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Remittances, Bonds and Bridges: Remittances and Social Capital in Burundi

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ABSTRACT *This study explores the effects of remittances on households' structural social capital in urban Burundi. Distinctions are made between bonding and bridging social capital, referring to intra- versus inter-network ties of family members and friends. The results demonstrate that remittance-receiving households invest more in bridging social capital by participating in organisations (donating time), but make fewer monetary contributions, compared to non-receiving households. Remittances have mixed effects on bonding social capital: receiving households give significantly less gifts to family members and friends, but are more likely to send internal remittances, compared to non-receivers. The implications of these findings for post-conflict development are discussed.*

1. Introduction

Recent decades have witnessed a rise in micro-level studies examining the impact of remittances on development. Most studies have employed the New Economics of Labour Migration (NELM) approach, in which migration is considered a household strategy to generate income through remittances that a household uses to diversify its income and insure against financial shocks (Stark, 1980; Stark & Bloom, 1985). Remittances would also reduce household liquidity constraints, enabling households to invest, thereby stimulating economic development in remittance-receiving areas (Taylor, 1999). When exploring the effects of remittances on development, most studies have examined economic outcomes such as increased income or expenditures (Adams, 2006), assets and agricultural outputs (Azam & Gubert, 2006), or human capital investments such as schooling (Adams & Cuecuecha, 2010; Amuedo-Dorantes & Pozo, 2010). While prior studies provided important insights, few studies have focused on the relationship between remittances and social development in receiving countries.

In the absence of formal insurance mechanisms, such as those provided by the state, households often rely on informal networks for support. These networks are used to share risks and function as reciprocal insurance mechanisms during periods of hardship (see, for example, Fafchamps, 2003; Fafchamps & Lund, 2003). From an economic perspective, this so-called social capital is an asset based on the assumption that it is fungible, meaning that it can be turned into other forms of capital if needed (Bourdieu, 1986; Woolcock & Narayan, 2000). In unstable settings where economic investment opportunities are limited, households may allocate (part of) their remittances to their social capital (Van Hear, 2002, 2004). By investing in social capital by, for example, participating in community organisations or financially supporting

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family members or friends, remittance-receiving households insure themselves against future risks.

Some studies have touched upon the relationship between remittances and social capital by examining the organisational participation (Caarls, Fransen, & Ruben, 2013), church donations (James, 1997; Kabki, Mazzucato, & Appiah, 2004), funeral participation (Kabki et al., 2004; Mazzucato, Kabki, & Smith, 2006), or gift-giving practices (Gerber & Torosyan, 2010) of remittance-receiving households. These studies provided interesting preliminary insights into the effects of remittances on social relations in remittance-receiving areas. Most studies, however, were small-scale and used single indicators of social capital. Therefore, this paper contributes to the literature on remittances and social development by treating social capital as a multifaceted concept to investigate the link between remittances and social capital in greater detail.

The case study selected for this study is Burundi, a small country in the African Great Lakes Region. Data was collected from 810 households in Burundi's capital, Bujumbura, in 2011, just over five years after the official end of conflict in the country. The data contains information on the households' migration and remittance-receiving histories, as well as their economic well-being and social capital investments, such as participation in organisations, expenditures on religious organisations and gifts to family members and friends. This information allows us to investigate the extent to which remittance-receiving households allocate remittances to their social capital. A distinction is made between bonding and bridging social capital (Putnam, 2000, 2002), which allows an exploration of the extent to which remittance-receiving households invest in social capital that benefits their in-group, as opposed to social capital that crosses social divides. This is especially relevant in a conflict-affected setting, such as Burundi, where decades of conflict have led to social tensions that are considered a risk for renewed conflict. In this paper, the bonding versus bridging social capital distinction is based on networks of family members and friends. These networks have an important insurance function for households in Burundi (Uvin, 2009; Vervisch, Titeca, Vlassenroot, & Braeckman, 2013b).

By exploring the link between remittances and social capital in Burundi, this paper contributes to the remittances and development debate by analysing the effects of remittances on social development in remittance-receiving areas. Remittances used for social capital investments may have spillover effects, strengthening networks and social relations. Such investments may restore social ties and foster reconciliation, especially in conflict-affected settings where social ties have been damaged (Van Hear, 2002, 2004). Investing remittances in social capital may also have economic implications. There is growing evidence that social capital is associated with economic development (see, for example, Fafchamps, 2006; Fukuyama, 2001; Grootaert & Van Bastelaer, 2002; Woolcock, 1998; Woolcock & Narayan, 2000). In conflict-affected states, social capital is considered a prerequisite for post-conflict reconstruction and economic development (Colletta & Cullen, 2000). This paper examines the relationship between remittances and social capital using a unique dataset, which provides an opportunity to explore how households allocate remittances in a conflict-affected context.

2. Theoretical Perspectives on Social Capital and Remittances

2.1 Social Capital and Development

The importance of networks and social relations for development gained increasing recognition in the 1990s (Woolcock & Narayan, 2000). These networks and social relations are conceptualised as social capital, a concept introduced by Bourdieu (1986) and subsequently elaborated on by Coleman (1988, 1990) and Putnam (1995, 2000, 2002). Since its introduction, numerous scholars have attempted to define and operationalise social capital (Portes, 1998, 2000). Social capital is most commonly defined as the 'features of social organisation such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit' (Putnam, 1995, p. 67). Another commonly used definition is 'the norms and networks that enable people to act collectively'

(Woolcock & Narayan, 2000, p. 226). These definitions treat social capital as a communal or societal resource that contributes to the development of these communities or societies.

In this study, social capital is treated as an economic, micro-level concept. This resembles the views of Bourdieu (1986), who regarded social capital as an individual- or household-level resource that can be created and maintained through investments. Social capital provides individuals or households with access to the economic resources of members of their network, enhances their access to information and cultural capital, and increases their access to institutional credit (Portes, 1998). Research has demonstrated that households with higher levels of social capital occupy better socio-economic positions within their communities (Grootaert, 1999; Grootaert, Oh, & Swamy, 2002; Narayan & Pritchett, 1999). Social capital investments are an insurance strategy that reduces vulnerability to shocks, particularly for poorer households that live in unstable environments that offer little institutional protection (Woolcock & Narayan, 2000). Poorer households generally have fewer resources to make social capital investments (Cleaver, 2005; Fafchamps, 2003), but they tend to receive higher returns from social capital than wealthier households (Grootaert, 1999; Grootaert et al., 2002).

