carling, 2008) find that higher age at the time of migration is connected with higher participation in transnational practices, such as remittance sending. In summary, conflicting empirical evidence on the effect of age on remittances indicate that several factors have to be taken into account simultaneously: remittances increase with age because income does, but decreases with age since the propensity to remit tend to decrease with time since migration (see below). Young people's higher propensity to remit might be a reflection of the fact that their families have not yet joined them in the country of destination.

4 Globally, about a third of the migrants from developing countries are youths. If people aged 25 to 29 year are included, young migrants probably make up half the flow of migrants from developing countries (World Bank, 2006; p. 192).

5 The increased propensity to migrate among older people has been explained by the fact that old-age people migrate in order to move closer to the care of family and relatives (Warnes, 1992; p. 182).

From a life course perspective, it is more relevant to look at determinants linked to life phases rather than age on its own. In Fischer and Malmberg's (2001) study of Swedish interregional migration, the effect of age on the propensity to migrate diminished when life course variables such as starting or completing education were added (p. 368). Analysing a Peruvian household survey, Cox, Eser and Jimenez (1998) found that capital market imperfections are likely to be an important cause of intra-family transfers over the life course. Intra-family transfers compensate for lack of opportunities to borrow from future incomes (for instance when young people cannot finance their education with a bank credit), and for difficulties to save towards retirement. Because the intra-family transfers respond to liquidity constraints, transfers are made to households and individuals in 'low earning phases of the life-cycle' (Cox et al., 1998; p. 14).

In a life course perspective, the timing of migration is important. Migrants who migrated at young ages, and have spent most of their lives in the country of destination might not have retained strong ties to family and relatives in their country of origin. But for migrants who have migrated at older ages, and who have spent a smaller share of their lives in the country of destination, there might be strong incentives to return when they approach old age. Migrants who plan to return to their country of origin tend to have a higher propensity to remit, and to remit larger amounts (Ulku, 2010; Carling, 2008; Amuedo-Dorantes & Pozo, 2006; Merkle and Zimmermann, 1992). This implies that remittances should be expected to decline with time spent in the country of destination, but not necessarily with age.

From a life course perspective, other than age the following results on migrant characteristics and remittance behaviour are relevant to bring forward:

*Income:* According to Hagen-Zanker and Siegel (2007), most studies find a positive effect of migrants' income on remittances. However, a number of studies have shown that there is not necessarily a linear relationship between migrants' level of income and amount remitted (Stryjan, 2007; Stryjan, 2008; Houle and Schellenberg 2008; Faini, 2006; Page and Plaza, 2006). Empirical evidence show that skilled migrants tend to remit less than unskilled, even though skilled migrants tend to have higher incomes than unskilled migrants. This has been explained by the fact that skilled migrants more often come from better-off families, whose needs or demands for remittances may be lower than that of poorer families (Niimi et al., 2008). Also, skilled migrants tend to have larger possibilities to bring their families and to stay longer in the country of destination (Faini, 2006).

*Time since migration:* According to the 'remittance decay hypothesis' (Carling, 2008), the propensity to remit over time follows an inverted U-curve (Amuedo-Dorantes and Pozo, 2006). As recent immigrants have not yet been able to establish themselves in the labour market, they have little possibility to send economic support to their relatives. But as

the immigrants gain increasing foothold in their host country, the propensity to remit increases as well. As more time passes, however, the propensity to remit decreases as ties to the country of origin grow weaker. The results of different efforts to empirically confirm or reject remittance decay have been disparate (Carling, 2008; p 592). An important factor determining the development of remittance sending over time seems to be the presence of family members in the country of origin. With time, and following the stages in the life course, family members either join their relatives in the destination country, or pass away (e.g. old parents) (Amuedo-Dorantes and Pozo, 2006; Carling, 2008). Studying ethnic minorities in Britain, Clark and Drinkwater (2007) find that the impact of the duration of stay in the host country can be different for different ethnic groups, mainly because different immigrant groups have different propensities to return to their country of origin, and thereby different motivations to continue to send money home.

*Social obligations:* There is a growing recognition that remittances are part of *social obligations* that tie migrants to their families and relatives in their countries of origin. 'The nature of this social obligation is at the heart of remittance patterns and expenditure decisions' (Carling, 2006; p. 55). This indicates that remittance behaviour will also vary with the culture of social obligations that the remitter belongs to. Using data from the World Values Survey, Inglehart (2005) argues that Sweden is one of the most secular and most individualistic countries in the world. A large share of the Swedish stock of foreign born residents come from developing countries that are at the opposite end of Inglehart's scales comparing secular or rational vs. traditional and survival vs. self-expressionist values. Extensive provisions of the Swedish welfare state, including subsidised universal childcare and generous old-age pensions might remove some of the motives for intergenerational transfers that exist in many developing countries. But, in analyzing Swedish survey data<sup>6</sup>, Lennartsson et al. (2009) find that intergenerational money transfers are nevertheless still prevalent in Sweden. Lennartsson et al. found evidence that in Sweden older persons make transfers to younger generations in exchange for time. (Lennartsson et al., 2009). Potential effects of cultural differences motivate analyses of differences in remittance patterns between natives and migrants from developing and non-developing countries.<sup>7</sup>

6 Lennartsson et al base their study on the 2004 Swedish Panel Study of Living Conditions of the Oldest Old (SWEOLD), SWEOLD 2002 and the Level of Living Survey (LNU) conducted in 2000.

7 Doing this, it is important to take into account the fact that migrants are a selection of the population, and are generally not representative of the population in the country they have left. In addition, the migration process in itself might have disruptive impacts on life course stages such as family formation. Therefore, ideally analyses of cultural differences between migrants and native-born should compare migrants not only to majority population in the country of destination, but also to the migrants' co-ethnics in the country of origin who did not migrate (Clark et al., 2009).

*Citizenship:* Citizenship status is often interpreted as a token of integration into the host society. DeSipio (2000) found that remittances from Latina American migrants in the US decline when settlement in the US becomes more permanent. In contrast, in a study of German micro data, Valdean (2007) found that migrants who could acquire dual citizenship gained ‘the best capacity to act transnationally’ and displayed a higher propensity to remit (Valdean, 2007; p 23). Sweden has one of the most liberal citizenship policies in Western Europe (Howard, 2009), and traditionally high rates of naturalisation (that is, a high share of foreign born who acquire Swedish citizenship) (Bauböck, 2006; Niessen et al 2007). The possession of a Swedish passport might make international travel easier. This is likely to have a positive impact on the propensity to remit, since visits to the country of origin positively influence remittances (Carling, 2008; Orozco et al., 2005). The possession of Swedish citizenship also lowers the risks associated with attempts to return to the country of origin. Several studies have shown that intentions to return permanently have a positive impact on the propensity to remit (see above).

*Family status:* Partnering as well as having children are important transitions and phases in the life course (Bailey, 2008). When couples and families are separated by migration, resources that would otherwise have been shared within the household are transferred as remittances. Empirical studies have confirmed that married migrants that are separated from their spouse remit more than couples who live in the same household (Carling, 2008; Amuedo-Dorantes & Pozo, 2006).

*Education:* Education can be seen as an investment in future (higher) incomes. Repayment of (informal) loans used to finance education has been identified as a motivation to send remittances (Rapoport and Docquier, 2005). A life course perspective on the education motive suggests that it matters if education was obtained prior to migration or postmigration.<sup>8</sup> Clark and Drinkwater (2007) indeed find evidence that among ethnic minority households in England and Wales, having foreign qualifications increased the likelihood of sending money abroad, whereas the level of education as such had no significant effect on the propensity to remit. Unfortunately, data in HEK does not make it possible to determine if education was completed in Sweden or abroad.<sup>9</sup>

8 This might be particularly relevant for a country like Sweden, where a tuition free university system and a relatively generous system of state supported student credits reduce the need for parents to finance their children’s education.

9 The education data base of *Statistics Sweden (Utbildningsregistret)* records the year that an education was registered. Since it might take a long time for a migrant to validate his or her foreign qualifications, the year of registration in the data base cannot be used to determine whether the qualifications were earned abroad or in Sweden.

## Data and variables: HEK as an estimation of workers’ remittances from Sweden

A variety of different methods are used to measure migrant remittances. While many researchers use data from the balance of payment statistics of the IMF, it is also common to raise data on remittances through surveys specifically designed for this purpose. In addition, a number of papers base their results on data from official household surveys similar to HEK (see for instance Holst et al 2008; Holst and Schrooten, 2006; Houle and Schellenberg, 2008; Blom and Henriksen, 2008).

The most commonly used statistics on migrant remittances is the aggregate data compiled by the World Bank’s Development Prospects Group. This data is taken from the IMF Balance of Payment Statistics (Ratha et al., 2009 & 2010). Problems related to reporting, accuracy and reliability are known to affect the quality of Balance of Payment statistics (Carson & Laliberté, 2002). Indeed, there is evidence suggesting that data on remittances might be even less reliable than many other items in the balance of payment accounts (IMF, 2009).

