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Sending Money Abroad – What Determines Migrants' Remittances?

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Sending Money Abroad - What Determines Migrants' Remittances?

Elke Holst & Mechthild Schrooten

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Abstract:

Migrants' remittances are the subject of this study which is based on German SOEP data. Major findings are: income only partly explains remittances. Altruism, integration and the pressure for return migration plays a major role. (35 words)

1. Introduction

In 2004, remittances from Germany amounted to more than five billion euro, making Germany one of the top ten countries worldwide. Given the huge sums of money in question and the equally significant potential economic impacts, remittances are currently considered to be the driving force behind migration (World Bank 2005, IMF 2005).

While Germany is one of the major immigration countries in the European Union only a few studies analyze the determinants of remittances from Germany; these studies mainly concentrate on 1980s and 1990s (Merkle/Zimmermann 1992; Oser 1995). Nevertheless, during the last decade, migration and integration policy has changed tremendously in Germany. On the one hand, new legal regulations concerning the acquisition of German citizenship ("naturalization") have been introduced. On the other, new migration patterns have emerged due to various factors including the end of Socialism, the opening of borders, the migration of Ethnic Germans ("(Spaet-)Aussiedler" ², the Balkan war and the increasing

² "(Spaet-)Aussiedler" are ethnic Germans born in mostly in Eastern Europe who want to migrate to Germany. People belonging to this group who immigrated after 1992 are called "Spaetaussiedler". "Aussiedler" and "Spaetaussiedler" acquire German citizenship upon entering the country.

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¹ The legal framework changed on January 1, 2000.

integration within the European Union.

This study addresses remittance behavior in Germany in the new institutional framework. According to the existing theoretical models on remittances, household size and years in the hosting country affect remittances negatively in models based on altruism and positively in the case of those focusing on investment motives; other variables as for example income are considered to have the same sign (Rapoport/Docquier 2005). However, we have to bear in mind that economic models on altruism only consider income-conditional forms of this behavior; pure altruism would occur, if remittances are independent from the relative income situation of the migrant. In this study, we define migrants as persons who did not receive the German citizenship at birth; using this definition, foreigners are only a sub-group. The following core questions are raised: Can we find evidence for altruism or investment motives? Are migrants a homogenous group concerning their remittance behavior? What is the role of integration and the legal framework? Since migration is often discussed in the context of social transfers in the host country, we also investigate whether the amount of remittances is influenced by social situation of migrant.

2. Data and Empirical Results

The German Socio-Economic Panel Study (SOEP) provides data on households and individuals (SOEP Group 2001).³ In our analysis we use retrospective data from the year 2004 on the individual level.⁴ The dependent variable is "remittances", defined as migrants' cross-border transfers. Our sample includes 2,608 observations. Based on the relevant arguments from the literature (Cox 1987, Poirine 1997, Stark/Wang 2002) the explanatory variables are reflecting personal characteristics, the social and the migration status as well integration into the German society. In a first step we analyze the remittance behavior of all migrants, including naturalized persons. In the second step we focus on those without German citizenship (foreigners).

³ See Burkhauser et al. 1997 for a description of the different immigrants in Germany and in SOEP.

⁴ For details see: http://www.diw.de/deutsch/sop/service/fragen/fr2004/personen_en_2004.pdf

Our main findings are: first, there is evidence that altruism as well as the integration into the German society matters. Second, migrants living in Germany are not a homogenous group concerning their remittance behavior. In detail: Focusing on all persons with migration background (table 1, column a) remittances increase with marriage, years of education, and employment, and in a non-linear fashion with the age of the migrant. Females remit significantly less than males. Turning now to the group of foreigners (column b) reveals that all these variables have the same sign as in the case of migrants, however, many of them are now not longer significant. According to our results, remittances of foreigners are significantly positively linked to the age; in contrast to previous studies we report a linear effect of the age.⁵

Taking a closer look to the social situation, we cannot find a general correspondence between the amount of remittances and income. However, migrants belonging to the lowest two income categories remit significantly less than those in the highest income category. In the case of foreigners only people belonging to lowest income category remit significantly less than those of the highest. This relative weak explanatory power of the income variable, especially in the case of foreigners, supports the hypothesis that unconditional altruism may play an important role. This idea is supported by the fact that the source of income source only partly matters: Receiving social welfare or unemployment benefits, both variables indicating a less favorable social situation of the migrant, has no significant effect on the amount of remittances. However, being employed for at least one month of the year leads to significantly higher remittances.

The migration status matters. Taking the broader group of migrants into account we find that people from former Yugoslavia als well as the "(Spaet)"-Aussiedler

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⁵ At a glance this might be due to relatively lower number of observations. While the remittance behavior of migrants is analyzed on the basis of 2,608 observations, the number of observations on foreigners is only 983. However, studies of remittance behavior in the 80s and early 90s operate on the basis of an even lower number of observations (Merkle/Zimmermann 1992; Oser 1995). Since they report a significance of many of these variables, such as owning real estate and the insignificance of others, like the years in Germany, these differences might also indicate a shift in the determinants of these cross-border transfers.

⁶ Income is imputed in case of item-non-response. See for the method of the provided data Frick/Grabka (2005).

remit significantly more than others. One explanation could be that former Yugoslavian experienced during the war the importance of a cross-border family network in a specific way; this would be in line with theoretical considerations on altruism and intra-family contracting. But since these people are also facing a comparable high pressure for return migration, remittances out of a personal investment motive are rational. Focusing on foreigners, not only people from former Yugoslavia but also those with a passport form Turkey remit significantly more than others.