2.2 Social Capital and Remittances

In the migration literature, social capital has been identified as an important driver of migration and, consequently, remittances. Households may, for example, facilitate the migration of a household member by relying on finances, information, or physical help derived from their social networks (see, for example, Haug, 2008, for an overview). This paper argues that social capital in remittance-receiving areas may also be affected by remittances, through the social capital investments of remittance-receiving households.

Remittances may affect social capital through three main mechanisms. First, remittances relax the liquidity constraints of receiving households, enabling them to invest the resource from abroad (Taylor, 1999). In unstable settings, such as those affected by conflict, other investment opportunities may be limited or involve high risk, incentivising remittance-receiving households to invest in their social capital (Van Hear, 2002, 2004). Second, remittances increase the income of remittance-receiving households, which may increase their civic engagement. Investing in social capital involves contributions of both resources and time – two goods that are generally more available to wealthier households. The remittance literature has shown that remittance-receiving households generally have higher consumption levels and more leisure time than non-receiving households, because of the income-smoothing function of remittances (Adams, 2011). As described, social capital studies have shown that wealthier households participate more in networks (Fafchamps, 2003, 2006). Remittances may thus increase social capital investments, both in terms of resources and time, by increasing wealth.

Third, households that have migrants abroad may be exposed to different values and norms, which incentivise them to be more civically engaged. Research has shown that so-called ‘conflict-generated diasporas’ (Lyons, 2007, p. 530) are often highly organised and engaged in their home country (see, for example, Lyons, 2007; Mohamoud, 2005; Orjuela, 2008) through lobbying, protesting, participating in development activities, and remittance sending. These norms to be civically engaged may be transferred to relatives and friends residing in the migrant sending country, through social remittances, or ‘the ideas, behaviours, identities, and social capital that flow from receiving- to sending-country communities’ (Levitt, 1998, p. 926), enhancing participation in organisations and other forms of civic engagement among households in the migrant-sending country.

The limited evidence available on the effects of remittances on social capital has shown mixed results. Kabki et al. (2004) demonstrated that remittances in rural Ghana were used for, among other things, church donations. These donations function as investments because churches in Ghana often provide financial support for their members during periods of hardship. Similarly, remittance-receivers in Tonga were found to donate part of their remittances to churches (Brown & Connell, 1993; James, 1997). Putnam (1995) used church membership or affiliation as an example of civic engagement, and such behaviour is frequently used as a social capital indicator (Lochner, Kawachi, & Kennedy, 1999). Research has also revealed remittances being spent on funerals in Ghana (Mazzucato et al., 2006).

Funerals are important social gatherings in Ghana through which attendees create and maintain networks. Migrants residing abroad were found to finance funerals through remittances to reinforce their position in the family and broader networks. Gerber and Torosyan (2010) found that remittance-receiving households in Georgia gave more financial gifts to other households than non-receiving households.

Research on Rwanda, however, has called the previously observed, positive relationship between remittances and social capital into question. In a study by Caarls et al. (2013), remittance receivers were found to participate less in community organisations and reported lower levels of reconciliation than non-receivers. According to the authors, household reliance on remittances reduced motivations to invest in bridging social capital in particular and led to cooperative behaviour that only benefitted their own group. Remittances allowed individuals to behave more financially independent and therefore 'crowded out' their incentives to participate in activities that crossed social divides. This, in turn, led to reduced feelings of reconciliation. This finding shares similarities with a moral hazard effect that has been linked to remittance reception. Research has shown that remittance-receivers may become less productive, because remittances provide them with insurance from abroad (see, for example, Azam & Gubert, 2006, for an overview).

Gerber and Torosyan (2010) argued that gift-giving practices in Georgia sustained social relations and fostered networks of reciprocity and mutual help in remittance-receiving areas in the post-conflict period. In post-conflict contexts in which social ties are damaged, investing remittances in social capital may thus be particularly important. However, if remittance-receiving households withdraw from their social relations and invest remittances exclusively in in-group, or bonding, social capital, as Caarls et al. (2013) suggested, this may intensify social divides. The extent to which remittance-receiving households invest in bonding versus bridging social capital has yet to be examined in depth, leaving room for further exploration of the complex relationship between remittances and social capital.

2.3 Social Capital as a Multifaceted Concept

Social capital can be divided into a structural and cognitive component (Uphoff, 2000). Structural social capital refers to organisational forms of social capital such as the 'roles, rules, precedents and procedures as well as networks that contribute to cooperation' (Uphoff, 2000, p. 218), whereas cognitive social capital comprises the shared norms, values and attitudes that underlie structural social capital. Examples of structural social capital include all types of formal or informal organisations, associations, or cooperatives. Cognitive social capital is often operationalised as trust, norms of reciprocity, or cooperation (see, for example, Knack & Keefer, 1997). Structural social capital provides the structure through which group members cooperate, while cognitive social capital is the set of attitudes that encourages group members to employ structural capital (Uphoff, 2000).[1]

This study focuses specifically on structural social capital, which is captured by people's participation and financial investments in networks. Within structural social capital, a distinction is made between bonding and bridging social capital (Putnam, 2000, 2002). Bonding social capital refers to connections between homogeneous groups or individuals, while bridging social capital unites individuals or groups that are dissimilar in terms of characteristics or beliefs, thereby bridging social divides. The concepts of bonding and bridging social capital are relevant in a conflict-affected setting, such as Burundi, because bridging social capital in particular is believed to prevent conflict and foster reconciliation in the wake of a conflict. Colletta and Cullen (2000), for example, concluded that low stocks of bridging social capital led to low social cohesion and therefore impeded reconstruction efforts in Cambodia, Rwanda, Guatemala, and Somalia. Similarly, Varshney studied the relationship between civic engagement and ethnic conflict in India, calling inter-ethnic networks 'agents of peace' (Varshney, 2001, p. 363) and intra-ethnic networks a conflict hazard. Formal forms of engagement, such as clubs and associations, are argued to be particularly important conflict buffers, as they make society more resilient to political polarisation.

Treating social capital as a multifaceted concept, comprising networks of bonding and bridging social capital, acknowledges that households may invest remittances differently in different types of social capital. This information sheds light on the various channels through which remittances affect households' social capital and, consequently, social relations in remittance-receiving areas.