Sweden is an unfortunate case in point. In the course of previous research (Pelling, 2009), it was found that data on workers’ remittances from Sweden are estimations built on surveys carried out before 2003.<sup>10</sup> The size of recorded global flows of remittances doubled between 2002 and 2007 (Ratha et al., 2008; Ratha et al., 2007). Given the rapid increase in the global sums of remittances during the last ten years, the estimations made by *Statistics Sweden* should be treated with particular caution. It is not possible to make any meaningful analysis of recent remittances from Sweden using the statistics reported to the Balance of Payment statistics of the IMF.<sup>11</sup> Until 2009<sup>12</sup>, migrant remittances were defined as the sum of three items in the Balance of Payments statistics: workers’ remittances, compensation of employees, and migrants’ transfers. Workers’ remittances were defined as ‘current private transfers from migrant workers who are considered residents of the host country to recipients in their country of origin’ (Ratha & Xu, 2009). Since workers’

10 Information confirmed by Marcus Ershammar, *Statistics Sweden*, on September 25, 2010.

11 Some of the last years’ exceptional growth of the flow of remittances has been attributed to improvements in data collection, the low price of the dollar, and better and less expensive availability of formal money transfer channels, but a real growth has probably taken place as well (World Bank 2006).

12 A new version of the Balance of Payments and International Investment Position Manual (BPM6) came into force in January 2010. In the new manual, workers’ remittances are replaced by ‘personal transfers’. Whereas workers’ remittances was intended to include only remittances made by migrant workers, the new item includes all transfers made from a household in one country to a household in another, irrespective of the status of residence or migration of the sender. (IMF 2010).

remittances are private transfers made from one household to another, this item is relevant for the purposes of this paper. The second item, compensation of employees, contains the transfers made by employers of salaries and other incomes of workers ‘who are employed in an economy where they are not resident’ (IMF, 2010; p. 272). This item also includes salaries of diplomatic staff. The third item, migrants’ transfers, are transfers made at the time of migration, for instance savings that migrants bring with them upon return to the country of origin (Ratha & Xu, 2009).

In relation to the Balance of Payments statistics on workers’ remittances, data from the Household Economic Survey (HEK) that we use for this study has a number of limitations. The data in HEK is based on interview answers to the question ‘Has the household during 2007 given family members/relatives economic support or gifts worth at least 5,000 SEK?’. Data in HEK is thus limited to transfers of funds to family and relatives only, and excludes transfers to non-relatives. Also, it excludes amounts smaller than 5,000 SEK per year. Another important limitation is that HEK does not record the country of destination of the transferred gifts/economic support. It is therefore not possible to know if the IMF Balance of Payment criterion of ‘recipients in the country of origin’ is met. The sums measured by HEK will include international remittances, but they do not exclude transfers made to recipients in Sweden or in third countries. It is thus possible to use the figures obtained by HEK to estimate the maximum sum of remittances sent as gift or economic support from migrants in Sweden, although with the important limitation that amounts smaller than 5,000 SEK per year are not recorded. The amount of remittances, however, will depend on what share of the transfers that are made to recipients within Sweden.

One can discuss if 5,000 SEK per year as the threshold for remittances in HEK should be considered a large amount. In a survey commissioned by the British Department for International Development (DfID) among ‘Black and Minority Ethnic’ in the UK (Boon, 2006), the average annual amounts transferred were 874 GBP per household, or the equivalent of nearly 12,000 SEK. According to this survey, ‘Black Africans’ remitted 910 GBP per year, and Pakistanis as much as 1,103 GBP (Boon, 2006; p. 29). A survey among Latin Americans in the US found that the annual amount of remittances was 4,875 USD or the equivalent of almost 37,000 SEK (Bendixen, 2008) Remitters from Ghana in Germany sent between 1,793 USD (men) and 1,391 USD (women) per year (Orozco et al., 2006). A survey sponsored by the Interamerican Development Bank found that Latin American immigrants in Spain sent an average of 2,700 EUR annually, that is a little more than 25,000 SEK (Bendixen, 2007). Accordingly, the amount of 5,000 SEK per year as the lower limit in HEK should be considered an amount that captures the main part of the remittances.

In comparison with data from the balance of payment statistics, data from the Household Economic Survey (HEK)

has important benefits. HEK is an annual survey that is carried out among a representative sample of all households and individuals who were officially registered as residents in Sweden some time during the surveyed year. Data from HEK is used in international statistics, for instance in the Luxembourg Income Study (LIS). The sample size in 2007 was approximately 17,000 households, representing 0.3 percent of all Swedish households. The sample is a network-sample, which means that all adult individuals that belong to the household of the selected individual participate in the survey. In total, approximately 38,000 individuals (including children) were included in the survey. According to *Statistics Sweden*, the non-response rate was 31.4 percent: 14.9 percent declined to participate, 13.3 percent could not be reached and 3.1 failed to participate. Social assistance recipients, individuals with very low income and migrants from non-Nordic countries were overrepresented in the drop-out (Statistics Sweden, 2009). After removing children (aged 0-19) we could use data from a total of 19,373 adult individuals (see Table 1 below). The share of foreign born in the sample is 13.7 percent compared to 13.37 percent in the total population in the year 2007.

The data gathered in HEK is very detailed. A particular feature of the Swedish statistical system is that official household surveys can make extensive use of administrative registers. This is facilitated by the fact that every Swedish inhabitant carries a unique personal identification number, which is used in almost all public administration registers (Vogel, 2001). HEK combines data gathered through phone interviews with detailed register data on income, social transfers, social assistance and taxes from the central income and tax register and data on housing (including from the central register on real estate taxation) from all household members (Statistics Sweden, 2009). The large number of households included in the sample enables detailed analyses of sub-groups. Information from interviews and – importantly – from the official registers makes it possible to make estimations on how the determinants of remittances from Sweden vary with age, disposable income, levels of education, family situation, etc. The data in HEK

**Table 1: Descriptive statistics**

COUNTRY OF ORIGIN	MEN	WOMEN	TOTAL
Native-born	8,321	8,396	16,717
Developing country	616	699	1,315
Non-developing country	573	768	1,341
<b>TOTAL</b>	<b>9,510</b>	<b>9,863</b>	<b>19,373</b>

Source: HEK 2007

also include a number of migration variables. In addition to the country of birth, it records the year of (the latest) immigration to Sweden and – if applicable – the year of acquisition of Swedish citizenship.

In HEK, the question on gift-giving or economic support of family members or relatives, has been posed to international migrants as well as non-migrants. This makes it possible to compare the patterns of gift-giving and economic support between migrants and non-migrants.

An important benefit of HEK is that it includes transfers of gifts or economic support irrespective of the method of transaction. Because the HEK survey item asks about all monies sent, it includes transfers made by bank transfer as well as gift and economic support handed over in cash or for instance transferred through the Hawala system<sup>13</sup>. Balance of Payments statistics only officially recorded remittances. All transactions taking place outside of formal transfer or banking systems remain unrecorded. The World Bank estimates that true value of remittances might be 50 percent larger than the officially recorded sums (World Bank, 2006; p 85). Other estimations of informal remittances range between 35 and 75 percent (Freund and Spatafora, 2005). In their empirical study, Freund and Spatafora (2005) conclude that formal and informal remittance channels are substitutes. If the financial sector is poorly developed, making it expensive to use formal channels to transfer money, migrants will chose informal channels instead: ‘the cost of

sending remittances primarily affects the channel by which money is sent home and not the amount’ (Freund and Spatafora, 2005; p. 9). A consequence of this is that officially recorded flows of remittances will underestimate the flows to countries with less developed financial sectors. Similarly, the remittance burden of migrants from countries with poorly developed financial sectors risks being underestimated.

Surveys made among remittance senders in Sweden indicate that a substantial amounts of remittances from Sweden are sent through informal channels. In an online survey made among members of a number of immigrant organizations (Engdahl, 2007), 34 out of 92 respondents, or 37 percent, had sent money through unofficial channels such as friends, relatives or other people travelling to the receiving country. In a survey among Kurds in the city of Uppsala, over 70 percent of the respondents used informal channels to transfer remittances (Pelling, 2010). 80 percent of the respondents in a survey among individuals from Somaliland reported that they used money transfer companies to send remittances (Stryjan, 2007). Many indicated that they use the company Dahabshiil, a Hawala company.

The following table (Table 2) summarises the main differences between different sources of data on workers’ remittances. We argue that the data contained in HEK, despite its limitations, gives a better picture of patterns of remittances from Sweden than what can be obtained from balance of payment statistics. The HEK data has some drawbacks in relation to other kinds of household surveys. While such surveys will typically not include the large number of detailed register-based variables included in HEK, surveys that are conducted explicitly on remittances obviously include more detailed questions on the why and how of remitting money. In summary, generalising from data contained in HEK should be undertaken with caution.

