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Migrants' Choice of Remittance Channel: Do General Payment Habits Play a Role?

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Summary. — This paper investigates the determinants in migrants' choice of payment channel when transferring money to relatives abroad. We analyze survey results on 501 migrants in the Netherlands, identifying five remittance channels: bank, money transfer operator, in-cash transfers via informal intermediaries, ATM withdrawals abroad, and carrying cash abroad. The results show that education, costs, access, and financial development in the recipient country are important determinants, while general cash preferences and internet banking usage play a limited role. Based on our findings, financial education, cost reduction, and increasing financial inclusion may serve a valuable role to increase the use of formal channels.

Key words — remittances, payment instruments, qualitative choice models

1. INTRODUCTION

In 2012, globally recorded remittance flows to developing countries surpassed USD 400 billion, which is nearly three times the size of global official aid and almost as large as total foreign direct investments (World Bank, 2012). Many studies point to the positive effects of remittances on the local economy of the recipient countries, at both a micro level (Adams & Cuecuecha, 2009) and a macro level (Giuliano & Ruiz-Arranz, 2009). With respect to financial markets, recent studies show that remittances may promote domestic financial development (Demirgüç-Kunt, López Córdova, Martínez Pería, & Woodruff, 2011) and financial liberalization (Beine, Lodigiani, & Vermeulen, 2012). However, other studies show that remittances may also have negative effects. For example, Acosta, Lartey, and Mandelman (2009) show that remittances can lead to a decline in labor supply and a shift in consumption demand toward non-tradables, which can induce the economic phenomenon known as the Dutch disease.

A large body of research documents the reasons for migrants to remit (e.g., Bounie, Diminescu, & François, 2013; Carling, 2008; Rapoport & Docquier, 2006) and the determinants of the amounts remitted (e.g., Bollard, McKenzie, Morten, & Rapoport, 2011; Holst, Schäfer, & Schrooten, 2008). Additionally, awareness of the choice that migrants make when selecting a remittance channel has increased in recent years. This awareness has been partly triggered by the use of informal channels. In fact, the actual value of remittance flows is probably significantly higher than the USD 400 billion mentioned earlier because a large but unknown amount finds its way through unrecorded informal channels. These include savings brought home on return and transfers through unregistered intermediaries.

Despite the potential advantages of informal remittance channels in terms of cost, speed, accessibility, and anonymity (e.g., Kapur, 2004; Pieke, Van Hear, & Lindley, 2005; Siegel, Vanore, Lucas, & de Neubourg, 2010), informal channels have increasingly been debated due to concerns about potential misuse for criminal ends, including money laundering, the financing of terrorism and smuggling.[1] Moreover, with regard to safety and security, informal channels are generally perceived to be more risky because they often rely on informal contracts and entail a higher risk of theft or loss. This is why many authorities try to channel remittances through the formal sector. Moreover, remittances channeled through the formal sector have more potential for promoting economic development by improving the earnings of the domestic financial sector and by increasing resources to finance economic activities. In addition, using formal institutions for remittances may bring individuals and households into contact with other financial services, such as savings, loans, mortgages, and insurances, which may foster economy-wide financial development (e.g., Demirgüç-Kunt *et al.*, 2011).

The use of formal remittance channels is also important and advantageous for the remittance sending country. In fact, central banks often include a "secure, reliable, and efficient payment system" in their mission statement (De Nederlandsche Bank, 2014). This mission does not end at the border and also holds for international transactions. Furthermore, given the potential misuse of informal channels for criminal activities, it is easier and more efficient to target financial supervision policies when informal channels are no longer used by citizens with good intentions.

This paper contributes to the existing literature by empirically examining a broad set of factors explaining migrants' choice of remittance channel. These factors comprise relevant variables as identified by the literature in earlier studies, e.g., characteristics of the transaction, characteristics of the different payment options, characteristics of the migrant, and the economic and institutional environment in both the home and host country.[2] In addition, we empirically assess if migrants' remittance choices correlate with their experiences

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and attitudes regarding payment methods used for daily purchases and bills. Although Barendse, Hiddink, Janszen, and Stavast (2006) and De Luna Martínez *et al.* (2006) argue that a widespread use of cash may negatively affect the use of formal bank channels, empirical evidence supporting this argument is lacking.

Our research approach is as follows: we assess the decision of remitters to select a certain remittance channel, by making a distinction between (i) remittance services offered by banks, (ii) services offered by money transfer operators (MTOs), (iii) in-cash transfers via informal intermediaries, (iv) ATM cash withdrawals abroad, and (v) carrying cash when traveling back home. To this end, we use a unique dataset collected among more than 500 remitting migrants residing in the Netherlands. The relevance of this work is to shed light on the role of the various formal and informal remittance channels and on the drivers and possible barriers of using particular channels. By focusing on the Netherlands, where virtually every person owns a bank account, this paper provides insight into the factors underlying migrants' choices other than having access to the banking system. Moreover, this paper aims to provide policy suggestions on how to increase the use of formal remittance channels that are monitored by supervisors in order to further stimulate the safety, efficiency, and integrity of international remittance transfers.

