

“A Lender Should Not Know Where You Live”: Financial precarity, debt, and everyday life in rural Malawi and Tanzania

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Abstract

This paper examines the loan sources used by rural solar home system adopters to meet their everyday needs, as well as the motivations for using these sources. The findings show that people in rural areas take into account social and economic factors when making a decision regarding where to seek a loan. People borrowed money from individuals with whom they had strong ties, which could be parents, siblings, cousins, uncles, aunts, friends, and neighbours. There is heterogeneity regarding where people situate family members in the weak/strong ties continuum. The results show that people preferred borrowing money from individuals with whom they had relationships based on the principle of reciprocity, suggesting their preference to avoid dependency in favour of equality. The findings also show that spatial and social proximity are intimately interconnected, and that both play an important role in determining where people turn to when in need of a loan. In several cases, the provision of a loan was based on a combination of both dimensions of proximity. Our findings have implications for energy policy that increasingly requires households to bear the financial demands of access to basic energy services.

Keywords: Solar home systems, credit, social proximity, spatial proximity, reciprocity, Africa

1. Introduction

About 600 million people in sub-Saharan Africa (SSA) lack access to electricity (IEA, 2019), while those with access to centralised grids face frequent power outages (Boamah and Rothfuß, 2020; Landry, 2018; Njoh et al., 2019; Samarakoon, 2020). Off-grid solar technologies such as solar home systems (SHSs) are increasingly being used in the region to help reduce the electricity access gap especially in rural areas as well as deal with the limitations of national grids. In fact, SSA has witnessed a significant rise in the adoption of SHSs, especially in the last decade (Ojong, 2021). The region currently constitutes 70% of SHSs sold globally (Kizilcec and Parikh, 2020), and most of the systems sold are in the 6 – 100W capacity range (GOGLA, 2019; Ojong, 2022).

The SHS sphere, like the energy industry in general, is embedded within particular political-economic contexts which shape how the sector operates (Lawhon and Murphy, 2012). While the state continues to play a role in the energy sector, the liberalisation of the sector has enabled the market to play a prominent role (Bayliss and Fine, 2007). African states are creating an conducive investment climate in order to attract independent energy companies. This shift to market-led energy production means that citizens are now clients and bear the financial demands of energy access (McDonald, 2012; Newell and Phillips, 2016). However, as privately owned off-grid solar providers seek to make profits on investment, clients who are not creditworthy are excluded (Baker, 2022). Several of these companies are increasingly offering pay-as-you-go (PAYG) payment plans for SHSs, as they enable users to pay for these small-scale renewable energy technologies in installments over a specific timeframe (Bisaga et al., 2021; Barrie and Cruickshank, 2017; Muchunku et al., 2018), but this has led to the exclusion of people regarded as not creditworthy (Baker, 2022).

While these innovative SHS payment models have received significant scholarly attention (Adwek et al., 2020; Kizilcec et al., 2021; Ockwell et al., 2019; Rolffs et al., 2015), little is known about the financial lives of SHS adopters, and more precisely, there is a blind spot in the scholarly literature regarding the various loan sources used by SHS adopters to meet their everyday needs. Studies have examined financing mechanisms for the off-grid sector (Mainali and Silveira, 2013; Pode, 2013; Quansah et al., 2016) as well as business models which are suitable for low-income households (Hirmer and Cruickshank, 2015; Reddy, 2015; Tawney et al., 2015); however, these studies have not investigated the loan sources used by SHS adopters to meet their daily needs.

This study attempts to bridge this research gap by examining the loan sources used by rural SHS adopters to meet their everyday needs (e.g., food, shelter, health shocks, access to basic energy services, and starting a small business), as well as the motivations for using these loan sources. The paper is guided by the following research questions: “What are the loan sources used by SHS adopters to meet their everyday needs?” And, “Why do SHS adopters use these loan sources?” We address these questions by drawing on research conducted in Malawi and Tanzania. This study is part of a larger research project investigating the different financing instruments used by SHS adopters in SSA to purchase their SHSs, and there is a forthcoming article that details the diverse financing mechanisms used to purchase SHSs (authors’ names blank for peer review). However, this paper is quite specific, as it sheds light on loan sources used by SHSs adopters to meet their daily needs. As low-income consumers now must bear the financial demands for the delivery of basic energy services, it is important to provide broader insights on their financial precarity. One way of understanding their financial lives more broadly and financial precarity, is by examining the diverse loan sources used to meet their everyday needs.