13 The Hawala system is a system of international money transfers made through brokers (called hawaladar). If a person in country A wants to transfer money to a recipient in country B, he or she pays the money to a hawaladar in country A, who contacts a hawaladar in country B. The hawaladar in country B pays the money to the recipient from his own cash reserves, so at this stage, money actually never leaves country A. The debt of the sending hawaladar is cleared at a later stage, for instance by a remittance requested in the opposite direction, a business deal, through conventional bank transfers or goods swaps. The Hawala system is built on trust and the fact that Muslim faith forbids the use of interest payments which makes it possible to balance the book on the transaction at a later stage (Buencamino & Gorbunov, 2002). *Statistics Sweden* have started to compile data on private transfers made through hawala banks, but those transfers are not yet included in published statistics (information confirmed in conversation with Marcus Ershammar, Statistics Sweden, 5 October 2010).

**Table 2: Different sources of data on workers’ remittances from Sweden**

	FORMAL TRANSFERS	INFORMAL TRANSFERS	INFORMATION ON THE SENDER	INFORMATION ON THE RECEIVER
Balance of Payment Statistics	Yes, estimations based on data from 2002	no	no	no
HEK	yes, self-reported	yes, self-reported	yes, self-reported and from official registers	no
Other household surveys without register data*	yes, self-reported	yes, self-reported	yes, self-reported, limited amount of variables	yes, receiving country and individual

\*) To our knowledge, three surveys on senders of remittances from Sweden have been published, see Stryjan, 2007; Engdahl, 2008 and Pelling, 2010.

## Methods

We have used HEK data to estimate the probability of sending remittances from Sweden among individuals from three types of country groups. The groups that have been analysed are individuals born in 1) Sweden (native-born), 2) developing countries, and 3) non-developing countries other than Sweden. A country was categorised as ‘developing’ if it was categorised as a DAC-country by the OECD Development Assistance Committee (DAC).<sup>14</sup> DAC countries had a Gross National Income (GNI) per capita lower than 11,455 USD in 2007 (the same year, GNI per capita for Sweden was 47,940 USD).<sup>15</sup> DAC countries are eligible for Official Development Assistance (ODA) according to OECD/DAC criteria, and are commonly referred to as developing countries. It should be noted that the two migrant groups only contain individuals born outside of Sweden. Second generation immigrants are included in the group of native-born.

The HEK data set contains information mainly on an individual basis. The questions on remittances, however, were asked about the entire household: ‘Has the household during 2007 given family members/relatives economic support or gifts worth at least 5,000 SEK?’. That means that our main variables were given on a household level and only to the one interviewed individual in each household. In order to individualise data on remittances, we have transferred household data on remittances to all adult individuals residing in that household. This means that if individual A and individual B both belong to the same household, only individual A had a value on remittances in the original dataset. We have transferred the value of remittances also to individual B. In households with one individual from a developing country and one individual born in Sweden, the remittance is counted both for Sweden and for the developing country.

This method has some important advantages. Firstly, we get a much larger population: instead of just the interviewed individual, we can now analyse all members of the household. Secondly, since all adults are included, we are able to analyse foreign-born living in mixed households where a native-born happened to be chosen for the interview. These individuals would otherwise be invisible. As mentioned above, this methodological advantage is made possible by the fact that the sample used for HEK is

a network-sample, which means that Statistics Sweden has included information about *all* members of the household in the data set.

We have first performed a descriptive analysis, where we have analysed the probability of giving remittances from the three country groups. We have then analysed differences with regard to income class, level of capital income, time since immigration to Sweden, age, family situation, citizenship, educational level and reception of social assistance.

In order to see the effects of various variables, we have performed effect likelihood ratio tests where we included the variables of age, education, family type, children under the age of 18, income class and capital income.

## The General Propensity to Remit from Sweden

13.8 percent of all surveyed individuals belong to a household that reported giving gifts or economic support worth at least 5,000 SEK during the last year (Table 3).

This propensity to remit is relatively low. 34 percent of the respondents in a recent survey among immigrants in Norway reported that they help their families in their countries of origin at least once a year (Blom and Henriksen, eds., 2008). In a survey made for the British Department for International Development on ‘Black and Minority Ethnic’ households in the UK in 2006, 26 percent of those surveyed reported that they had sent money to family and friends abroad during the last 12 months (Boon, 2006). Data from the German Socio-Economic Panel SOEP show that ‘about one-fifth’ of the migrants (foreign born with and without German citizenship) living in Germany send money home (Holst et al., 2008; p. 13). According to data from the Longitudinal Survey of Immigrants to Canada, an average of 23 percent of the immigrants in Canada send money home 6 to 24 months after arrival. The average increases to 29 percent 25 to 28 months after arrival (Houle and Schollenberg, 2008:6). Compared to the above listed countries, the propensity to remit among the foreign born population in Sweden seems to be considerably lower.

One explanation might be that the question ‘Has the household during 2007 given family members/relatives economic support or gifts worth at least 5000 SEK?’ can be interpreted as having given/sent 5,000 SEK *at once*. That is, the respondent might have interpreted the question as asking about large gifts worth more than 5,000 SEK, or about single transfers of more than 5,000 SEK. In this perspective, 5,000 SEK (the equivalent of 760 USD or 540 EUR) is a relatively large sum of money. Analysing over 55,000 transfers of remittances made through private transfer institutions in Spain during 2006, Moré (2008) found that the average remittance sent

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 14 The term ‘developing country’ has been contested for various reasons. One important critique is that the term is used to denote countries that are very different in terms of economic development. We have used the classification made by the OECD DAC Committee which classifies countries eligible for development aid. The full list of DAC countries ‘DAC List of ODA Recipients Effective from 2006 for reporting on 2005, 2006 and 2007’ can be found at <http://www.oecd.org/dataoecd/43/51/35832713.pdf> The DAC definition of a developing country is consistent with that of the World Bank, except that the DAC definition excludes countries that are members of the G8 or the EU (OECD 2010).

15 As reported by the World Bank, see Information note on the revision of the DAC List at [www.oecd.org/dac/stats/daclist](http://www.oecd.org/dac/stats/daclist).

**Table 3:** The general tendency to remit from Sweden

ORIGIN	TOTAL NUMBER OF SURVEYED INDIVIDUALS	HAVE REMITTED	HAVE REMITTED %
Sweden	16,717	2,343	14.0%
Developing country	1,315	149	11.3 %
Non-developing country	1,341	172	12.8 %
ENTIRE SAMPLE	19,373	2,664	13.8 %

Source: HEK (2007).

\*) Answer to the question ‘Has the household during 2007 given family members/relatives economic support or gifts worth at least 5,000 SEK?’

was 348 EUR (men) and 333 EUR (women). Another survey among migrants in Spain found that the average remittance was 270 EUR (Bendixen, 2007). Among 5,000 randomly selected Latin Americans in the US participating in a survey in 2008, the average amount remitted at a time was 325 USD (Bendixen, 2008). In Engdahl’s survey among migrants in Sweden in 2008 only 22.2 percent usually sent more than 2,500 SEK at a time (Engdahl, 2008; 25). Among Kurds surveyed in Uppsala in 2009, 20.4 percent reported having sent 3,000 SEK or more last time they remitted (Pelling, 2009; 8).

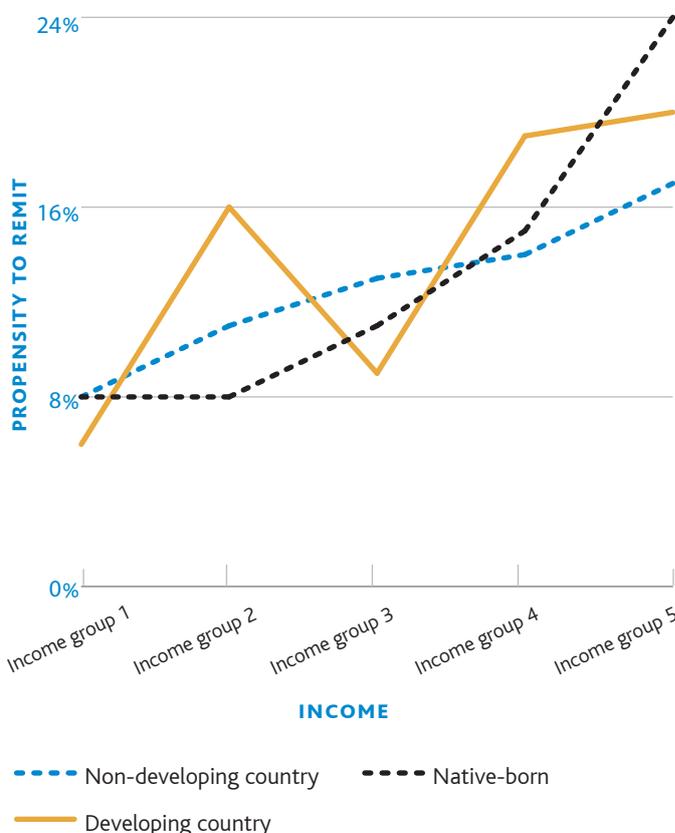
Though beyond the scope of this paper, it is also possible to look for explanations for the relatively low propensity to remit in the composition of the Swedish immigrant population. After labour migration from non-Nordic countries came to a halt in the beginning of the 1970s, non-Nordic immigration to Sweden has consisted almost exclusively of asylum-related immigration, with the largest number of people being family members of individuals that have been granted residence after arriving in Sweden as asylum seekers (Westin 2006). Relatively generous policies for family reunification and the relatively low share of labor migrants might impact on the propensity to remit.

countries belonging to households in income groups 2 and 4 show a propensity to remit that by far exceeds both that of native Swedes and of migrants born in non-developing countries. Migrants from developing countries in household income groups 1 and 3, however, show a lower propensity to remit. This diverging pattern indicates that migrants from developing countries remit in different phases in the life course than native-born and migrants from non-developing countries.