3. Conflict, Migration and Social Ties in Burundi

Burundi has experienced waves of civil conflict since it gained independence from Belgium in 1962 (Lemarchand, 1996). These conflict episodes spurred large population movements and had harmful effects on both economic and social aspects of Burundian society. Per capita income decreased by nearly 40 per cent in the period 1993–2007 (World Bank, 2009), which in combination with a substantial decrease in international aid (Bundervoet & Verwimp, 2005), drove the percentage of individuals living below the poverty line of 1 dollar per day from 35 per cent in 1993 to 67 per cent in 2006 (World Bank, 2009). The signing of the Arusha Peace and Reconciliation Agreements in August 2000 and the election of a new government in 2005 signified the beginning of the peace and reconstruction phase in Burundi. Poverty, however, remains one of Burundi's main challenges, despite recent economic improvements. In 2011 Burundi still ranked 185 on the Human Development Index, which is the lowest in the world after the Democratic Republic of the Congo (DRC) and Niger (UNDP, 2011).

As a result of this civil conflict, Burundi has a large and heterogeneous diaspora scattered around the globe. The largest share of the diaspora resides in the neighbouring countries of Tanzania, Rwanda, and the Democratic Republic of the Congo (DRC). A small minority migrated to Europe and North America. In total, more than 350,000 Burundians, or 4.2 per cent of the population, were living abroad in 2010 (World Bank, 2011). Recently, new migration patterns from Burundi have arisen, primarily comprising skilled migrants moving to western Africa, South Africa, and Europe to seek employment and education opportunities (Fransen & Siegel, 2010).

The Burundian government is currently exploring strategies to access the resources of the Burundian diaspora for reconstruction purposes. The first draft of the national migration policy aims to enhance remittance flows into the country and invest them in development programmes (Republic of Burundi, 2011). The aim is to create social stability through economic development. Although the Burundi diaspora residing in Europe and North America is relatively small, its members are well organised, highly active, and engaged in their home country (Fransen & Siegel, 2010).

International remittances are believed to be a small, but growing, financial inflow into Burundi. Remittances were estimated at between three million USD (World Bank, 2011) and 28 million USD in 2010.[2] Most remittances are sent from Europe and North America (De Bruyn & Wets, 2006; Fransen & Andersson, 2011). Remittance-receiving households primarily reside in urban areas and a recent study has shown that they are generally wealthier than non-receiving households (Fransen & Mazzucato, 2014). Urban-rural financial transactions have also increased due to increasing rural-urban migration flows, primarily consisting of young, rural men seeking better job opportunities in the capital. These remittances typically pass through informal channels; they are sent either through hand delivery or couriering and are transferred within family networks that are based on trust and reciprocity (Fransen & Andersson, 2011; Uvin, 2009).

The conflict in Burundi also affected social ties within society, reportedly leading to low levels of interpersonal trust, solidarity, and reciprocity (Brachet & Wolpe, 2005; Uvin, 2009; Vervisch et al., 2013b). The conflict, in which nearly all households were affected, combined with increasing poverty levels, deeply divided community members. This led scholars to describe Burundian society as characterised by 'weak bridges, strong bonds' (Brachet & Wolpe, 2005, p. 6). They refer to a highly fragmented society, due to inter-ethnic tensions, but also socio-economic inequity between social classes (principally the urban elite versus the rural population), divisions between clans within ethnic groups, and regional inequalities (especially between urban and rural areas). Tensions between former refugees and other community members have also been reported, due to disputes regarding land and other assets (Fransen and Kuschminder, 2012).

Social relations with friends and relatives are an important form of insurance and support for Burundian households (see, for example, Trouwborst, 1973; Uvin, 2009). Horizontal networks of close friends and family members, based on solidarity expressed through gift-giving and mutual support, have historically formed an important part of social life in Burundi (Trouwborst, 1973). Financial transactions are an important manifestation of these social ties. Many households engage in gift giving for (religious) celebrations, educational support or other necessities (Uvin, 2009). Vervisch et al. (2013b) described how the insurance function of this bonding social capital weakened during the war period, due to conflict and economic hardship that gave rise to disputes over valuables, and sometimes led to violence. Uvin (2009), however, argues that poverty and limited economic opportunities have increased households' dependency on social capital.

The restoration of social relations has been a focus of many reconstruction programmes in Burundi (Brachet & Wolpe, 2005; Vervisch, Titeca, Vlassenroot, & Braeckman, 2013a). Since the end of the conflict, the number of civil society organisations and community associations has increased in Burundi and civil society has become more active in areas such as women and youth issues, development and reconciliation, human rights, and religion (Brachet & Wolpe, 2005; Vervisch & Titeca, 2010). Given these unique social dynamics, characterised by low trust but high inter-household dependency because of economic hardship, and increasing civic engagement, Burundi provides an interesting case study to explore the effects of international remittances on bonding and bridging social capital.

4. Data and Empirical Approach

The dataset includes information on 810 households residing in Bujumbura, Burundi's capital. The data was collected in March 2011 in 54 randomly selected blocks within the 17 zones or quartiers (neighbourhoods) of the city. The distribution of blocks across the different neighbourhoods was based on a neighbourhood's population size, meaning that more blocks were visited in more densely populated neighbourhoods. In each block, consisting of two to four streets, 15 randomly selected households were interviewed. The household interviews were conducted with a main respondent, who was at least 18 years of age and knowledgeable on household financial and social affairs. In 82 per cent of the cases the main respondent was the household head or his/her spouse. In 11 per cent of the cases the main respondent was a child of the household head. The main respondents were, on average, 34 years old.

4.1 Remittances

Remittances were defined as international monetary transfers that were received by a household in the 12 months preceding the interview. Remittance receipt was common in Bujumbura: of the 810 households in the sample, 15.93 per cent (n = 129) had received remittances. For these 129 receiving households, the average number of senders was 1.26, yielding a total of 162 remittance senders in the data. Most remittance senders lived in Europe or North America: 34.57 per cent (n = 56) and 33.95 per cent (n = 55), respectively. Other senders lived in non-neighbouring African countries (15.43%, n = 25), neighbouring countries (12.35%, n = 20), Asia (1.23%, n = 2), or Australia (0.62 per cent, n = 1).[3] These findings confirm anecdotal evidence that most remittances to Burundi are sent from Europe and North America (Fagen & Bump, 2006). The majority of senders (93.83%, n = 152) were not considered household members, but most of them (90.79%, n = 138) were family members.[4] International remittances are thus primarily a family affair in Burundi.

