

Oded Stark

Number

Reasons for Remitting

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Phone: +49-228-73-1861 Fax: +49-228-73-1869 E-Mail: zef@uni-bonn.de

http://www.zef.de

The author:

Oded Stark, Universities of Bonn, Klagenfurt, and Vienna; Warsaw University; Warsaw School of Economics

Contact: ostark@uni-bonn.de

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Abstract

This paper presents a set of reflections on what gives rise to remittances, which constitute a major part of the impact of migration on economic development in the migrants' own countries. The collage of reasons presented serves to illustrate that remittance behavior is the outcome of an intricate interplay between the preferences and interests of migrants and their families.

Kurzfassung

Diese Arbeit stellt eine Reihe von Überlegungen zu Geldüberweisungen von Migranten aus dem Ausland dar, welche wichtige Auswirkungen auf die wirtschaftliche Entwicklung der Herkunftsländer der Migranten haben. Die hier präsentierte Sammlung von Gründen illustriert, dass sich die Einstellung der Migranten zu Geldüberweisungen aus einem vielschichtigen Wechselspiel der Präferenzen und Interessen zwischen Migranten und ihren Familien ergibt.

1 A mutual risk-sharing rationale for migration and remittances

Consider the following example. Suppose that a two-member family residing in a village faces two states of nature: good and bad. In a good year each of the two members produces 150 units, in a bad year 50. Half the years are good and half are bad, and whether a year is good or bad is completely random. The probability that a year is good, or bad, is $\frac{1}{2}$. There are no capital markets, and output is perishable. In half the years (the good years) the family's total income (consumption) is 300, in the other half (the bad years) it is 100. Think of consumption of 100 per member as being an adequate consumption level, and of 50 being very inadequate. Aversion to risk implies that having 200 in each and every year is preferable, but the family cannot possibly achieve the inter-year zero income variance sequence. Suppose next that an employment opportunity opens up in the city that provides an income of 150 in a good year and 50 in a bad year; and suppose that a bad year in the village coincides with a good year in the city, and vice versa. The family decides that one member, say the husband, will migrate to the city and that, regardless of which situation prevails the two spouses will pool their incomes and share them equally. The family's income variance is thereby completely eliminated. The family's pooled income will always be 200, ensuring a per-member consumption of 100 each and every year. (Had both members migrated, this benefit of migration would have been lost. The only way of securing the favorable zero income variance outcome is to have one of the members migrate while the other stays put.) It is worth noting that migration takes place even though the expected wage differential that the migrant faces is $\frac{1}{2} \cdot 150 + \frac{1}{2} \cdot 50 - (\frac{1}{2} \cdot 50 + \frac{1}{2} \cdot 150) = 0$, so the household's expected income gain from migration (remittances sent by the migrant less remittances sent to the migrant) is zero. A model that will draw on the premise that a positive expected income gain is the fundamental precondition for migration would wrongly conclude that there is no benefit from migrating in this case. 1 Kurosaki (2006) shows that in the North-

¹ The argument that "Migrants ... incur risks to find work in another country" (Ratha, 2005) fails to recognize that the family as a composite entity can reduce its overall income risk even if the migrant family member faces a higher

West Frontier Province, Pakistan, the ability to cope with negative income shocks is lower for households that do not receive remittances regularly.

2 Remittances aimed at diversifying the migrant's income portfolio

Just as a family may want to use migration by a family member as a means of diversifying its income portfolio, a migrant may want to diversify the portfolio of his hard-earned migration income. The migrant may want to maximize the returns to his savings, an outcome which in turn could be brought about by spreading his savings between destination and origin, so that in the context of origin the migrant uses his family as intermediary or agent, paying the family for making and managing his origin-located investment with remittances. Stark and Lucas (1988) show how in Botswana migrants to South African mines remit so that their families can purchase for them and tend to cattle, a major form of asset holding and wealth in Botswana.