## Determinants of remittances

### INCOME

In general, in our sample the propensity to give gifts/economic support increases with increasing disposable income. Whereas only 8 percent in the lowest income group remit, almost one quarter in the highest income group do (see table 4 and figure 1). Since income increases with age this could generally be associated with remittances during later stages of the life course. However, this linear increase holds only for the native population and for international migrants from non-developing countries. For migrants from developing countries there is no linear relationship between household disposable income and the share of potential remittance senders. Instead, migrants from developing



Source: HEK 2007

**Figure 1:** Propensity to remit on income

**Table 4: Propensity to remit on household disposable income<sup>16</sup>**

INCOME GROUP (ANNUAL HOUSEHOLD DISPOSABLE INCOME)		HAVE REMITTED
1 (<135,000 SEK)	Sweden	8,7 %
	developing country	6,2 %
	non-developing country	8,5 %
<b>TOTAL</b>		<b>8,3 %</b>
2 (135,001 – 175,000 SEK)	Sweden	8,6 %
	developing country	16,0 %
	non-developing country	11,2 %
<b>TOTAL</b>		<b>9,4 %</b>
3 (175,001 – 220,000 SEK)	Sweden	11,1 %
	developing country	9,4 %
	non-developing country	13,6 %
<b>TOTAL</b>		<b>11,1 %</b>
4 (220,001 - 285,000 SEK)	Sweden	15,1 %
	developing country	19,3 %
	non-developing country	14,7 %
<b>TOTAL</b>		<b>15,3 %</b>
5 (Above 285,000 SEK )	Sweden	24,6 %
	developing country	20,0 %
	non-developing country	17,3 %
<b>TOTAL</b>		<b>24,1 %</b>

Source: HEK 2007

**Table 5: Propensity to remit on capital income**

ANNUAL HOUSEHOLD INCOME FROM CAPITAL		HAVE REMITTED
1 (<8,000 SEK)	Sweden	9,3 %
	Developing country	10,6 %
	Non-developing country	11,2 %
<b>TOTAL</b>		<b>9,6 %</b>
2 (8,001 – 15,000 SEK)	Sweden	12,6 %
	Developing country	18,2 %
	Non-developing country	12,7 %
<b>TOTAL</b>		<b>12,8 %</b>
3 (15,001 – 30,000 SEK)	Sweden	13,1 %
	Developing country	20,3 %
	Non-developing country	17,1 %
<b>TOTAL</b>		<b>13,6 %</b>
4 (30,001 - 60,000 SEK)	Sweden	17,6 %
	Developing country	17,1 %
	Non-developing country	16,0 %
<b>TOTAL</b>		<b>17,5 %</b>
5 (Above 60,000 SEK )	Sweden	22,9 %
	Developing country	5,1 %
	Non-developing country	14,2 %
<b>TOTAL</b>		<b>22,1 %</b>

Source: HEK 2007

**INCOME FROM CAPITAL**

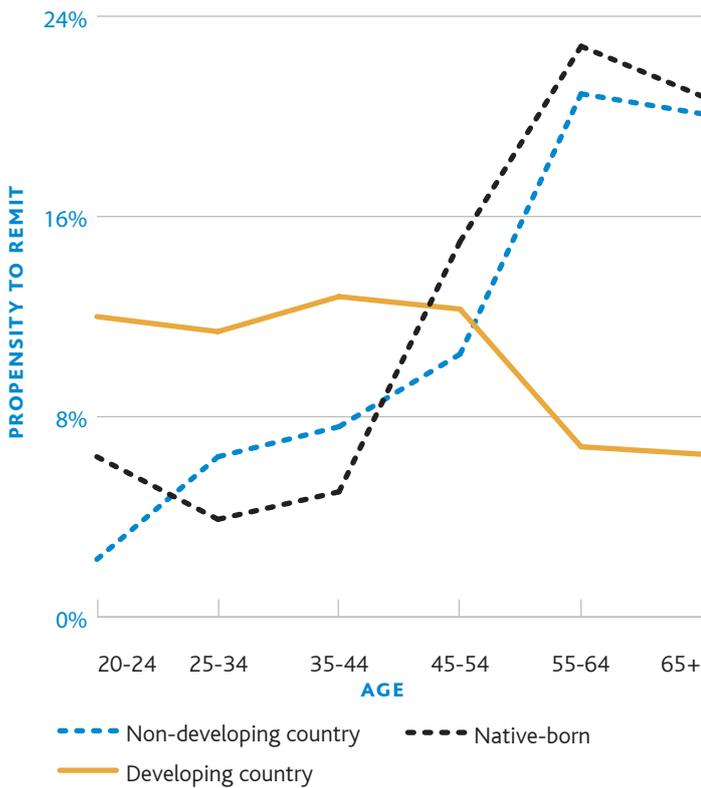
Among individuals belonging to households that have incomes from capital, the propensity to give gifts/economic support is relatively larger among individuals born in developing countries. For the highest levels of income from capital this trend reverses. The number of surveyed individuals in this group is very small. Only 59 respondents from developing countries belong to households with annual capital

incomes exceeding 60,000 SEK. Of them, three respondents or 5.1 percent remit. In this group, 22.9 percent of the Swedish households report that they give gifts/economic support to relatives.

**SOCIAL ASSISTANCE**

To see if the source of income makes a difference, we looked for differences in the propensity to give gifts/economic support between households of different origin receiving means-tested social welfare. In general only 3.6 percent of the population receiving social welfare sent gifts to their relatives, and the propensity was equally low for all country groups. There were no differences between native households and households from developing countries. In our sample, there were no migrants from non-developing countries on social welfare who reported having given gifts or

<sup>16</sup> We have based our income classes on the disposable income of the household. In order to make it possible to compare different households, disposable income has been adjusted taking the carrying capacity of the household into account. The adjustment has been done by using consumption weights according to Statistics Sweden standards with one exception: we have given the same consumption weight to all children (ages 0-19) in the household. Statistics Sweden makes a distinction between the first (weight 0,52) and the subsequent child/children (weight 0,42). (Statistics Sweden 2008)

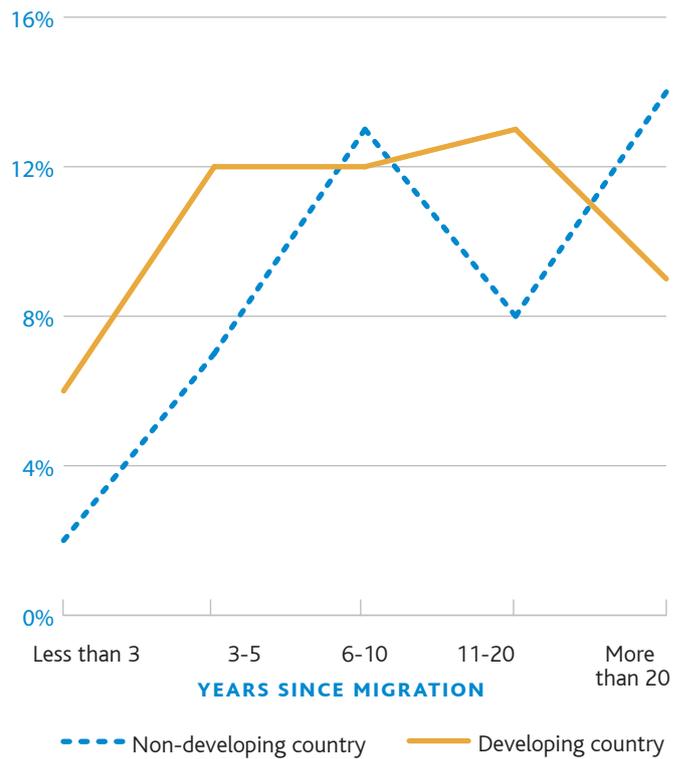


Source: HEK 2007

**Figure 2:** The propensity to remit on age

economic support. It is possible that this result is influenced by under-reporting, since recipients of means-tested social welfare payments might be reluctant to tell *Statistics Sweden* (that can be perceived as representatives of Swedish authorities) that they have had as much as 5,000 SEK to spend on gifts or economic support. The low propensity to send remittances among households that receive social welfare nevertheless provides evidence that there is no tendency for so called 'social tourism' among international migrants. Migrants who remit are not living on the Swedish social system but belong to the employed population. This finding is consistent with research by Taylor (2000) on remittances to Mexico from the US. Taylor finds that income from means-tested social transfers, as opposed to other forms of income, does not increase remittances.