4.2 Social Capital Indicators

As described, this study focused on structural social capital, which was divided into bonding and bridging social capital. Bonding social capital is defined in this paper as networks of close friends and family members, acknowledging the importance of these horizontal social networks in Burundi (see, for example, Trouwborst, 1973; Uvin, 2009; Vervisch et al., 2013b). Networks of close friends and family members are frequently, but not necessarily, aligned with ethnic ties in Burundi, and should therefore not be treated as a proxy for ethnicity. Bridging social capital is defined as social capital that transcends these networks of close friends and family members.

Four indicators were used to measure households' structural social capital: (1) membership in organisations, (2) monthly expenditures on religious organisations, (3) monthly expenditures on gifts to family members and friends, and (4) internal remittance sending. These indicators thus included social capital investments in the form of both investing time (organisation membership) and money (religious organisations, gifts to family members and friends, and internal remittances).[5] First, the number of organisation memberships per household, measuring households' associational involvement, is often used to study social capital (see, for example, Grootaert, 1999; Narayan & Pritchett, 1999). As described, formal forms of engagement, such as clubs and associations, are also particularly important in conflict-affected settings (Varshney, 2001). In this study, organisations included credit or savings associations, agricultural associations, religious organisations, political organisations, and sports clubs.[6] The indicator refers to membership only and does not include monetary contributions. Organisation membership is therefore perceived as a social capital investment that is made by donating time.

The second indicator, monthly expenditures on religious organisations, was considered separately from organisation memberships, as it specifically relates to financial contributions. This indicator was selected because previous studies have linked remittances to church donations (Brown & Conneil, 1993; James, 1997; Kabki et al., 2004) and churches may offer financial safety nets for their members. Churches are important meeting places in Burundi and the data showed that church donations were frequent among both remittance and non-remittance receiving households (see Table 1). The third indicator referred to gifts to family members and close friends that were not part of the household. The second and third indicators were derived from the expenditure section of the questionnaire, where the households were asked about their average monthly spending on several items.

The fourth indicator measured households' financial transfers to family or friends residing in other provinces in Burundi over the past 12 months. Indicator three and four were selected due to the importance of gift giving in maintaining social relations in Burundi (see Section 3). Practices of gift giving have been studied extensively by anthropologists, pioneered by the work of Mauss (1989), and are considered an important part of building reciprocity, trust and social ties – terms that are highly

Table 1. Social capital indicators: means and standard deviations

Bonding versus bridging	Variable	Non-rem. receiving households			Rem. receiving households			All			T-statistic
		M (SD)	Mdn	n	M (SD)	Mdn	n	M (SD)	Mdn	n	
	Structural social capital										
Bridging	Number of organisation memberships	0.39 (0.05)	0	681	0.88 (0.19)	0	129	0.48 (1.46)	0	810	3.56***
Bridging	Expenditures on religious organisations (USD)	0.57 (0.14)	0.00	633	1.33 (0.37)	0.00	108	0.68 (3.49)	0.00	742	2.12**
Bonding	Expenditures on gifts to family and friends (USD)	4.69 (0.55)	1.15	580	7.95 (1.17)	5.75	104	5.19 (13.08)	1.73	684	2.34**
Bonding	Urban-rural remittance sending (1 = yes)	0.28 (0.45)	0	679	0.42 (0.50)	0	126	0.30 (0.46)	0	805	3.29***
Bonding	Value of urban-rural remittances (USD)	27.64 (118.58)	0.00	655	108.22 (334.53)	0.00	116	39.71 (171.62)	0.00	772	4.72***

Notes: * $p < .10$, ** $p < .05$, *** $p < .01$.

linked to current notions of social capital. Although the fourth indicator specifically refers to monetary support to households that live in other provinces in Burundi, there may be some overlap between the third (average monthly expenditures on gifts to family and friends) and fourth indicator. Nevertheless, both indicators are used because they refer to different support networks. Whereas indicator number three makes reference to both family members and close friends, urban-rural remittances primarily represent intra-family financial transactions. The data used in this paper shows that over 99 per cent of the rural recipients were family members of the sending households in the capital. The indicators were therefore used separately in the analyses.

Of the four structural social capital indicators, organisational membership and expenditures on religious organisations were treated as bridging social capital indicators. Brachet and Wolpe (2005) have described that civil society organisations, including religious organisations, have become increasingly (ethnically) mixed in Burundi after the war. In addition, the development community has focused on so-called community-based development, using an inclusive approach to strengthen social cohesion (Vervisch et al., 2013a). The assumption is therefore made in this study that organisations, such as saving associations, sport clubs, political organisations, and agricultural associations are larger social structures that cross social networks of close friends and family members. Gift giving to family and friends was considered a bonding social capital investment, based on the ethnographic work of Trouwborst (1973) and Vervisch et al. (2013b) described in Section 3. Finally, urban-rural remittance sending was used as an indicator of bonding social capital.

As described, the information on social capital investments was derived from the main respondent. Just like information on, for example, income may not be shared with all household members (see, for example, Fisher, Reimer, & Carr, 2010), household information on social capital investments may also not be pooled. In the absence of individual data on social capital investments, the data derived from the main respondent is therefore used as a proxy for the households' total social capital investments.

4.3 Empirical Approach

The empirical approach consisted of descriptive statistics and propensity score matching (PSM). Although descriptive statistics provide interesting insights, PSM addresses the possibility that households differ in their social capital investments due to household characteristics other than remittances. For example, remittance-receiving households in Burundi are generally wealthier than non-remittance receiving households, which might affect their social capital. Studies have shown that wealthier households are more able to make social capital investments (see, for example, Cleaver, 2005; Fafchamps, 2003). Using PSM, remittance-receiving households were matched to non-remittance receiving households that are similar, following Rosenbaum and Rubin (1983). This yielded an average treatment effect for the treated (ATT), which approximates a household's circumstances with respect to social capital under the counterfactual that it had not been treated, meaning that it had not received remittances.

For the analyses in this paper, households were matched based on the characteristics of the main respondent, including his or her age, gender, educational attainment, employment, and marital status. Matching variables also included household characteristics including asset ownership, the number of economic shocks the household experienced over the past five years, and the number of adults in the household (see Table 1A in the Appendix). These variables have been identified as important migration determinants and are therefore closely related to remittance receipt (McKenzie & Sasin, 2007). Households were also matched based on the past migration experiences of their household members, including international return migration and internal displacement, and the current migration status of a household member.