3 Remittances aimed at reducing precautionary savings by the family

The paucity of devices for smoothing out consumption to cope with income shocks compels households to resort to unproductive precautionary saving such as grain storage. This is costly as it reduces the capacity of households to channel resources to productive ends such as human capital investment. Remittance, and remittances as a signal that funds will flow in to enable households to cope with unexpected adverse income shocks, relieve households of the need to save as a precaution. The migrant remits not only to buy insurance and not only to provide insurance, but also to substitute for a costly form of insurance. "In China, the improved

income risk, as long as the income of the family and the income of the family migrant member are less positively correlated than they would have been if he had not migrated.

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ability to cope with risk that accompanied the expansion of migrant networks during the 1990s had a significant impact on precautionary behavior. With employment in the migrant labor market and the prospect of an additional means of coping with unexpected shocks, both poor and non-poor households engage in less saving as a hedge against consumption risk" (Giles and Yoo, 2007).

4 Remittances aimed at purchasing insurance from the family

The numerical example in section 1 serves to demonstrate how and why a migrant who is subject to income variation gains from pooling and sharing income with his family. It also suggests that over time the migrant's remittances to his family constitute both an insurance payment to the family in case it experiences income shortfalls, *and* payment of an insurance premium towards future income transfers from the family (Amuedo-Dorantes and Pozo, 2006) or towards other insurance-type future services. For example, the household in the village might serve as a refuge for the migrant in the event of illness or other misfortune (Fletcher, 1999). More vulnerable migrants appear to remit more than less vulnerable migrants: "Illegal migrants [in the U.S.] appear to be more likely than legal migrants to send remittances to family members in Mexico" (Hanson, 2006).

5 Remittances as an element in an implicit migrant-family contractual agreement

An insightful way of conceptualizing the relationship between a migrant and his family is to view the relationship as an implicit self-enforcing intertemporal contractual arrangement (Stark, 1983). Transfer of remittances is an element in this contractual arrangement. Usually, the migrant and his family can benefit from several Pareto-optimal contractual arrangements between them. This multiplicity naturally gives rise to an indeterminacy problem which is solved through a bargaining process between the parties. The contractual arrangement to which the

parties converge specifies the migrant-to-family remittances. The chosen contractual arrangement reflects the relative bargaining power of the parties. Variables that impinge on these powers bear on remittances. It follows then that the factors that determine remittances go beyond the migrant's earnings and the family's needs. For example, a variable that enhances the bargaining power of the family, such as a volatile destination labor market, increases the migrant's need for family-supplied insurance, weakens the migrant's bargaining power, and increases his remittances.

6 Altruism, relative deprivation, and the value of remittances

Altruistic migrants will remit more the poorer (in an absolute income sense) their family. But altruistic migrants may well consider other attributes of their family's fortune in assessing the returns to their remittances. Suppose that the family is quite concerned about its relative income position at origin. Then, the more that position is elevated on receipt of a given amount of remittances, the greater the value the migrant will attach to remittances. This could in turn induce the migrant to remit more. To illustrate: suppose that the village income distribution is (5, 15, 20, 22, 24, 25) and that the migrant wants to assess the value of remitting 10 units of income to his family, which currently earns 15. The migrant sees that upon receipt of the remittances the family will rise to the top rank, eliminating all rank deprivation. If, however, the village income distribution is (5, 15, 31, 35, 36, 38) the rank gain conferred by the transfer of 10 units will be zero. Thus, controlling for the family's (absolute) income, the value of the remittances to the family, and consequently their magnitude, could well be affected by relative income considerations. Stark and Taylor (1989, 1991) show how the concern for relative deprivation in rural Mexico impacts on migration behavior and remittance outcomes. Azam and Gubert (2005), who study the Kayes region in western Mali, show that migrants internalize the effect of their transfers on the social prestige of their clan.