The developing country households are over-represented among those that receive social welfare: 9.3 percent of developing country households receive social welfare, as compared to only 0.83 percent of Swedish native households. Since households receiving social welfare in general have a very low propensity to give gifts/economic support, this has an impact on the general propensity to remit among developing country households. If households receiving social welfare that do not remit are excluded from the sample, the



Source: HEK 2007

**Figure 3:** The propensity to remit on time since immigration to Sweden.

propensity to remit among developing country households increases with one percentage point from 11.3 percent to 12.3 percent.

**AGE**

The trend of remittances increasing with age is evident in the HEK data. The propensity to give gifts/economic support increases strongly with age, but individuals who have reached the age of 65 or more are slightly less likely to remit than those aged 55 to 64. There are, however, important differences between individuals born in a developing country and the other groups (Figure 2).

In the lowest age groups the propensity to give gifts/economic support is twice as high among individuals born in developing countries compared to respondents born in Sweden. In the older age groups, on the other hand, we find that individuals born in Sweden are much more likely to give gifts/economic support than people born in developing countries. In sum, individuals born in developing countries are more likely to give gifts/economic support if they are young, whereas non-migrants are more likely to give gifts if they are old. This shows, again, a particular pattern of the propensity to remit among individuals from developing countries compared to individuals from other countries,

which can be associated with diverging remittance patterns over the life course.

**TIME SINCE IMMIGRATION**

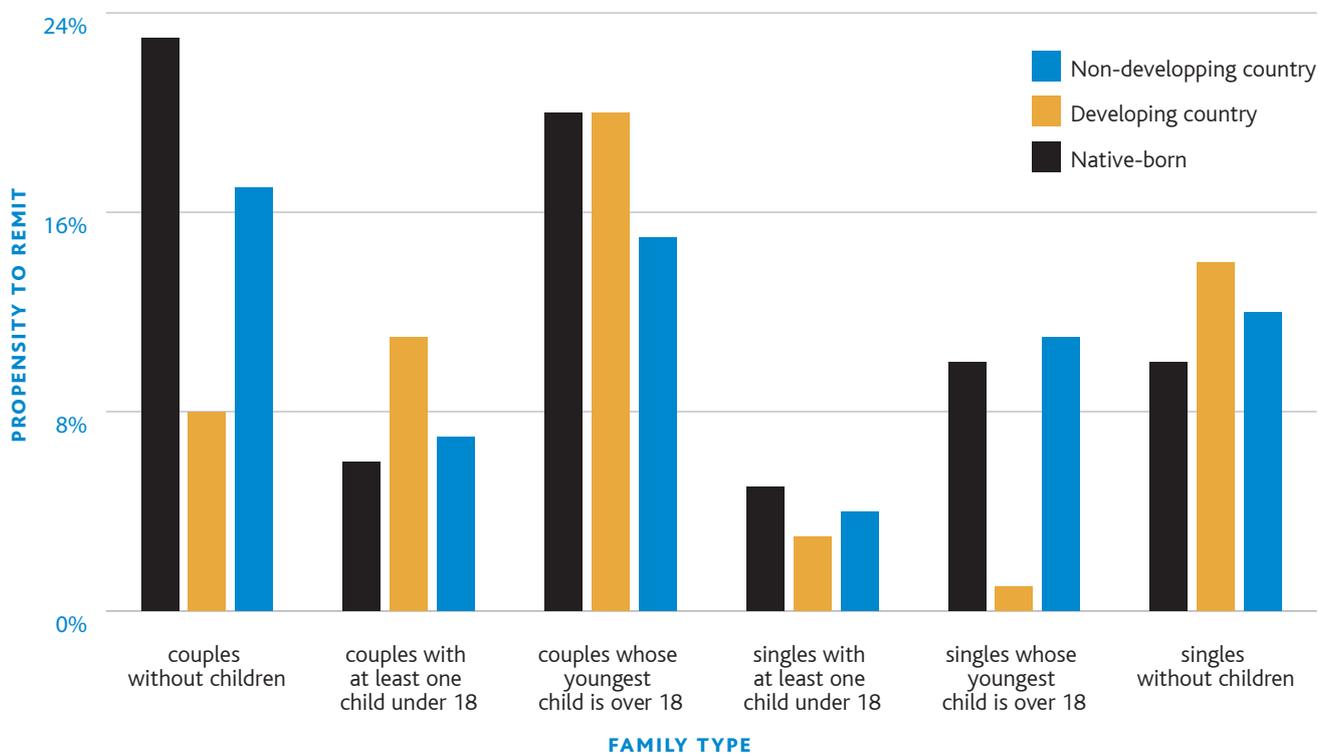
Our findings seem to confirm the inverted U-curve predicted by the hypothesis that remittances decay with time since migration, and thus is strongly related to the life course of the migrants after migration (figure 3). In our sample, recent migrants from developing countries show a low propensity to make transfers to relatives, but the likelihood that they will make such transfers increases over time. The same initial increase is visible among migrants from non-developing countries. This increase is stable on 12 percent for migrants from developing countries until we reach the group that arrived to Sweden more than 20 years ago. However, migrants born in non-developing countries behave differently. The propensity to remit among migrants from non-developing countries decreases in the group that arrived to Sweden 11-20 years ago, but thereafter it is again strongly increases. This is probably an effect of the fact that migrants from non-developing countries also tend to increase their propensity to give gifts and economic support when they are older, whereas, as we have seen above, migrants from developing countries rather decrease their propensity to remit when they approach retirement age and above. Data from HEK show that remittance decay starts late: the propensity to remit does not fall until migrants from developing countries have spent more than 20 years in Sweden.

**CITIZENSHIP**

For the entire sample, the share of respondents who report having given gifts/economic support is significantly larger for Swedish citizens (13.9 percent) than for non-Swedish citizens (10.4 percent). This positive relationship between being a Swedish citizen and giving gifts holds also within the group of respondents from developing countries (10.3 percent of non-citizens remit, and 11.7 percent of citizens). The relationship is stronger among migrants from non-developing countries (10.2 percent of non-citizens remit, and 14.3 percent of citizens).

**FAMILY SITUATION**

There are large differences between developing country migrant households and non-migrant households with different family types (Figure 4). Whereas the highest propensity to remit for the native-born group and the group of migrants from non-developing countries is found among couples without children at home, for remitting migrants from developing countries the most common family situation is to have children still residing at home. This can be interpreted as a reflexion of the fact that native-born and migrants from non-developing countries tend to give gifts and economic support at higher ages than individuals born in developing countries. Moreover, migrants from developing countries are overrepresented in single-person families and in families with at least one child residing at home. Only



**Figure 4:** The propensity to remit on family type

**Table 6:**  
Propensity to remit on age of the youngest child

AGE OF THE YOUNGEST CHILD		HAVE REMITTED	HAVE REMITTED %
<6 years	Sweden	75	3.7 %
	developing country	29	8.8 %
	non-developing country	9	5.5 %
<b>TOTAL</b>		<b>113</b>	<b>4.4 %</b>
<18 years	Sweden	271	5.6 %
	developing country	72	10.3 %
	non-developing country	21	5.7 %
<b>TOTAL</b>		<b>364</b>	<b>6.2 %</b>
<22 years	Sweden	445	7.3 %
	developing country	86	10.6 %
	non-developing country	37	8.0 %
<b>TOTAL</b>		<b>568</b>	<b>7.7 %</b>

Source: HEK 2007

6 percent of Swedish couples with children under the age of 18 give gifts or economic support, while almost twice as many families with children in developing country households send remittances.

The age of the youngest child in the household also seems to influence the pattern of gift-giving (Table 6). Among households with children under the age of six, the propensity to give gifts/economic support is much larger among developing country households than among native Swedish households. The same goes for households with children under the age of 18, whereas for households with children under the age of 22, the difference is smaller.

The diverging remittance pattern on family types between migrants from developing countries and others once again points at different phases in the life course when remittances are performed. Whereas the other groups mainly give gifts to their family when the children are adult or have moved out from home, migrants from developing countries remit to their relatives also in the cases when they support families with small children, or as single-households, when remittances probably are directed to family members remaining in the country of origin.

#### LEVEL OF EDUCATION

In the entire sample, there are no major differences in educational level between households who give gifts to their relatives and other households. However, the educational

level among those who give gifts/economic support was higher for migrants than native-born Swedes. A possible explanation could be that migrants with low educational attainment are newly arrived migrants, whose educational level has not yet been registered or who are still being educated in Sweden. As we saw earlier, newly arrived migrants display a lower tendency to give gifts to their relatives.

## Relative significance of different factors

In order to test the significance of different factors on the propensity to give gifts/economic support we now proceed to construct a model using effect likelihood ratio tests. Building on the results presented above, six variables are included in the model: age, education, family type, children under the age of 18, income class and capital income.

For the entire sample, we find that all variables have an effect, except capital income (Table 7). The strongest effects are due to income class and family type, but also age and to some extent education affect the probability to send remittances. Having children under the age of 18 also affect the remittance pattern.