Overall, we find that higher educated migrants are less likely to transfer cash via informal intermediaries or to carry cash themselves. This may point to a higher awareness of the potential risks of these informal channels, and hence suggests a potential role for financial education when attempting to increase the use of remittance services offered by banks and formal MTOs. We also show that bank transfers are generally preferred for larger remittance amounts, whereas the other channels tend to be used for smaller amounts, which suggests an important role of costs. In fact, further analyses of the remitters' self-stated reasons demonstrate that the use of informal intermediaries is driven strongly by cost considerations. This underlines the fact that reducing the costs of formal services may discourage the use of informal services, especially for small transactions. Moreover, we demonstrate a role of (perceived) ease of use and the degree of urbanization of the migrants' living environment. Overall, bank services are significantly more often used for reasons of convenience and by migrants living in rural areas compared to the other remittance options. This may point to a role of accessibility and availability, and the herewith-associated opportunity costs of remittance options at the sender's side.

Similarly, we show the importance of financial development and financial access in the recipient country. We find that informal intermediary services are often used because the recipient does not have a bank account. Also, we demonstrate that the use of bank services increases with the availability of ATM terminals and the level of GDP in the home country. This suggests that the use of formal channels could be stimulated by improving the financial infrastructure and the level of financial inclusion in the recipient country.

Regarding payment habits, we only find weak relationships between daily payment behavior and remittance payment channel choices. The results suggest that migrants with a strong preference for paying in cash in the Netherlands, seem less likely to use ATM services instead of bringing cash oneself. By contrast, people who frequently use internet banking for other purposes seem more likely to use bank services for remittances.

The paper proceeds as follows: Section 2 presents a selective review of literature relevant to the characteristics and use of remittance channels, while Section 3 provides background information on the Dutch remittances market and the major recipient countries. Section 4 describes the data and empirical methodology, and Section 5 presents the results illustrating the factors determining migrants' choice of remittance channel. Section 6 presents the conclusion and discusses policy implications.

2. CHARACTERISTICS OF AND REASONS TO USE PARTICULAR REMITTANCE CHANNELS

There are several options available for transferring remittances. The literature makes a broad distinction between formal and informal channels. Formal channels constitute services offered by officially registered or exempted entities, such as banks, post offices, and MTOs. Any other remittance services are defined as informal channels. These may be legal, such as physically carrying cash oneself or withdrawing it from an ATM at the country of destination, or illegal, such as services offered by unregistered and unlicensed entities. Given their informal character, actual statistics on the magnitude of informal remittances are lacking. There are a few studies that have tried to empirically estimate it (see Puri and Ritzema (1999) and Freund and Spatafora (2008) for an overview). Freund and Spatafora (2008), for example, use historical data on workers' remittances, as well as information on migration, transaction costs, and various country characteristics, to estimate informal remittance flows for more than 100 countries. They conclude that informal remittances amount to about 35–75% of official remittances to developing countries. The results, however, show large regional differences, with the share of informal flows ranging from 5% in Guatemala to 80% in Uganda. Puri and Ritzema (1999) survey a different set of studies and find similar orders of magnitude, with shares of informal flows ranging from 8% in Korea to 85% in Sudan.

In addition to distinguishing between formal and informal channels, a further distinction can be made between the particular transfer channels used. First, money can be sent formally using a transfer between banks in the sending country and the receiving country. Bank transfers often require the migrant and the recipient to have a bank account and can be initiated using paper-based forms or cheques, online banking services or the phone. Second, remittances can find their way via registered MTOs, which have a wide network of local branches where migrants can collect and send money. Other formal channels include credit unions, SMS, traveler's cheques, money and postal orders, preloaded gift cards, and payment cards that allow for cash withdrawals at an ATM or bank branch abroad.

Among the informal channels, there are several unregistered MTOs active in the market, in particular for payments to countries with low levels of financial development. They are often referred to as "Hawala" or "Hundi" operators. There is evidence of these systems transferring more than tens of billions of dollars globally (Kapur, 2004). The services are typically based on low-cost technologies, such as a fax or a telephone call, and offered in mobile phone shops, travel agencies and groceries. Compared to bank and official MTO transfers, these unregistered transfers are relatively anonymous, fast, and inexpensive (Siegel *et al.*, 2010). Migrants may also send remittances by physically hand-carrying the money. This may be done by the migrants themselves when visiting or returning to the recipient country, or by a third person, such as a friend, a family member, or a trusted agent. Alternatively,