7 Remittances as a "purchaser" of gratitude

When two migrants who care about their families to the same extent come from families with different income levels, and when the migrant whose family is poorer is observed to remit more than the migrant whose family is less poor, altruism is not necessarily at work; in fact, it could be quite the opposite. The poorer family receives more because its gratitude will be greater. And migrants value the ensuing gratitude. In terms of "gratitude productivity" a dollar remitted to a poor family is more valuable than a dollar remitted to a less poor family. Consequently, more will be remitted to a poorer family. This variation is caused not by (variation in) altruism towards the families that stay behind but rather by self interest in eliciting, or in acquiring, gratitude (Stark and Falk, 1998).

8 Remittances as a status-enhancing device

If the migrant comes from a low-status family, and if status at origin matters to the migrant and his family, remittances can be utilized as a status-elevating device. This consideration could affect both the disposition and the distribution of remittances. To the extent that elevated status hinges on a visible signal, a new house could well fit the bill. One reason why migrants' remittances are so often channeled into improved housing is that a superior house is an unequivocal measure, or statement, of status-yielding success, suggesting that the incentive to migrate in the first place was to acquire higher status. There are public displays that typically merit or confer higher status: financing the building or renovation of a church, or lavish celebration of a festival. The distribution of remittances between private and public usages will then depend on the status elasticity of the various projects or dispositions. ²

² Concerns that families at origin might spend irresponsibly on conspicuous consumption the hard-earned remittances sent to them by a migrant family member neglect to admit the possibility that the status-conferring repercussions of the spending were the very purpose of and reason for remitting.

9 Strategic remittances

When information on the individual skill level of migrant workers is unknown to employers at destination, all migrant workers in a given occupation or in a given sector of employment receive a wage based on the average product of the group of migrants. Since the high-skill workers would benefit from dissuading the low-skill workers from migrating, they should be willing to make a transfer to the low-skill workers to induce them to stay put. In Stark (1999) the conditions under which such transfers will be made were spelled out and their precise magnitude was determined. Migrants who remit to non-migrants are thus motivated not by altruistic considerations but rather by pure self-interest: remittances protect the wage of high-skill workers from being "contaminated" by the presence of low-skill workers in the same pool.

10 Migrants remit because they are induced to remit

The motives that prompt migrants to remit have long been studied, especially following the work of Stark (1983), Lucas and Stark (1985), and Stark and Lucas (1988) who spanned the range of motives for remitting from pure altruism to pure self interest, elucidating points in the spectrum falling between the two extremes. The motives of the family staying behind for inducing migrants to remit have not been studied closely. On the one hand, it is not at all obvious that the family will want to maximize the amount of remittances; assuming that the family is altruistic towards its migrant member, the family may want him to enjoy a standard of living above that which would be afforded if the migrant were to remit the maximum amount, thereby living in misery. On the other hand, the family that stays behind may pressure the migrant member to remit because if he does not, other families might well fail in their future use of migration by a family member as an income-enhancing strategy. Thus, it is these other families' threat of social sanctions against a family with a "deviant" migrant member that compels the family to pressure its migrant member to reform his ways and to remit (González-König, 2005).

11 Migrants remit because they are conditioned to remit

The choice of family migrant is influenced by the propensity to remit, which may be more important than who is likelier to secure a higher destination wage. For example if, as migrants, sons can earn more than daughters but daughters are considered more reliable remitters than sons, the family may choose a daughter to act as a migrant rather than a son. Lauby and Stark (1988) have shown that this is how families in the Philippines behave. Put differently, if children are differentially inclined to sense guilt should they fail to remit, the potentially guiltier child will be the preferred remitter.

12 Remittances and inheritance

In its choice of migrant, the family may be affected also by the prevailing rules of inheritance. Consider a setting in which inheritance is governed by primogeniture - the exclusive right of the eldest son to the family's farm. As migrants, second and later children will not be motivated to remit by an aspiration to inherit. In contrast, as a migrant, the eldest son will be encouraged to remit since his transfers will be invested in the family's farm and such transfers, in turn, will serve to boost the value of his inheritance. The interaction between migration, remittances, and the rules and customs that shape bequest behavior constitutes a fertile research topic.