Retrospective home and land ownership were used to match households based on their status from before they began receiving remittances. A previous study on remittances in Burundi showed that wealthier and higher educated households were more likely to receive remittances; a finding that the authors ascribed to a selection into migration – wealthier households have more means to send a household member abroad, and are therefore more likely to receive remittances (Fransen &

Mazzucato, 2014). By including retrospective information on wealth (assets), the aim is to control for this selection. The indicators refer to five years in the past and are therefore not necessarily linked to the pre-remittance period for all households. The data reveal that 44 of the 162 senders (27.16%) began sending remittances prior to 2005. However, this five-year period was used in the survey, as it was linked to the pre- to post-conflict transition in Burundi. This was considered the most reliable reference point for interviewees to provide retrospective information.

Three estimation methods were used to calculate the ATT: nearest neighbour (5), kernel (Gaussian) and radius matching (calliper 0.01), to verify the robustness of the results. The assumption required for PSM is that all relevant differences between groups are captured by observable characteristics in the data. Balancing tests, which calculate the reduction of systematic differences between groups through matching, were performed by comparing mean absolute standardised biases (Rosenbaum & Rubin, 1985), pseudo R2 and p-values of the likelihood ratio tests before and after matching. In addition, common support graphs were constructed to determine whether there were remittance and non-remittance receivers in the data for all values of the dependent variables. The results of the balancing tests and the common support graphs are presented in the Appendix.

5. Results: Remittances and Social Capital in Urban Burundi

5.1 Descriptive Statistics

Table 1 presents the descriptive statistics on the households' social capital. The table indicates that nearly half of the households had at least one organisation membership and, on average, households spent nearly 0.70 US dollars on religious organisations per month. Almost 4.70 US dollars were spent, on average, on gifts to family members and friends. Urban-rural remittances were relatively common as well: 30 per cent of the households in the sample had sent money to family members living in rural areas in the 12 months preceding the interview. The values of these remittances differed significantly. The mean value across all 810 households was nearly 40 US dollars, with a minimum of zero, for households that had sent no remittances, and a maximum of 2760 US dollars for households that had sent remittances. The average amount sent per transaction was just over 22 US dollars. Correlations among the social capital indicators are presented in Table 2A in the Appendix.

The descriptive statistics reveal that remittance-receiving households invested significantly more in their structural social capital, both bonding and bridging, than non-receiving households. Receiving households had on average 0.88 organisation memberships, versus 0.39 for non-receiving households. Receiving households also spent more on religious organisations: 1.33 US dollars versus 0.57 US dollars in the past month, for remittance-receiving and non-remittance receiving households, respectively. Receiving households also gave significantly more financial gifts to family and friends, with almost 8 US dollars per month, versus 4.69 US dollars for non-receiving households. Finally, receiving households were more likely to send urban-rural remittances and sent higher values. 42 per cent of households that had received international remittances in the past 12 months had sent internal remittances. Of the households that had not received international remittances, 28 per cent had sent internal remittances.

As described earlier, remittance-receiving households may differ in their social capital investments due to household characteristics other than remittances, which may explain why remittance-receiving households score higher on social capital in Table 1. The following section therefore presents the PSM estimates, for which remittance-receiving households were matched to similar, non-remittance receiving households.

5.2 Remittances and Social Capital: Addressing Selection Effects

The PSM estimates are presented in Table 2, which shows the mean values for remittance-receiving households (the treated) and non-remittance receiving households (the untreated), and the ATT,

Table 2. Remittances and structural social capital: PSM results.

Bonding versus bridging	Matching algorithm	M Treated	M Untreated	ATT	t	No. of treated	No. of untreated
Bridging	Number of organisation memberships						
	NN (5)	0.93	0.36	0.57**	2.54	124	663
	Kernel (Gaussian)	0.93	0.44	0.49**	2.21	124	663
	Radius, cal. (0.1)	0.93	0.44	0.48**	2.23	124	663
Bridging	Expenditures on religious organisations (USD)						
	NN (5)	1.31	2.09	−0.78	−1.42	107	617
	Kernel (Gaussian)	1.31	1.50	−0.20	−0.43	107	617
	Radius, cal. (0.01)	1.31	1.37	−0.07	−0.16	107	617
Bonding	Expenditures on gifts to family and friends (USD)						
	NN (5)	8.02	12.81	−4.79**	−2.43	103	566
	Kernel (Gaussian)	8.02	13.46	−5.44***	−3.30	103	566
	Radius, cal. (0.1)	8.02	11.97	−3.95**	−2.58	103	566
Bonding	Urban-rural remittance sending (1 = yes)						
	NN (5)	0.43	0.30	0.13**	2.21	122	661
	Kernel (Gaussian)	0.43	0.28	0.15***	2.62	122	661
	Radius, cal. (0.1)	0.43	0.29	0.14**	2.51	122	661
Bonding	Value of urban-rural remittances (USD)						
	NN (5)	111.97	32.30	79.67**	2.30	113	641
	Kernel (Gaussian)	115.08	36.57	78.51**	2.29	113	641
	Radius, cal. (0.1)	112.99	38.32	74.68**	2.22	113	641

Note: * $p < .10$, ** $p < .05$, *** $p < .01$

which signifies the average difference between the treated and untreated.[7] The assumption is that the analyses are controlled for all theoretically relevant variables, so that the ATT signifies the difference in social capital between remittance-receiving and non-remittance-receiving households, due to remittances.

Table 2 shows mixed results for the relationships between remittances and bridging social capital. Remittance-receiving households had significantly more organisation memberships per household, compared to similar, non-remittance-receiving households. The effect of remittances on the second bridging indicator, expenditures on religious organisations, however, became insignificant after matching. This signifies that remittance-receiving households do not spend significantly more or less on religious organisations than similar, non-remittance-receiving households. As explained above, organisation memberships and expenditures on religious organisations refer to social capital investments that are made by donating time versus money, respectively. Remittance-receiving households thus seemed to invest more in their bridging social capital by donating time, but did not make larger monetary contributions than non-remittance-receiving households.

The estimates in Table 2 reveal mixed effects of remittances on bonding social capital as well. Remittance-receiving households spent significantly less on gifts to family members and friends. Yet, remittance-receiving households sent more and higher values of urban-rural remittances. Sending urban-rural remittances was classified as a bonding social capital investment, because internal remittances, like international remittances, are mostly a family affair in Burundi: remittances tend to stay within close family networks. Remittances thus seemed to incentivise receiving households to spend less on their networks comprised of family members and close friends and more on family networks only.

The estimates for the indicators of social capital in Table 2 are robust across the different matching estimations. Common support graphs are presented in the Appendix (Figure 1(a)–1(e)), illustrating the distribution of the propensity scores and the area of common support for the propensities of remittance-receiving households and non-remittance receiving households. The graphs indicate that few observations are outside the common support area, meaning that non-remittance-receiving households can be considered a good control group for the remittance-receiving households.