Concerning integration indicators it can be shown that the household size in Germany as well as the fact of owning real estate in Germany – both reflecting a higher degree of integration into the German economy – have a significant negative impact on remittances of migrants. In addition, in the case of foreigners the years spent in Germany lead to a significant decrease in remittances. Within this group owning real estate as well as the variable capturing the subjective distance to the home country, "visits during the last 2 years" are insignificant.

3. Conclusions

Our results indicate that altruism and integration policy seems to play an important role to explain remittance behavior. Since the income variable is only in the case of the lower income groups significant the results suggest that there is room for a further investigation of different forms of altruism (Fehr/Schmidt 2005). In this context, a longitudinal study of remittance behavior would be natural extension of the present paper. In addition, deeper investigation of the potential motivations of migrants might be possible using the tools of experimental economics to get further insights to the linkage between income and remittances. In general, the link between altruism, remittances and the institutional framework for migration shows one potentially interesting direction for future research.

References

- Burkhauser, R. V., M. Kreyenfeld and G. G. Wagner (1997). The German Socio-Economic Panel - A Representative Sample of Reunifed Germany and its Parts. *Vierteljahrshefte zur Wirtschaftsforschung*, 66(1): 5-12.
- Cox, D. (1987). Motives of private transfers, *Journal of Political Economy*, 95(3): 503-46.
- Fehr, E. and K. M. Schmidt (2005). The Economics of Fairness, Reciprocity and Altruism Experimental Evidence and New Theories. Department of Economics, University of Munich Volkswirtschaftliche Fakultät Ludwig-Maximilians-Universität München, Discussion paper 2005-20. Online at http://epub.ub.uni-muenchen.de
- Frick, J. and M. Grabka (2005). Item-non-response on income questions in panel surveys: Incidence, imputation and the impact on the income distribution. *Allgemeines Statistisches Archiv (ASTA)* 89: 49-61.
- IMF (2005): World Economic Outlook. Washington D.C.
- Merkle, L. and K. F. Zimmermann (1992). Savings, remittances, and return migration. *Economics Letter* 38: 77-81.
- Oser, U. (1995). Remittances of Guest Workers to their Home Countries: An Econometric Analysis. Diskussionspapier Nr. 25, Konstanz: Universität Konstanz, Fakultät für Wirtschaftswissenschaften und Statistik.
- Poirine, B. (1997). A Theory of Remittances as an Implicit Familiy Loan Arrangement. *World Development* 25 (4): 589-611.
- Rapoport, H. and F. Docquier (2005). The Economics of Migrants' Remittances. IZA Discussionpaper 1531.
- SOEP Group (2001): The German Socio-Economic Panel (GSOEP) after more than 15 years Overview. In: Elke Holst, Dean R. Lillard und Thomas A. DiPrete (Hg.): Proceedings of the 2000 Fourth International Conference of German Socio-Economic Panel Study Users (GSOEP2000), Vierteljahrshefte zur Wirtschaftsforschung, 70 (1): 7-14.

- Stark, O. (1995). Altruism and Beyond. MIT Press, Cambridge, MA.
- Stark, O. and Y.Q. Wang (2002). Migration dynamics. *Economic Letters*, 76(2): 159-164.
- World Bank (2005): Global Economic Perspectives. Economic Implications of Migration and Remittances. Washington D.C.

Table 1: Determinants of the amount of remittances – Tobit

	Migrants	Foreigners
	(a)	(b)
Personal status		
Age	222.851	283.498
	(3.27)***	(1.70)*
Age squared	-2.087	-2.608
	(2.95)***	(1.52)
Female (yes = 1)	-571.808	-836.523
	(2.03)**	(1.57)
Married (yes $= 1$)	1,434.672	1,134.691
	(3.59)***	(1.42)
Education (in years)	207.402	97.387
	(3.88)***	(0.99)
Social status		
Employed (yes $= 1$)	865.054	1,205.727
	(2.29)**	(1.80)*
Social assistance (yes $= 1$)	-1,107.066	-897.701
	(1.22)	(0.49)
Unemployed (yes $= 1$)	-572.857	-483.488
	(1.19)	(0.55)
Income less than 900 euro $(yes = 1)^1$	-1,105.612	-2,027.970
	(2.37)**	(2.30)**
Income 900 to less than 1200 euro (yes = 1) ¹	-813.366	-364.535
	(1.93)*	(0.50)
Income 1200 to less than $1600 \text{ euro (yes} = 1)^{1}$	-417.303	-843.852
	(1.14)	(1.22)
Income imputation control variable	-468.309	-1,650.241
	(0.63)	(1.03)
Migration status		
Turkish (yes $= 1$)	670.034	1,355.681
	(1.56)	(2.03)**
Former Yugoslavian (yes = 1)	1,957.735	2,740.433
	(4.44)***	(4.08)***
"(Spaet-)Aussiedler" (yes = 1)	522.553	
	(1.50)	
Integration	,	
Household size	-260.111	-693.197
	(2.20)**	(2.82)***
Real estate owner (yes=1)	-663.054	-621.054
, , , , , , , , , , , , , , , , , , ,	(2.06)**	(1.00)
Years in Germany	(=.00)	-101.897
- care in Comming		(3.26)***
Visits at home in the last 2 years (yes = 1)		1,096.995
visits at nome in the last 2 years (yes = 1)		
		(1.11)

Constant	-12,569.975	-10,580.711	
	(7.04)***	(2.57)**	
N	2602	983	
Pseudo R ²	-3017.35	-1307.00	
LL	0.02	0.03	

t values in brackets; *** p<0.01, ** p<0.05, * p<0.1.

Source: SOEP 2004. own calculations.

 $^{^{1}}$ Income 1600 euro and more (yes = 0).

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