Moving one step further, we use a logit model estimation to investigate in what direction these variables affect the propensity to send remittances among the entire sample when other variables are controlled for (Table 8).

Income class, which turns out to have the strongest effect, affected the propensity to support relatives in a positive way, in that the higher the income group, the higher the likelihood to remit. Compared to income group 5, the highest income class, households in income group 1 are considerably less likely to remit. To some extent, this also held for income class 2. However, going higher up the income

**Table 7: Effect Likelihood Ratio Test**

SOURCE	NPARAM	DF	L-R CHISQUARE	PROB >CHISQ
Age	5	5	14.927353	0.0107
Education	3	3	7.72911612	0.0520
Family type	5	5	19.4386536	0.0016
Children under the age of 18	1	1	3.21369783	0.0730
Income class	4	4	35.3620634	<0.0001
Capital income	4	4	6.39354224	0.1716

**Table 8:** Effect Likelihood Ratio Tests on Propensity to Remit

TERM	ESTIMATE	STD ERROR	CHISQUARE	PROB>CHISQ
<i>Intercept</i>	-2.435	0.123	393.6	<.0001
<b>Age</b>				
Age 20-24	-0.269	0.228	1.39	0.2381
Age 25-34	-0.338	0.135	6.24	0.0125
Age 35-44	-0.077	0.121	0.41	0.5235
Age 45-54	0.196	0.104	3.56	0.0593
Age 55-64	0.235	0.128	3.37	0.0663
Age base: 65+				
<b>Education</b>				
Completed 9 years of school	-0.246	0.124	3.93	0.0473
Completed 12 years of school	0.051	0.109	0.22	0.6412
University education and above	0.100	0.113	0.78	0.3771
Education base: No completed education				
<b>Family type</b>				
Couples without children	0.240	0.131	3.35	0.0671
Couples with children under 18	0.174	0.159	1.19	0.2747
Couples with children over 18	0.488	0.139	12.33	0.0004
Singles with children under 18	-0.426	0.278	2.36	0.1248
Singles with children over 18	-0.532	0.271	3.86	0.0494
Children under 18 (dummy)	0.189	0.104	3.28	0.0699
Family type base: Singles without children				
<b>Income</b>				
Income group 1	-0.424	0.102	17.24	<.0001
Income group 2	-0.165	0.091	3.3	0.0694
Income group 3	-0.116	0.095	1.5	0.2211
Income group 4	0.221	0.091	5.9	0.0152
Income base: Income group 5				
<b>Capital income</b>				
No income from capital	-0.048	0.083	0.34	0.56
Capital income group 1	0.104	0.143	0.53	0.4655
Capital income group 2	0.169	0.132	1.64	0.2001
Capital income group 3	0.123	0.161	0.59	0.4436
Capital income base: Capital income group 4				

scale, the pattern is reversed and households belonging to income group 4 are even more likely to remit than individuals in the highest income category. Households in income group 3 and 5 are more or less equally likely to remit.

Family type, the second most important variable, shows that households consisting of couples are more likely to remit than single households. Couples who don't have children residing in the household as well as couples with children residing home who are above 18 have a high propensity to remit compared to the reference category of single households without children. Couples with younger children, and single mothers, remit money to the same extent as single households and were thus not significant. Single mothers with children above the age of 18 are less likely to remit than single households.

The age factor is important to consider, given the importance of the life course pattern for the propensity to remit that was identified in the descriptive analysis above. Individuals of working age (ages 45-54 and 55-65) increase the probability to give gifts/economic support. Belonging to the youngest age groups (20-24 and 25-34), on the other hand, decreases the probability to remit, also when the other factors in the model are controlled for.

Low education reduces the probability to give gifts to some extent. However, when individuals with uncompleted education are compared with individuals with low, middle and high education, only one group is significant. Individuals with low but completed education have a lower probability to give gifts than individuals without completed education.

#### RELATIVE SIGNIFICANCE TO REMIT ON VARIOUS COUNTRY GROUPS

Since the descriptive analysis pointed at a differing remittance patterns for migrants from developing countries, the breaking down of the total population into country groups is of considerable interest. This is done in Table 9, where the reference category is 'born in Sweden'. Significant effects are marked in bold.

There are some significant differences between individuals born in a developing country and the individuals born in Sweden. The difference in patterns of gift giving between age groups of different origin that has been noted earlier is maintained also when tested against other factors. Whereas the age pattern of migrants from non-developing countries is not differing much from that of the native population, younger individuals born in a developing country have a significantly higher probability to give gifts/economic support than individuals born in Sweden of the same age. Older individuals from developing countries (above the age of 45), on the other hand, show a lower likelihood of giving gifts/economic support than native-born individuals of the same age. That is, the life course pattern of sending money to relatives differs considerably between migrants from developing countries and other individuals.

When comparing different family types, the most common group to remit overall was individuals living in a couple but in a household without children. Individuals born in developing countries don't differ from this picture. However, what is specific for this group/migrants born in a developing country is that couples with children aged 18 or more remit more than the native-born population. Couples with Migrants from developing countries with children under the age of 18, however remit less. This means that Moreover on average, compared to the native-born population, individuals from developing countries tend to remit less if they have children than the native born population.

Taken together, the analysis of the age pattern and of family type show that migrants from developing countries make transfers to relatives when they are relatively young. However, But when they enter a phase in the life course when they have become their own children they decrease their tendency to remit. When the children get older, however, and perhaps could contribute to the family income, remittances once again increased.

On the total population, patterns of gift-giving vary considerably with income, and the higher the income the more remittances are given. Among individuals born in developing countries, however, a non-linear remittance behaviour can be found. In the lowest income group (income group 1) and in the middle income group (income group 3) migrants from developing countries remit less than the native born population. In the second income group, however, migrants from developing countries remit more than the native born population. This is an indication that for this group, giving gifts or providing economic support is not so much connected to having a higher income, but rather to other aspects of the life course.

We found no significant differences in the propensity to remit between individuals born in Sweden and developing countries when it comes to level of education.

**Table 9: Likelihood to Remit on Native and Developing Country Households**

TERM COUNTRY OF BIRTH	VARIABLE	ESTIMATE	STD ERROR	CHI SQUARE	PROB> CHISQ
<b>Age</b>					
Non-developing country	Age 20-24	-0.454	0.423	1.15	0.2836
Non-developing country	Age 25-34	0.006	0.234	0	0.9791
Non-developing country	Age 35-44	-0.118	0.204	0.34	0.5626
Non-developing country	Age 45-54	-0.092	0.169	0.29	0.5884
<b>Non-developing country</b>	<b>Age 55-64</b>	<b>0.480</b>	<b>0.176</b>	<b>7.45</b>	<b>0.0063</b>
<b>Developing country</b>	<b>Age 20-24</b>	<b>0.568</b>	<b>0.277</b>	<b>4.2</b>	<b>0.0405</b>
<b>Developing country</b>	<b>Age 25-34</b>	<b>0.492</b>	<b>0.183</b>	<b>7.26</b>	<b>0.007</b>
<b>Developing country</b>	<b>Age 35-44</b>	<b>0.446</b>	<b>0.169</b>	<b>7</b>	<b>0.0082</b>
Developing country	Age 45-54	-0.120	0.153	0.61	0.4337
<b>Developing country</b>	<b>Age 55-64</b>	<b>-0.749</b>	<b>0.223</b>	<b>11.28</b>	<b>0.0008</b>
<b>Education</b>					
<b>Non-developing country</b>	<b>Completed 9 years of school</b>	<b>-0.329</b>	<b>0.181</b>	<b>3.31</b>	<b>0.0687</b>
Non-developing country	Completed 12 years of school	-0.175	0.140	1.56	0.2114
Non-developing country	University education and above	0.013	0.142	0.01	0.9268
Developing country	Completed 9 years of school	0.255	0.177	2.08	0.1489
Developing country	Completed 12 years of school	0.200	0.146	1.89	0.169
Developing country	University education and above	-0.020	0.156	0.02	0.8965
<b>Family type</b>					
Non-developing country	Couples without children	-0.067	0.185	0.13	0.7195
Non-developing country	Couple with children under 18	0.144	0.244	0.35	0.5561
<b>Non-developing country</b>	<b>Couple with children over 18</b>	<b>-0.457</b>	<b>0.214</b>	<b>4.56</b>	<b>0.0327</b>
Non-developing country	Single with children under 18	0.246	0.416	0.35	0.5538
Non-developing country	Single with children over 18	0.366	0.363	1.01	0.3143
Developing country	Couples without children	-0.003	0.222	0	0.9891
Developing country	Couple with children under 18	0.015	0.224	0	0.946
<b>Developing country</b>	<b>Couple with children over 18</b>	<b>0.582</b>	<b>0.220</b>	<b>7</b>	<b>0.0082</b>
Developing country	Single with children under 18	-0.419	0.443	0.9	0.3438
Developing country	Single with children over 18	-0.706	0.464	2.32	0.1281
Non-developing country	Children under 18 (dummy)	0.245	0.163	2.27	0.1322
<b>Developing country</b>	<b>Children under 18 (dummy)</b>	<b>-0.279</b>	<b>0.153</b>	<b>3.33</b>	<b>0.068</b>
<b>Income</b>					
Non-developing country	Income group 1	0.053	0.167	0.1	0.7531
Non-developing country	Income group 2	-0.096	0.149	0.42	0.5175
<b>Non-developing country</b>	<b>Income group 3</b>	<b>0.32634288</b>	<b>0.139</b>	<b>5.51</b>	<b>0.019</b>
Non-developing country	Income group 4	-0.1093248	0.140	0.61	0.4335
<b>Developing country</b>	<b>Income group 1</b>	<b>-0.2668343</b>	<b>0.147</b>	<b>3.28</b>	<b>0.0701</b>
<b>Developing country</b>	<b>Income group 2</b>	<b>0.41212553</b>	<b>0.132</b>	<b>9.73</b>	<b>0.0018</b>
<b>Developing country</b>	<b>Income group 3</b>	<b>-0.3776225</b>	<b>0.156</b>	<b>5.84</b>	<b>0.0157</b>
Developing country	Income group 4	0.12734708	0.145	0.77	0.3805
<b>Capital income</b>					
Non-developing country	No income from capital	0.1032386	0.117	0.77	0.379
Non-developing country	Capital income group 1	-0.0960316	0.209	0.21	0.6457
Non-developing country	Capital income group 2	0.08058754	0.193	0.17	0.6763
Non-developing country	Capital income group 3	-0.1618519	0.217	0.56	0.4553
Developing country	No income from capital	-0.006717	0.132	0	0.9594
Developing country	Capital income group 1	0.18360038	0.237	0.6	0.4385
Developing country	Capital income group 2	0.28829418	0.220	1.72	0.1899
Developing country	Capital income group 3	0.16163806	0.283	0.33	0.5682