Balancing tests that present the pseudo R^{2s}, the p-values of the likelihood ratio tests, and the mean absolute standard biases before and after matching, are presented in Table 3A in the Appendix. Declines in mean standardised bias after matching ranged from 81 per cent to 85 per cent. The residual mean standardised bias ranged from 3.7 to 4.7, indicating that bias was significantly reduced through matching (Rosenbaum & Rubin, 1985). The pseudo R^{2s} were also significantly smaller after matching, and the p-values of the likelihood ratio tests became insignificant, indicating that systematic differences in the covariates between remittance-receiving and non-remittance-receiving households were eliminated through matching.

6. Discussion and Conclusion

This paper explored the relationship between remittances and households' social capital in Bujumbura, the capital of Burundi. Social capital is considered a prerequisite for post-conflict reconstruction and development but has largely been overlooked in the literature researching the effects of remittances on development in migrant-sending areas. Remittances were hypothesised to increase social capital investments by (1) relaxing liquidity constraints, thereby facilitating investments, (2) raising the income of remittance-receiving households, incentivising them to civically engage, or (3) the transfer of norms and values regarding civic engagement from the diaspora. Urban Burundi provided an interesting setting to study the link between remittances and social capital because of its unique social dynamics, characterised by 'weak bridges, strong bonds' (Brachet & Wolpe, 2005, p. 6).

Two main findings emerged from this study. First, remittances seemed to incentivise households to invest in structural social capital by donating time (associational involvement), but not money (church donations). The finding that remittance-receiving households participated more in organisations may be explained by the income-smoothing effect of remittances, which generates leisure time, or the fact that remittance-receiving are more likely to participate in networks because they have more to offer to other members. Remittance-receiving households may also be affected by norms and values regarding civic engagement through contacts with the diaspora. Previous studies have shown that the Burundi diaspora is highly organised and active (see, for example, Fransen & Siegel, 2010). The exact mechanisms through which remittances affect social capital investments, however, remain to be explored.

The observation that remittance-receiving households participated more in organisations contradicts findings from Rwanda, a country neighbouring Burundi, where remittance-receiving households were found to participate less in community organisations (Caarls et al., 2013). It is unclear why these findings differ. The contrasting findings might be due to economic differences between the countries. Burundi is significantly poorer than Rwanda and has a more recent history of conflict. Research has demonstrated that social capital investments are especially important for poorer households (Grootaert, 1999; Grootaert et al., 2002; Woolcock & Narayan, 2000). The finding that remittance-receiving households did not contribute more to religious organisations than non-remittance-receiving households also contradicts previous research findings (Brown & Conneil, 1993; James, 1997; Kabki et al., 2004). It is not clear why this is the case. Future research should provide further insights into the effects of context on the relationship between remittances and social capital.

The second important finding that emerged is that remittance-receiving households invested more in their bonding social capital than non-remittance-receiving households, but only when the network comprised family members. Receiving households sent more and higher values of urban-rural remittances, which, as the data showed, are almost always sent within family networks.

However, receiving households spent significantly less on gifts to family members and close friends, compared to similar, non-receiving households. This indicator was used to capture social networks that have historically performed an important insurance function in Burundi society (Uvin, 2009; Vervisch et al., 2013b). Remittances seem to crowd out gifts to these networks, to the extent that remittance-receiving households spend less than similar, non-remittance receiving households. This may be due to the crowding-out effect that Caarls et al. (2013) mentioned: remittance reception may reduce incentives to invest in social capital, because it creates financial independence. The crowding-out effect is similar to a moral hazard effect that predicts that remittances reduce the receiver's incentives to be productive, because remittances provide insurance (see, for example, Azam & Gubert, 2006). Another possible explanation is that remittance-receiving households have shifted their investment priorities to their network members residing abroad, from whom they receive financial support. Horizontal social networks have reportedly weakened in Burundi during the war (Vervisch et al., 2013b), which may have incentivised remittance-receiving households to invest more in their emigrant connections.

Based on these results, the expectation that remittances are invested in networks for insurance purposes (Gerber & Torosyan, 2010; James, 1997; Kabki et al., 2004; Mazzucato et al., 2006) can only partly be confirmed. Remittance-receiving households spent more time on their bridging social capital, but did not make higher monetary contributions to their bridging social capital. Remittance-receiving households spent more money on their bonding social capital, but only when the network comprised family members. Overall, these findings seem to suggest that financial investments due to remittances strengthened mainly the bonding social capital of remittance-receiving households, and family networks in particular. Despite the fact that remittance-receiving households made fewer monetary contributions to their bridging social capital, their participation in organisations may have positive, long-term effects. Participation in formal organisations such as associations is particularly important for conflict prevention, as they make society more resilient to political polarisation (Varshney, 2001.). Because of small sample sizes, it was not possible to explore the types of organisations that remittance-receiving households participated in, leaving room for further exploration of the associational involvement of remittance-receiving households.

This paper studied the linkages between remittances and social capital in a conflict-affected setting. The use of a multifaceted social capital measure demonstrated that the relationship between remittances and social capital is complex and dependent on the measure of social capital considered. Some limitations should be mentioned. First, the mechanisms underlying the relationship between remittances and social capital could not be disentangled with the present data. Whether remittances increase social capital investments by relaxing households' liquidity constraints or by increasing the income of remittance-receiving households is unclear. In addition, it was not possible to distinguish between monetary remittances and the transfer of norms and values (social remittances) from the diaspora as driving forces of social capital investments. The mechanisms underlying the relationship between remittances and social capital investments therefore warrant further research attention. Second, because of the cross-sectional nature of the data, it is difficult to draw causal inferences. PSM is an empirical approach that is commonly used in the absence of longitudinal or experimental data to create a counterfactual situation. However, there may be unobservable variables that simultaneously affect the assignment of a household into the treatment group and the dependent variable, potentially creating a 'hidden bias' that may drive the results. Future research is therefore needed to study the long-term effects of remittances on social capital formation, and consequently social development, in conflict-affected settings.

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No potential conflict of interest was reported by the author.