In the sections that follow, we begin by providing the theoretical background that guides our study (Section 2), and then we introduce our research context and methodological approach (Section 3) before presenting the study's findings (Section 4). Concluding remarks are provided in Section 5.

2. Theoretical background

Different schools of thought have provided rationales behind financial service usage (Johnson, 2005). Central to neoclassical economic theory are issues such as collateral, economic efficiency, and transaction and information costs (Guerin et al., 2012). Financial institutions are faced with the thorny issue of ensuring that a loan is used solely for its intended purpose in order to ensure repayment (Pauly, 1968; Stiglitz and Weiss, 1981). These institutions address this problem by charging lower than equilibrium interest rates as well as by using nonprice mechanisms such as collateral (Hoff and Stiglitz, 1990). To compensate for higher risk, due to the inability to discriminate against risky borrowers, financial institutions in the Global South will raise interest rates on loans (Armendariz de Aghion and Morduch, 2005), and in response, people will use informal loan sources when they are rationed out by formal credit providers (Stiglitz and Weiss, 1981) or because of the lower transaction costs, including quicker and simpler loan procedures (Guirkinge, 2008). Also, according to neoclassical economic theory, social relations and social structures have a minimal impact on production, distribution, and consumption (Granovetter, 1985), implying that issues related to credit can be detached from social relations.

In contrast, economic anthropology emphasises the social meaning of credit. Credit and debt are regarded as inseparable, as “[t]he nature and intentions of the contracting parties, the nature of the thing given, are all indivisible” (Mauss, 1990: 60). Beyond its economic significance, debt is framed as a social construct (Guerin, 2014; Ojong, 2019; Peebles, 2010; Shipton, 2010). People

draw on self-constructed hierarchies as well as calculative mechanisms to determine where they request credit and how they repay it (Bloch and Parry, 1989; Servet, 2006; Shipton, 2007). Such credit relationships reflect issues of power, honour, and status (Guerin, 2014; Kammoun, 2011; Ojong, 2019; Shipton, 2010).

Some scholars have highlighted various factors which shape sources of credit, such as privacy and anonymity (Vonderlack and Schreiner, 2002), flexibility and negotiability (Collins et al., 2009; Johnson and Sharma, 2007; Ojong, 2019; Rutherford, 2001), reliability (Bouman, 1989; Collins et al., 2009), and social relationships and the strength of their ties (Aryeetey, 1992; Ojong and Obeng-Odoom, 2017; Seibel, 2001). Other factors include proximity (Alimukhamedova et al., 2017; Gonzalez et al., 2015), structure and self-discipline (Collins et al., 2009; Guerty, 2007), and trust and reciprocity (Gifford, 2004; Hillenkamp, 2013; Ojong, 2020; Servet, 2007). The concept of reciprocity entails complementary relations based on voluntary interdependence (Servet, 2007). “Negotiability”, as used in this study, denotes “the possibility to negotiate transaction modalities and, particularly, defer repayment deadlines” (Guerin et al., 2011: 109). Mark Granovetter (1973: 1361) defined a “strong tie” as “a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie.” Marsden and Campbell (1984) argue that “closeness” is probably the best indicator of tie strength, while in contrast, weak ties have fewer of the features that are manifested in strong ties (Granovetter, 1973; Ojong, 2020).

It is important to look at the different dimensions of proximity that are relevant to our study: i.e., spatial proximity and social proximity. The former refers to the physical or geographic distance between individuals, while the latter denotes socially embedded relations between individuals at the micro level (Boschma, 2005). As stated by Boschma (2005), “Relations between

the actors are socially embedded when they involve trust that is based on friendship, kinship and experience” (p. 66). In other words, interpersonal relations are at the center of social proximity (Felder, 2020; Granovetter, 1985; Ojong, 2020).

By drawing on this theoretical background, this study focuses on the various loan sources used by rural populations to meet their everyday needs, including the motivations for using these loan sources.

3. Context and Research Methodology

3.1. Context

This study was conducted in two districts in Malawi (Mchinji and Kasungu) and three districts in Tanzania (Rorya, Singida, and Nzega). Both countries have experienced a significant rise in the adoption of SHSs, but have received little scholarly attention when compared to other countries in East Africa (e.g., Kenya) and Southern Africa (e.g., South Africa). Hence, both countries are interesting research sites for our study. Tanzania is viewed as a “high potential off-grid market” (Ferrall et al., 2014: 9), while about 50% of households in Malawi could be utilising home-based solar systems for energy by 2030 (GoM, 2018).

