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To remit, or not to remit: that is the question. A remittance field experiment

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ABSTRACT

We conduct a remittance field experiment among Salvadoran migrants in the metro DC area. Migrants need to decide whether or not to remit funds to a recipient in El Salvador and if so how much. We maintain a (2×2) design in which the remittance budget has a value of \$400 or \$200, and the remitted funds arrive as cash or grocery vouchers that are non-transferable and applicable to basic necessities that do not include alcohol and cigarettes. Each migrant is randomly allocated to one of the resulting four treatments. We test across these treatments whether control over remittance spending in the form of grocery vouchers affects remittance behavior. We find the following. Our quantitative findings suggest that migrants prefer a remittance to arrive as cash than as groceries when stakes are high. This result is robust to inclusion of a wide set of covariates and is consistent with a conceptual framework in which migrants have preferences over how recipients spend remittances. Our qualitative findings suggest that migrants integrate amounts sent in the experiment with the external environment for sending remittances. We explore the mechanisms underlying the main effect and find that migrants who more recently sent a remittance and, in certain specifications, male migrants exhibit a greater preference for cash. Some implications of our findings are discussed.

1. Introduction

Remittance flows form an important source of income and development for many developing countries. The World Bank (2011) estimates that \$325 billion in remittances went to developing countries in 2010, representing close to 75% of total remittance flows. While the impacts of remittances seem to be relatively well understood and there appears to be consensus that remittances promote development (see for example Edwards and Ureta, 2003; Yang, 2006, 2008, 2011; Yang and Choi, 2007, and the references within), the exact drivers of remittance behavior are still being assessed.

The theoretical and empirical literatures on remittance behavior have posited and tested several hypotheses with regard to migrants' motives to remit, including altruism (Lucas and Stark, 1985; Agarwal and Horowitz, 2002), repayment of investment (for example in education, Johnson and Whitelaw, 1974; Faini, 2007), provision of insurance against shocks (de la Brière et al., 2002; Yang and Choi, 2007) and other forms of self interest driven by a search for bequests or esteem if returning home (Hoddinott, 1994; de la Brière et al., 2002; Yang, 2008). Recently, Ashraf et al. (2011), Chin et al. (2011) and Yang (2011) have

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indicated that the migrant's ability to control the use of remitted funds can also be seen as an important driver of remittance decision making.

In this paper we study two related questions: *Does full (relative to no) control over remittance spending affect the amount remitted from a fixed budget and does this effect vary with the size of the budget?* We conduct a remittance field experiment among Salvadoran migrants in the metropolitan DC area. We maintain a (2×2) experimental design in which the migrant's budget available for remittances has a value of $400 (high stakes) or $200 (low stakes) and the remitted funds arrive as grocery vouchers or cash. The grocery vouchers are by name of the remittance recipient, non-transferrable and only usable for basic necessities that do not include alcohol and cigarettes. Thus, they give the migrant full control over how the remitted funds are spent, but in only one dimension, *groceries*. In our experiment, a migrant is randomly allocated to one of the following four treatments: treatment 1, ($400,groceries); treatment 2, ($200,groceries); treatment 3, ($400,cash); and treatment 4, ($200,cash). This enables us to test across treatments 1 and 3 (2 and 4) whether full control over remittance spending on groceries, *specifically, the migrant's ability to control spending on alcohol or cigarettes*, affects the amount remitted.

The ex ante rationale for controlling remittance spending through basic necessities partly stems from evidence suggested by other data which show that migrants have a preference for spending on 'meaningful' items. For example, a survey conducted in 2008 and 2009 on behalf of the Government of El Salvador by IFPRI and FUSADES for evaluating the program Comunidades Solidarias Rurales suggests that migrants desire close to 75% of the remittance budget to be spent on household expenses (de Brauw, 2011).[2] The rationale for excluding alcohol and cigarettes from the coverage of the grocery vouchers is based on anecdotal evidence that migrants dislike remittances being put to unproductive uses, most notably, to purchase sin goods such as alcohol and cigarettes. This seems to be a broader concern in the household expenditure literature particularly when the person spending the money is male, as reported by for example Hoddinott and Haddad (1995) for the Ivory Coast, Ashraf (2009) (and the references within) for the Philippines, and International Organization for Migration (2010) for Moldova.

Our quantitative findings suggest that migrants prefer a remittance to arrive as cash than as groceries when stakes are high ($400), but not when they are low ($200). This result is robust to inclusion of a wide set of covariates (such as the migrant's and the recipient's gender as well as the migrant's risk, time, and social preferences) and is consistent with a conceptual framework in which migrants have preferences over how recipients spend remittances.

Our qualitative findings suggest that migrants integrate amounts sent in the experiment with the external environment for sending remittances. Approximately 80% of migrants report that they base the amount sent in the experiment on their own financial need (relative to the recipient's) and their typical cycle for sending remittances.

When controlling for migrants' qualitative reasons in the quantitative assessment, we find that migrants have an even greater preference for cash (over groceries) at high stakes. We explore the mechanisms underlying this effect and find that migrants who more recently sent a remittance and, in certain specifications, male migrants exhibit a greater preference for cash. The former finding in particular is consistent with a framework in which migrants consider spending on groceries to be a basic necessity that should have priority over other types of spending.

Overall, two potential implications emerge from our results. First, it is important to be able to assess how subjects integrate decisions within an experiment with decisions in the naturally-occurring environment. Second, remittance products should give recipients sufficient spending flexibility. While control over spending may be desirable as suggested by previous literature (and possibly by the null effect at low stakes), migrants have a preference for cash at high stakes. As such, experimentation with remittance products that offer controlled liquidity may be a useful avenue for future research.

The remainder of the paper proceeds as follows. Section 2 explains the hypotheses, experimental design, and empirical strategy. Section 3 discusses the study implementation. Section 4 presents the main findings. Finally, Section 5 concludes and discusses some policy implications.

2. The experiments

Our experiments are designed to study two related questions: *Does full control over remittance spending on groceries (relative to no control) affect the amount remitted from a fixed budget and does this effect vary with the size of the budget?* An alternative way to frame the first question in our setup is to ask *whether the migrant's ability to control spending on goods and services other than groceries, in particular "sin goods" such as alcohol and cigarettes, affects the amount remitted.*

The rationale for these questions comes from an existing literature on intra-household allocations and spending (see for example Thomas, 1990, 1994; Strauss and Thomas, 1995; Udry, 1996, and the references within) that has specific applications in remittance contexts (see for example Lucas and Stark, 1985; de Laat, 2008; Yang, 2011, and the references within). The literature suggests that different actors within a household may have different preferences over household spending. In particular, in a migration context such as ours disagreements may arise between the migrant and the recipient regarding how remittances should be spent. As a result, the migrant's ability to control such spending may affect the amount remitted (see for example Ashraf et al., 2011).

[2] The other spending categories are education, health, business, construction, and any expense. The survey was not representative at the national level, but was mainly focused on rural areas in El Salvador.