Notes

1. The distinction between structural and cognitive social capital stems from Putnam's definition, described above, and that of Coleman, who referred to social capital as 'a variety of different entities having two characteristics in common: They all consist of some aspect of social structure and they facilitate certain actions of individuals who are within the structure' (1990, p. 302).
2. The difference between these statistics is due to measurement differences. The BRB estimate refers to the period from January to October 2010 and was provided by BRB during a personal interview with the author.
3. Three households (1.85%) indicated that they were unaware of the location of their remittance sender(s).
4. A household was defined as 'all individuals living together with communal arrangements concerning subsistence and other necessities of life and including all individuals presently residing elsewhere (in the country or abroad) whose principle commitments and obligations are to this household' (Fransen, 2011).
5. Because of the ethnic character of the conflict in Burundi, it would have been interesting to link remittances with inter- or intra-ethnic social capital. However, the survey data contain no references to the households' ethnicity, due to the sensitivity associated with the concept of ethnicity in Burundi.
6. The data also contained information on donations to community projects, agricultural cooperatives, and saving and credit groups. These donations were, however, not common, which made it impossible to run separate analyses for these indicators due to small sample sizes. Analyses performed with averaged scores of all donations did not yield significantly different results (results available upon request).
7. Logit regression analyses were used for the estimates, to predict the probability of receiving remittances (results are available upon request).

References

Adams Jr., R. H. (2006). Remittances and poverty in Ghana (Policy Research Paper No. 3838). Washington, DC: World Bank.

Adams Jr., R. H. (2011). Evaluating the economic impact of international remittances on developing countries using household surveys: A literature review. *The Journal of Development Studies*, *47*(6), 809–828. doi:10.1080/00220388.2011.563299

Adams, R. H., & Cuecuecha, A. (2010). Remittances, household expenditure and investment in Guatemala. *World Development*, *38*(11), 1626–1641. doi:10.1016/j.worlddev.2010.03.003

Amuedo-Dorantes, C., & Pozo, S. (2010). Accounting for remittance and migration effects on children's schooling. *World Development*, *38*(12), 1747–1759. doi:10.1016/j.worlddev.2010.05.008

Azam, J., & Gubert, F. (2006). Migrants' remittances and the household in Africa: A review of evidence. *Journal of African Economies*, *15*(Supplement 2), 426–462. doi:10.1093/jae/ejl030

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York, NY: Greenwood.

Brachet, J., & Wolpe, H. (2005). Conflict-sensitive development assistance: The case of Burundi (Social Development Papers: Conflict Prevention and Reconstruction, Paper No. 27, June 2005). Washington, DC: World Bank.

Brown, R. P. C., & Conneil, J. (1993). The global flea market: Migration, remittances and the informal economy in Tonga. *Development and Change*, *24*, 611–647. doi:10.1111/dech.1993.24.issue-4

Bundervoet, T., & Verwimp, P. (2005). Civil war and economic sanctions: Analysis of anthropometric outcomes in Burundi (Households in Conflict Network Working Paper No. 11). Brighton: University of Sussex.

Caarls, K., Fransen, S., & Ruben, R. (2013). Can migratory contacts and remittances contribute to reconciliation and reconstruction in Rwanda? *International Migration*, *51*(1), 98–117. doi:10.1111/j.1468-2435.2012.00747.x

Cleaver, F. (2005). The inequality of social capital and the reproduction of chronic poverty. *World Development*, *33*(6), 893–906. doi:10.1016/j.worlddev.2004.09.015

Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, *94*, 95–120.

Coleman, J. S. (1990). *Foundations of social theory*. Cambridge: Belknap Press.

Colletta, N. J., & Cullen, M. L. (2000). *Violent conflict and the transformation of social capital: Lessons from Cambodia, Rwanda, Guatemala, and Somalia*. Washington, DC: World Bank.

De Bruyn, T., & Wets, J. (2006). *Remittances in the Great Lakes Region*. Geneva: IOM.

Fafchamps, M. (2003). *Rural poverty, risk and development*. Cheltenham: Edward Elgar Publishing.

Fafchamps, M. (2006). Development and social capital. *The Journal of Development Studies*, *42*(7), 1180–1198. doi:10.1080/00220380600884126

Fafchamps, M., & Lund, S. (2003). Risk-sharing networks in rural Philippines. *Journal of Development Economics*, *71*(2), 261–287. doi:10.1016/S0304-3878(03)00029-4

Fagen, P. W., & Bump, M. N. (2006). *Remittances in conflict and crises: How remittances sustain livelihoods in war, crises, and transitions to peace*. New York, NY: International Peace Academy, International Peace Institute.

Fisher, M., Reimer, J. J., & Carr, E. R. (2010). Who should be interviewed in surveys of household income? *World Development*, *38*(7), 966–973. doi:10.1016/j.worlddev.2009.11.024

Fransen, S. (2011). Migration and development: A world in motion. Fieldwork report Burundi: Methodology and sampling. Maastricht: Maastricht Graduate School of Governance, Maastricht University.

Fransen, S., & Andersson, L. (2011). *The emerging remittances market in Burundi: Opportunities for development* (Migration and Development Policy Brief No. 6). Maastricht: Maastricht Graduate School of Governance, Maastricht University.

Fransen, S., & Kuschminder, K. (2012). Back to the land: The long-term challenges of refugee return and reintegration in Burundi (New Issues in Refugee Research Research Paper No. 242). Geneva: UNHCR.

Fransen, S., & Mazzucato, V. (2014). Remittances and household wealth after conflict: A case study on urban burundi. *World Development*, *60*, 57–68. doi:10.1016/j.worlddev.2014.03.018

Fransen, S., & Siegel, M. (2010). *Diaspora engagement in Burundi: The emergence of a migration policy* (Migration and Development Policy Brief No. 3). Maastricht: Maastricht Graduate School of Governance.

Fukuyama, F. (2001). Social capital, civil society and development. *Third World Quarterly*, *22*(1), 7–20. doi:10.1080/713701144

Gerber, T. P., & Torosyan, K. (2010). Remittances in Georgia: Correlates, economic impact, and social capital formation (Working paper series No. 002-10). Tbilisi: International School of Economics at Tbilisi State University (ISET).

Grootaert, C. (1999). Social capital, household welfare, and poverty in Indonesia (Research Working Paper No. 2148). Washington, DC: World Bank.

Grootaert, C., Oh, G. T., & Swamy, A. (2002). Social capital, household welfare and poverty in Burkina Faso. *Journal of African Economies*, *11*(1), 4–38. doi:10.1093/jae/11.1.4

Grootaert, C., & Van Bastelaer, T. (2002). *The role of social capital in development: An empirical assessment*. Cambridge: Cambridge University Press.