We also selected these research sites to reflect economic, socio-cultural, and geographic diversity. The research sites have different population sizes, with Kasungu having 842,953 inhabitants, Mchinji having 602,305, Shirati having 50,000, and Singida having 150,000. Malawi and Tanzania are largely agrarian societies, and in Malawi, just 11% of the population is connected to the centralised energy grid (National Statistics Office, 2018; USAID, 2019), versus 40% for Tanzania (Ferrall et al., 2014). In Malawi, farmers grow crops such as groundnuts, soya beans, tobacco, sweet potatoes, Irish potatoes, maize, and vegetables, along with livestock such as goats,

cattle, chickens, and pigs. Non-farming activities in the country include carpentry, tailoring, maize mills, pottery, hair salons, bakeries, restaurants, brewing, and welding. For comparison, in Tanzania, farmers grow crops such as cotton, groundnuts, beans, cassava, rice, and oil seeds, along with fishing and beekeeping. Beyond farming, other economic activities include timber trading, tourism, and brewing.

3.2. Methodology

We used an interpretive qualitative research design due to the nature of the questions we address in this study. An interpretive qualitative research design highlights the perspectives and experiences of participants (Creswell, 1998; Denzin, 1997). Our research participants construct meanings which are linked to various loan sources, and such meanings are brought to the fore, at least partially, through qualitative research (Crotty, 1998).

From February to June, 2022, interviews were conducted at the various research sites by research assistants based in Tanzania and Malawi. The research assistants were trained in qualitative research techniques by the authors, and they received feedback from the authors throughout the interview process. The assistants used their local networks to recruit the first research participants, and the snowball method was subsequently used to recruit other participants. Additionally, research assistants walked through the research sites to identify households who had installed solar panels or had it somewhere around their house. This was done in order to recruit individuals who were not part of the social network of participants who had been interviewed. Once identified, research participants asked either of the spouses whether they would like to take part in the study, and those who accepted were interviewed. The recruitment of participants was purposive in the sense that only households with any type of SHS were included in the study. Households with pico solar devices, i.e., solar lanterns were excluded from the study.

Interviews were conducted outside the participants' homes, and the research participants wore masks and followed guidelines regarding social distancing. Informed consent was obtained verbally prior to the start of the interviews, and this was audio-recorded as part of the interview process. Interviews lasted between 30 to 50 minutes on average, which was based on the responses provided by the participants. The study was approved by the ethics committee of the University of [blank for peer review].

The interviews were conducted in local languages using a semi-structured guide designed to investigate the loan sources used by rural residents to meet their everyday needs, and the interviews were audio-recorded. In total, 44 interviews were conducted in Malawi and 83 in Tanzania. The economic and socio-demographic characteristics of the research participants are presented in Table 1.

The interviews were transcribed and translated into English by the research assistants while they were in the field, and the authors provided follow-up questions where necessary. All identifying information was removed during the transcription, and each research participant was assigned an ID. For the data analysis, each author was assigned a country. To start, each transcript was read, and then we used open coding to identify themes related to our research questions. This enabled us to identify themes as described by the research participants as opposed to our own preconceived views. Similar codes were grouped together, and we subsequently compared the codes to facilitate analytical depth and interpretation of the results.

Table 1: Economic and socio-demographic characteristics of research participants

Characteristics		Tanzania (%) N= 83	Malawi (%) N= 44
Gender	Female	51	14.6
	Male	49	85.4
Age	20 < 35	35	64.8
	35 < 45	25	17
	45 < 55	21	13.5
	55 & above	16	4.7
Marital status	Single	13	6.7
	Married	73	93.3
	Divorced	4	
	Widowed	9	
Level of education	No formal education	4	
	Primary	57	46.5
	Secondary	29	53.5
	Tertiary	9	
Ethnicity	Ngoni		6.7
	Chewa		86.6
	Tumbuka		6.7
	Iraq	9	
	Maasai	5	
	Chagga	5	
	Sukuma	14	
	Nyamwezi	5	
	Nyaturu	14	
	Nyiramba	6	
Luo	20		
Other *	22		
Income generating activity	Small business	27	17.2
	Carpentry	2	2.4
	Farming	32	23.7
	Farming/small business	3	37.6
	Teaching	8	
	Farming/teaching		12.4
	Motorcycle taxi driver	5	
	Civil service	1	2.4
	Civil service/farming	1	4.3
Other	21		
Mode of purchase of SHS	PAYG	38	9
	No payment plan	62	91

*No single tribe over 7%

4. Results

Our study revealed that rural residents obtained loans to meet their everyday need such as food, shelter, health shocks, starting a small business, and access to basic energy services (e.g., purchase of SHSs), from five major sources: family members, friends, neighbours, savings and credit groups, and banks. To bring to the fore nuances and provide depth, we presented the results on a source-by-source basis, but we are not making a claim that individuals who borrowed money from one source did not make use of other sources.