## Conclusions

This paper has investigated patterns of remittances from migrants in Sweden using data from the 2007 income household survey (HEK) of *Statistics Sweden*. The results of the paper are twofold: First, it improves basic knowledge about determinants of remittances from Sweden, that have previously been largely ignored. Second, it finds strong life course related explanations behind remittances from Sweden.

The patterns of giving gifts and economic support to family members and relatives evident in the HEK data are strongly related to the individual life course, which differs between migrants from developing countries compared to migrants from non-developing countries and native-born Swedes. Our results indicate that remittances from Sweden decline over time for migrants from developing countries, although not until they have reached a late stage in the life course. For migrants from non-developing countries they increase over time. The general tendency that the higher the household income, the higher the propensity to give gifts/economic support – is not valid for migrants from developing countries. For migrants from developing countries other factors in the life course seem to be more important. Transnational family formations (singles living separated from their family) also seem to increase remittances for migrants from developing countries, whereas among natives and migrants from non-developing countries *couples* without children at home tended to remit more often.

Better knowledge about the volume and determinants of remittances from Sweden can enhance the possibilities to increase the development impact of these money transfers. Data from HEK shows that remittances from Sweden to developing countries are most likely a lot smaller than remittances from other comparable countries. Important insights relate to the relationship between propensity to remit and integration in Sweden. Although the propensity to remit declines with time spent in Sweden, the decay starts only after more than twenty years in Sweden. Moreover, the propensity to remit does not decline with the acquisition of Swedish citizenship.

Our results show that the preference or obligation of international migrants to support family and relatives in the country of origin might have implications for migrant standard of living in Sweden. More knowledge on the size and determinants of these obligations is therefore also relevant for policy makers in the field of immigrant integration. Native Swedes and Swedish residents born in non-developing countries tend to give gifts and economic support

to relatives at higher ages and when they have adult children. Migrants from developing countries tend to be younger, have small children at home, and belong to a household with a lower disposable income. This is an indication that many remittance senders from developing countries might find themselves in particularly vulnerable stages of the life course: at young ages, with children to care for, and relatively low incomes.

Diverging patterns of remittances between migrants from developing countries and the other groups indicate that remittances are strongly related to phases in the individual life course. We found that a life course perspective is a relevant framework for exploring the patterns of remittances from Sweden, which is an aspect that should be included in other studies of remittances.

## References

- Adams, Richard H. Jr. and John Page (2005). Do international migration and remittances reduce poverty in developing countries? In *World Development*, Volume 33, Issue 10, October 2005, Pages 1645-1669
- Bailey, A. J. (2008). Population geography : lifecourse matters. *Progress in Human Geography* June 2009, 33: 407-418, first published on December 17, 2008
- Bendixen, Sergio (2008). Survey of Latin American Immigrants in the United States. Multilateral Investment Fund of the Inter-American Development Bank
- Bendixen, Sergio (2007). Remesas de España a Latinoamérica. Resumen ejecutivo. Multilateral Investment Fund of the Inter-American Development Bank
- Blom, Svein and Kristin Henriksen (eds) (2008). Levekår blant innvandrere i Norge 2005/2006. Rapport 2008/5. Statistics Norway. Oslo
- Boon, Martin (2006). BME Remittance Survey. London: DfID/ICM, July 2006.
- Brinkberg, Sara (2009). Migration and Remittances : Differences in Ability and Propensity to Remit among Migrant Groups in Sweden. Master thesis. Department of Economics, University of Uppsala.
- Brinkberg, Sara and Mattias Engdahl (2006). Remitteringarnas bestämningsfaktorer – en studie av det svenska remitteringsflödet. Undergraduate dissertation. Department of Economics, Uppsala University.
- Buencamino, Leonides and Sergei Gorbunov (2002). Informal Money Transfer Systems : Opportunities and Challenges for Development Finance, Discussion Paper of the United Nations Department of Economic and Social Affairs, November 2002.
- Carling, Jørgen (2008). The determinants of migrant remittances. *Oxford Review of Economic Policy*, 24(3), 582-599.
- Carson, Carol S. and Laliberté, Lucie (2002). Assessing Accuracy and Reliability : A Note Based on Approaches Used in National Accounts and Balance of Payments Statistics. IMF Working Paper No. 02/24. Accessed on 5 February at <http://www.imf.org/external/pubs/ft/wp/2002/wp0224.pdf>
- Chami, Ralph with Yasser Abdih, Jihad Dagher and Peter Montiel (2008a). Remittances and Institutions: Are Remittances a Curse? IMF Working Papers No 08/29. IMF. Accessed on 15 February 2009 at <http://www.imf.org/external/pubs/ft/wp/2008/wp0829.pdf>
- Chami, Ralph with Adolfo Barajas, Thomas Cosimano, Connel Fullenkamp, Michael Gapen, and Peter Montiel (2008b). Macroeconomic consequences of remittances. Occasional paper ; 259. International Monetary Fund, 2008.
- Clark, Rebecca L., Jennifer E. Glick and Regina M. Bures (2009). Immigrant Families over the Life Course : Research Directions and Needs. *Journal of Family Issues* 2009; 30; 852 originally published online Mar 4, 2009; DOI: 10.1177/0192513X09332162. The online version of this article can be found at: <http://jfi.sagepub.com/cgi/content/abstract/30/6/852>
- Cox, Donald; Zekeriya Eser and Emmanuel Jimenez (1996). Motives for Private Transfers over the Life Cycle: An Analytical Framework and Evidence for Peru. Economics Department. Working Papers in Economics. Boston College, year 1996.
- DeSipio, Louis (2000) Sending Money Home... For Now: Remittances and Immigrant Adaptation in the United States. Inter-American Dialogue and Tomás Rivera Policy Institute.
- Drinkwater, Stephen and Ken Clark (2007). An Investigation of Household Remittance Behaviour: Evidence from the United Kingdom. *The Manchester School* Vol 75 No. 6, December 2007.
- Engdahl, Mattias (2007). Penningförsändelser från Sverige till utlandet – Kartläggning av den svenska remitteringsmarknaden. Master thesis. Department of Economics, Uppsala University.
- Faini, Riccardo (2006). Remittances and the Brain Drain : International Trade and Labour Economics, Centre for Economic Policy Research (CEPR).
- Fischer, Peter A. and Gunnar Malmberg (2001). Settled People Don't Move : On Life Course and (Im-)Mobility in Sweden. *International Journal of Population Geography*, 7: 357-371. doi: 10.1002/ijpg.230
- Freund, Caroline and Nikola Spatafora (2005). Remittances : Transaction Costs, Determinants, and Informal Flows. WPS3704. International Monetary Fund
- Gupta, Sanjeev; Catherine A. Pattillo and Smita Wagh (2009). Effect of Remittances on Poverty and Financial Development in Sub-Saharan Africa in *World Development*, Volume 37, Issue 1, January 2009, Pages 104-115.
- Hagen-Zanker, Jessica and Melissa Siegel (2007). The Determinants of Remittances : A Review of the Literature. MGSOG Working Paper No. 003
- Holst, Elke; Andrea Schäfer & Mechthild Schrooten (2008). 'Gender, Migration, Remittances : Evidence from Germany,' SOEP papers 111, DIW Berlin, The German Socio-Economic Panel (SOEP).
- Holst, Elke, Mechthild Schrooten (2006). Migration and Money – What Determines Remittances? Evidence from Germany, DIW Discussion Papers no. 566 , DIW Berlin.
- Houle, René and Grant Schellenberg (2008). Remittances from Recent Immigrants. Statistics Canada. Catalogue no 75-100-X. IMF (2010). Balance of Payments and International Investment Position Manual (BPM6), Sixth Edition. International Monetary Fund.
- IMF (2009). International transactions in remittances: guide for compilers and users. International Monetary Fund, 2009.
- Inglehart, Ronald (2005): The Worldviews of Islamic Publics in Global Perspective in Moadell, Mansour, ed. (forthcoming) Values and Perceptions of the Islamic and Middle Eastern Publics. New York: Palgrave.
- Lennartsson, Carin, Merrill Silverstein and Johan Fritzell (2009). 'Generations in Swedish Families : Time-for-Money Exchanges Between Older and Younger' in *Journal of Family Issues* 2010; 31; 189.