13 How to infer on the reasons for remitting from the erosion of remittances

The decline over time of remittance flows need not be interpreted as a gradual erosion of altruism - an "out of sight, out of mind" effect. It is possible that on a schedule of declining marginal gains from remittance outflows, migrants reach the point at which the marginal gain from a dollar remitted is equal to the marginal gain from a dollar retained (and invested at destination). Hence, the optimization of investment returns, not the erosion of altruism, may account for the decline in remittances. Using data for Egypt, El-Sakka and McNabb (1999) find that the difference between domestic and foreign interest rates has a negative and significant impact on the inflow of remittances through official channels; when migrants are better off keeping their savings abroad or investing them in higher-return foreign-exchange denominated assets, they do so.

In light of the complexity of remittance behavior, it stands to reason that other "decaying" explanations are possible as well. Suppose that a family's first migrant sends home \$500 per month, and that after a few years he sponsors the migration of another family member. The new migrant sends home \$400 per month, and the first migrant reduces his remittance contribution to \$300. The simple correlation between the first migrant's remittances and time away is negative. Is this a case of "decaying of remittances?" It could be argued that part of the first migrant's contribution to the household is reflected in the remittances of the other family member who would not have migrated without the first migrant's help. (The first migrant's assistance to the second migrant could assume diverse forms, from helping to finance the second migrant's trip to facilitating his job search, supporting the second migrant until he is employed, or simply being of help to the second migrant in the event of illness or unemployment, and, should such a misfortune befall the second migrant, substituting for the second migrant's remittances by sending home additional funds.) In this, perhaps not all that unlikely scenario, although remittances from the first migrant decrease over time, total remittances to the household increase. The simple correlation between remittances and time away in the case of the

first migrant misses this optimistic twist on what is usually portrayed as a pessimistic "remittance erosion" tale.

Another optimistic explanation for the erosion of remittances comes to mind. Suppose that the original aim of remitting was to achieve a specific investment objective in the village - say, setting the migrant's parents up as shopkeepers in order to secure for them a steady stream of income in the future. The diminution of remittances in this case reflects the migrant's and parents' success in accomplishing their objective. Like the second migrant in the preceding example, the new flow of profits from the store represents a contribution by the migrant to the parents' economic well-being.

14 How to infer on the reasons for remitting from remittances coming to a halt

An obvious but overlooked explanation for migrant-to-household remittances coming to a halt is the reunion of migrants with their households in general, and return migration in particular. Disregard for this explanation could lead to exceptionally wrong inferences about the relationship between the role of remittances in the alleviation of poverty and the very motive for migration. One reason for a migrant's return is a severe adverse shock to the livelihood of his household back home. Even if continued work at the migration destination and the consequent transfer of remittances will help a stricken household, migrants and their households may consider it beneficial, at a time of extreme misfortune (hurricane, earthquake), for the migrant to be at home, especially when labor to repair serious damage cannot be hired locally. This could explain the seemingly paradoxical return migration to El Salvador in the wake of the devastating earthquake of 2001.³ If, out of a group of 10 migrants, each of those who stay increases his remittances by 25 percent while three return, the overall result will be a decline in the group's remittances. Yet it would be a mistake to conclude that the household's demand for insurance is not the motive for "appointing" members as migrants. Halliday (2006) presents evidence that

³ While the perception that remittance are "countercyclical" - they tend to rise after "a ... natural disaster ... as migrants transfer more funds during hard times to help their families" (Ratha, 2005) - is in line with the risk-

while agricultural shocks in El Salvador increased remittances from migrants in the United States and dampened their incentive to return, earthquakes in El Salvador in early 2001 prompted migrants to return home to help their families recover from the effects of the disaster. It is as if mild misfortunes pull remittances in, while drastic upheavals pull the remitters in.

It goes without saying that remittances could well come to a halt (or decline) if, in the wake of an extreme misfortune, migrants' households (or members of their households) join the migrants. The migrants' remittances to those household members will vanish, but this must not be interpreted as evidence of an insurance failure, either. Indeed, family reunification at destination may offer a plausible explanation for what might appear to be a decreasing inclination over time to share migrant earnings with others via remittances. Poirine (1997) vividly shows that migrants from Tonga and Western Samoa (South Pacific Islands) exhibit a declining time profile of remittances when relatives join them in the host country.

alleviating role of remittances, it is not in line with the possible behavior of migrants in the event of a major calamity described above.