Haug, S. (2008). Migration networks and migration decision-making. *Journal of Ethnic and Migration Studies*, *34*(4), 585–605. doi:10.1080/13691830801961605

James, K. (1997). Reading the leaves: The role of Tongan women's traditional wealth and other 'contraflows' in the process of modern migration and remittance. *Pacific Studies*, *20*(1), 1–27.

Kabki, M., Mazzucato, V., & Appiah, E. (2004). 'Wo benanɛ a ɛyɛ bebree': The economic impact of remittances of Netherlands-based Ghanaian migrants on rural Ashanti. *Population, Space and Place*, *10*, 85–97. doi:10.1002/(ISSN)1544-8452

Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? A cross-country investigation. *The Quarterly Journal of Economics*, *112*(4), 1251–1288. doi:10.1162/003355300555475

Lemarchand, R. (1996). *Burundi: Ethnic conflict and genocide*. Cambridge: Cambridge University Press.

Levitt, P. (1998). Social remittances: Migration-driven local-level forms of cultural diffusion. *International Migration Review*, *32*(4), 926–948.

Lochner, K., Kawachi, I., & Kennedy, B. P. (1999). Social capital: A guide to its measurement. *Health and Place*, *5*(4), 259–270. doi:10.1016/S1353-8292(99)00016-7

Lyons, T. (2007). Conflict-generated diasporas and transnational politics in Ethiopia. *Conflict, Security and Development*, *7*(4), 529–549. doi:10.1080/14678800701692951

Mauss, M. (1989). The gift. The form and reason for ex-change in archaic societies. London: Routledge. (Original work published in 1923).

Mazzucato, V., Kabki, M., & Smith, L. (2006). Transnational migration and the economy of funerals: Changing practices in Ghana. *Development and Change*, *37*(5), 1047–1072. doi:10.1111/dech.2006.37.issue-5

McKenzie, D., & Sasin, M. J. (2007). Migration, remittances, poverty, and human capital: Conceptual and empirical challenges (World Bank Policy Research Working Paper No. 4272). Washington D.C.: World Bank.

Mohamoud, A. A. (2005). *Mobilizing African diaspora for the promotion of peace in Africa*. Amsterdam: African Diaspora Policy Centre.

Narayan, D., & Pritchett, L. (1999). Cents and sociability: Household income and social capital in rural Tanzania. *Economic Development and Cultural Change*, *47*(4), 871–897. doi:10.1086/edcc.1999.47.issue-4

Orjuela, C. (2008). Distant warriors, distant peace workers? Multiple diaspora roles in Sri Lanka's violent conflict. *Global Networks*, *8*(4), 436–452. doi:10.1111/glob.2008.8.issue-4

Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, *24*(1), 1–24. doi:10.1146/annurev.soc.24.1.1

Portes, A. (2000). The two meanings of social capital. *Sociological Forum*, *15*(1), 1–12. doi:10.1023/A:1007537902813

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, *6*, 65–78. doi:10.1353/jod.1995.0002

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community.* New York, NY: Simon and Schuster.

Putnam, R. D. (2002). *Democracies in flux: The evolution of social capital in contemporary society.* Oxford: Oxford University Press.
Republic of Burundi. (2011). *Politique nationale de migration de la Republique du Burundi: Avant-projet*. Bujumbura: Republic of Burundi.
Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika*, *70*(1), 41–55. doi:10.1093/biomet/70.1.41
Rosenbaum, P. R., & Rubin, D. B. (1985). The bias due to incomplete matching. *Biometrics*, *41*(1), 103–116.
Stark, O., & Bloom, D. E. (1985). The new economics of labor migration. *The American Economic Review*, *75*(2), 173–178.
Stark, Q. (1980). On the role of urban-to-rural remittances in rural development. *The Journal of Development Studies*, *16*(3), 369–374. doi:10.1080/00220388008421764
Taylor, E. J. (1999). The new economics of labour migration and the role of remittances in the migration process. *International Migration*, *37*(1), 63–88. doi:10.1111/imig.1999.37.issue-1
Trouwborst, A. A. (1973). Two types of partial networks in Burundi. In J. Boissevain & C. Mitchell (Eds.), *Network analysis: Studies in human interaction* (pp. 111–125). The Hague: Mouton and Co.
UNDP. (2011). *Human development report 2011*. New York, NY: UNDP.
Uphoff, N. (2000). Understanding social capital: Learning from the analysis and experience of participation. In P. Dasgupta & I. Serageldin (Eds.), *Social capital: A multifaceted perspective* (pp. 215–249). Washington, DC: World Bank.
Uvin, P. (2009). *Life after violence: A people's story of Burundi*. London: Zed books.
Van Hear, N. (2002). Sustaining societies under strain: Remittances as a form of transnational exchange in Sri Lanka and Ghana. In N. Al-Ali & K. Koser (Eds.), *New approaches to migration: Transnational communities and the transformation of home* (pp. 202–223). London: Routledge.
Van Hear, N. (2004). *'I went as far as my money would take me': Conflict, forced migration, and class*. Oxford: COMPAS.
Varshney, A. (2001). Ethnic conflict and civil society: India and beyond. *World Politics*, *53*(3), 362–398. doi:10.1353/wp.2001.0012
Vervisch, T., & Titeca, K. (2010). Bridging community associations in post-conflict Burundi: The difficult merging of social capital endowments and new 'institutional settings'. *The Journal of Modern African Studies*, *48*(3), 485–511. doi:10.1017/S0022278X10000327
Vervisch, T., Titeca, K., Vlassenroot, K., & Braeckman, J. (2013a). Social capital and post-conflict reconstruction in Burundi: The limits of community-based reconstruction. *Development and Change*, *44*(1), 147–174. doi:10.1111/dech.12008
Vervisch, T., Titeca, K., Vlassenroot, K., & Braeckman, J. (2013b). Livelihoods, power, and food insecurity: Adaptation of social capital portfolios in protracted crises—Case study Burundi. *Disasters*, *37*(2), 267–292. doi:10.1111/j.1467-7717.2012.01301.x
Woolcock, M. (1998). Social capital and economic development: Towards a theoretical synthesis and policy framework. *Theory and Society*, *27*(2), 151–208. doi:10.1023/A:1006884930135
Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research, and policy. *The World Bank Research Observer*, *15*(2), 225–249. doi:10.1093/wbro/15.2.225
World Bank. (2009). *Country brief: Burundi*. Washington, DC: World Bank.
World Bank. (2011). *Migration and remittances factbook 2011* (2nd ed.). Washington, DC: World Bank.