- Lucas, Robert. E. B. and Oded Stark (1985). Motivations to Remit - Evidence from Botswana. *Journal of Political Economy*, 93(5), 901-918.
- Mayer, Karl Ulrich (2009). New Directions in Life Course Research. *Annual Review of Sociology*, vol. 35: 413-433.
- Moré, Íñigo (main author) with Alfonso Echazarra de Gregorio, Bouchra Halloufi and Ramona Petru (2008): Cuantificación de las remesas enviadas por mujeres inmigrantes desde España (Quantification of remittances sent from Spain by women immigrants) Madrid 2008. Hämtad den 19 april 2009 från <http://www.remesas.org/09cuantificacionmujeres.html>
- National Board of Health and Welfare (2010). Social rapport 2010 (Social Report 2010). National Board of Health and Welfare publication number 2010-3-11.
- Niessen, Jan, Thomas Huddleston and Laura Citron (2007): Migrant Integration Policy Index. British Council and Migration Policy Group, September 2007.
- Niimi, Yoko, Ozden, Caglar and Schiff, Maurice (2008). Remittances and the Brain Drain: Skilled Migrants Do Remit Less. Institute for the Study of Labour (IZA). Discussion Paper No. 3393, mars 2008.
- OECD (2010). „Different concepts of what a developing country is”. Article published on the OECD Internet site. Accessed on 25 October 2010 at [http://www.oecd.org/document/55/0,3343,en\\_2649\\_34447\\_35832055\\_1\\_1\\_1\\_1,00.html#Concepts](http://www.oecd.org/document/55/0,3343,en_2649_34447_35832055_1_1_1_1,00.html#Concepts)
- Okonkwo Osili, Una (2007). Understanding Migrants, Remittances: Evidence from the U.S.-Nigeria Migration Survey. Department of Economics, Indiana University and Purdue University Indianapolis. Accessed at [www.imi.ox.ac.uk/pdfs/una-osili-amw-08](http://www.imi.ox.ac.uk/pdfs/una-osili-amw-08)
- Orozco, Manuel; Lindsay Lowell and Johanna Schneider (2006) Gender-Specific Determinants of Remittances: Differences in Structure and Motivation. Report to the World Bank Group Gender and Development Group, PREM. June 2006.
- Orozco, Manuel (principal researcher) Lindsay Lowell, Micah Bump and Rachel Fedewa (2005): Transnational Engagement, Remittances and Their Relationship to Development in Latin America and the Caribbean. Institute for the Study of International Migration, Georgetown University. Accessed on 25 September 2010 at <http://www.thedialogue.org/PublicationFiles/Orozco-%20Transnational%20Engagement.pdf>
- Page, John and Sonia Plaza (2006) Migration remittances and development: A review of global evidence. *Journal of African Economies*, 15, 245-336.
- Pelling, Lisa (2009). Remitteringar från Sverige. Global Utmaning.
- Pelling, Lisa (2010). Transnationella band : en fallstudie om remitteringar från Sverige. Global Utmaning.
- Rapoport, Hillel and Docquier, Frédéric (2005). The Economics of Migrants, Remittances. IZA Discussion Paper No. 1531. Available at SSRN: <http://ssrn.com/abstract=690144>
- Ratha, Dilip, Sanket Mohapatra and Ani Silwal (2010). Migration and Development Brief 12 : Outlook for Remittance Flows 2010-11: Remittance flows to developing countries remained resilient in 2009, expected to recover during 2010-11. Published April 23, 2010. Migration and Remittances Team, Development Prospects Group, World Bank.
- Ratha, Dilip and Zhimei Xu (2009). Migration and Remittances Handbook Data Notes, Migration and Remittances Team, Development Prospects Group, World Bank.
- Ratha, Dilip, Sanket Mohapatra and Ani Silwal (2009). Migration and Development Brief 11: Migration and Remittance Trends 2009. Migration and Remittances Team, Development Prospects Group, World Bank.
- Ratha, D., Mohapatra, S., & Xu, Z. (2008). Outlook for Remittance Flows 2008-2010: Growth expected to moderate significantly, but flows to remain resilient, *Migration and Development Brief* (pp. 1-14). Washington: Migration and Remittances Team, Development Prospects Group, World Bank.
- Ratha, D., Mohapatra, S., Vijayalakshmi, K. M., & Xu, Z. (2007). Remittance Trends 2007. In M. a. R. T. Development Prospects Group (Ed.): World Bank.
- Statistics Sweden (2010). Statistical database : Foreign-born persons in Sweden by country of birth, age and sex. Year 2000-2008. Updated 2009-02-17.
- Statistics Sweden (2009). Household Income : Description of the Statistics (Hushållens ekonomi (HEK) : Beskrivning av statistik-en). HE0103 Ida Forsgren, 2009-02-19. Also available at [http://www.scb.se/Pages/DataCollectionProductInfo\\_\\_\\_\\_259791.aspx?PageID=97611andSelectedTab=1](http://www.scb.se/Pages/DataCollectionProductInfo____259791.aspx?PageID=97611andSelectedTab=1)
- Stryjan, Miri (2007). Att skicka pengar till hemlandet: En studie av remitteringsmotiv bland somaliländare i Sverige. Stockholms universitet: Nationalekonomiska institutionen.
- Ulku, Hulya (2010). Remitting Behaviour of Turkish Migrants: Evidence from Household Data in Germany. Brooks World Poverty Institute Working Paper No. 115. Available at SSRN: <http://ssrn.com/abstract=1599101>
- UNDP (2009). Human Development Report: Overcoming barriers: Human mobility and development. UNDP.
- U.S. Census Bureau (2009). American Community Survey Design and Methodology Report. Accession on November 24 2010 at [http://www.census.gov/acs/www/methodology/methodology\\_main/](http://www.census.gov/acs/www/methodology/methodology_main/)
- Vadean, Florin (2007). Citizenship Status and Remittances: Evidence from German Micro Data. SSRN Working Paper Series.
- Vogel, Joachim (2001). ‚The Swedish System of Official Social Surveys’ in F. Kraus and G. Schmaus (eds) (2001). Official Social Surveys in Europe : Towards a European System of Social Reporting and Welfare Measurement. EuReporting Working Paper No. 27. Mannheim 2001.
- Taylor, J. Edward (2000). ‚Do Government Programs ‚Crowd in’ Remittances?’ Study published by the Tomas Rivera Policy Institute and the Inter-American Dialogue. January 1, 2000
- World Bank (2006). Global Economic Prospects: Economic Implications of Remittances and Migration. World Bank.



# Remittances from Sweden

AN EXPLORATION OF SWEDISH SURVEY DATA

## Abstract

The present study explores data on transfers of gifts/economic support to relatives from a recent Swedish Household Income Survey (HEK) compiled by *Statistics Sweden*. It provides the first analysis of demographic determinants of remittances from Sweden based on official household survey and register data. By exploring a data set that also includes non-migrant households, it presents a unique comparison of patterns of gift-giving and intra-family support between migrant and non-migrant households.

We argue that data from the Household Income Survey can be used to obtain an empirically based estimation of the determinants of remittances from Sweden. According to our results, the flows of remittances to developing countries from Sweden appear to be relatively small in comparison with remittance flows from other developed countries. The article analyses these transfers of gifts/economic support in relation to different kinds of income, education, age, time since migration, acquisition of citizenship and family situation.

Analyses are made for three types of country groups: developing countries, non-developing countries and Sweden. Whereas the general propensity to give economic support to relatives is similar among native Swedes and migrants from developing and non-developing countries, the patterns of gift-giving and intra-family economic support differ significantly over the life course between individuals from different country groups. Native Swedes tend to give gifts and economic support to relatives at higher ages and when they have adult children who have moved away from home. Migrants from developing countries tend to be younger and have children living at home. The propensity of native Swedes to remit increases with increasing income. Among migrants born in developing countries, other factors than income seem to be more decisive for the propensity to remit. Diverging patterns of remittances between migrants from developing countries and the other groups indicate that remittances are strongly related to phases in the individual life course that vary with the individual migration history.

**Key words:** remittances, intra-family transfers, life course

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