15 Conclusion

The reason why the reasons for remitting are so very interesting is that, in a fundamental sense, remittances are a puzzle: they constitute transfers between entities that have separated and are distanced from each other, often by thousands of miles; they are neither mandated nor enforceable by the legal power of the state (or states); and it appears that the mere force of intrafamilial altruism cannot account for their intensity and variability. The explanations considered in this paper serve two purposes: they span the rich spectrum of the reasons for remitting, and they suggest that research on remittances is evolving and anything but dated.

References

- Amuedo-Dorantes, Catalina and Pozo, Susan. 2006. "Remittances as Insurance: Evidence from Mexican Immigrants," *Journal of Population Economics*, Vol. 19, 227-254.
- Azam, Jean-Paul and Gubert, Flore. 2005. "Those in Kayes: The Impact of Remittances on Their Recipients in Africa," *Revue Economique*, Vol. 56, 1331-1358.
- El-Sakka, Mohammed I.T. and McNabb, Robert. 1999. "The Macroeconomic Determinants of Emigrant Remittances," *World Development*, Vol. 27, 1493-1502.
- Fletcher, Peri. 1999. La Casa de mis Sueños Dreams of Home in a Transnational Migrant Community. Boulder, CO: Westview Press.
- Giles, John and Yoo, Kyeongwon. 2007. "Precautionary Behavior, Migrant Networks and Household Consumption Decisions: An Empirical Analysis Using Household Panel Data from Rural China," *The Review of Economics and Statistics*, Vol. 89, 534-551.
- González-König, Gabriel. 2005. "Remittances as Investment in the Absence of Altruism." Georgetown University, mimeo.
- Halliday, Timothy. 2006. "Migration, Risk, and Liquidity Constraints in El Salvador," *Economic Development and Cultural Change*, Vol. 54, 893-925.
- Hanson, Gordon H. 2006. "Illegal migration from Mexico to the United States," National Bureau of Economic Research, Working Paper 12141, April.
- Kurosaki, Takashi. 2006. "Consumption Vulnerability to Risk in Rural Pakistan," *Journal of Development Studies*, Vol. 42, 70-89.
- Lauby, Jennifer L. and Stark, Oded. 1988. "Individual Migration as a Family Strategy: Young Women in the Philippines," *Population Studies*, Vol. 42, 473-486.
- Lucas, Robert E.B. and Stark, Oded. 1985. "Motivations to Remit," *Journal of Political Economy*, Vol. 93, 901-918.
- Poirine, Bernard. 1997. "A Theory of Remittances as an Implicit Family Loan Arrangement," *World Development*, Vol. 25, 589-611.

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- Ratha, Dilip. 2005. "Remittances: A Lifeline for Development." *Finance and Development*, Vol. 42.
- Stark, Oded. 1983. "Towards a Theory of Remittances in LDCs," Harvard Institute of Economic Research Discussion Paper 971, March.
- Stark, Oded. 1999. Altruism and Beyond: An Economic Analysis of Transfers and Exchanges Within Families and Groups. Cambridge: Cambridge University Press.
- Stark, Oded and Falk, Ita. 1998. "Transfers, Empathy Formation, and Reverse Transfers," *The American Economic Review*, Vol. 88, 271-276.
- Stark, Oded and Lucas, Robert E.B. 1988. "Migration, Remittances and the Family," *Economic Development and Cultural Change*, Vol. 36, 465-481.
- Stark, Oded and Taylor, J. Edward. 1989. "Relative Deprivation and International Migration," *Demography*, Vol. 26, 1-14.
- Stark, Oded and Taylor, J. Edward. 1991. "Migration Incentives, Migration Types: The Role of Relative Deprivation," *The Economic Journal*, Vol. 101, 1163-1178.

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