4.1. Loans from family members

Families were one of the widely used sources of loans in both countries, being used by 34% and 50% of participants in Malawi and Tanzania, respectively. Research participants requested loans from this source because the family relationship gave them an assurance that the family member would provide the loan if they were in a financially sound position. For instance, when asked why they got a loan from a family member, a participant in Malawi said, “I have confidence that they will provide the loan” (Participant M18). Along similar lines, another participant from Malawi stated, “I feel that they [family member] can easily give me a loan because of our relationship” (Participant M14). Another participant in Tanzania noted, “Because of the blood relationship, my relative lends me money without imposing harsh conditions” (Participant CD09).

Even though there was a family relationship, participants would first consider the financial situation of the person they were planning to ask. A participant from Tanzania explained, “I could not have gone to ask them because they did not have,” while another said, “it is not easy [to borrow from them] due to the life situation they have.” Another participant from Malawi who did not request loans from relatives stated, “Because my relatives are also not well to do people, they are poor, hence it is difficult to borrow from them” (Participant M008). Similarly, another Malawian

participant did not request loans from family members “because they are also poor” (Participant M19). Then, the person would consider who would be sure to agree and potentially provide any amount they needed.

When requesting a loan from relatives, people made a difference between those with whom they have a “close” relationship and those who are “far”. In other words, people considered the nature of their relationship with a relative before requesting a loan. For example, when asked whether they obtained loans from relatives, one participant in Tanzania said, “Yes, but from relatives who are closer to me.” When asked to provide an explanation for their behaviour, they said, “Because if I fail to repay a loan provided by far relatives on time, there is likely to be murmurings. So, I like to borrow money from my closest relatives like my mom and sisters” (Participant CD13). Similarly, another participant stated, “Yes, but especially from my mum,” and explained, “Because I am her daughter and I know that she would not want to see me suffer, but other relatives will require that I provide a detailed explanation about my problems and at the end, they will not help me” (Participant CD22).

Other participants went beyond the nuclear family and were comfortable requesting a loan from an uncle, aunt, or cousin with whom they had a strong relationship. For instance, when asked whether they request loans from relatives, a participant in Tanzania said, “Yes, I borrow money from my cousin [...] because he is the one who has the habit of lending the amount of money I want” (Participant DL17). Another participant who frequently got loans from an extended family member said, “We have a habit of helping one another; when I need a loan, I always call my relatives, especially my uncle who always meets my request” (Participant DL2).

Family members were a preferred source of loans for some participants because they could understand participants’ situation and provide favourable repayment terms. On this point, a

participant from Tanzania who usually requested loans from family members explained: “[...] because they are my relatives, they can easily help me; for example, when I request a loan from my brother or sister, it is easier for them to understand [my situation] because they are my relatives” (Participant ED11). For other participants, the flexible repayment terms associated with loans from relatives were very attractive. One participant from Tanzania who often requested loans from family members said: “Because my relatives know me, and I can repay the loan at any time, and they would tolerate my excuses more than others” (Participant CD17).

However, that family members understand the condition of the borrower does not mean that the relationship between the lender and borrower is not affected in the case of a loan default. Participants also acknowledged that although loans from family members are convenient, a default could affect their relationship. In explaining why they turn to family members for loans, a participant in Tanzania noted, “Because it is easier for them to understand, but sometimes, failure to repay the loan can destroy your relationship; but what can I do, I don’t have the money” (Participant ED14).

That several participants obtained loans from family members does not mean that it was a preferred loan source for all participants. Our study revealed that some people did not request loans from family members due to ongoing or past experiences. Participants in both countries provided various reasons for not requesting loans from family members or for failure to receive loans from family members:

“They are just greedy with their things” (Participant ED10).

“Sometimes relatives are unwilling to provide a loan just to punish you, so that you suffer” (Participant M14).

“My relatives do not have the habit of helping one another; for example, my brother who lives in Kahama is so rich, but he does not care about me. That is why I decided to live my life without depending on my relatives, especially issues which concern money” (Participant DL1).

“Because relatives do not help fellow relatives. Even when you have a serious need, they always think that you just want to take their money” (Participant CD20).

Our study also revealed that spatial proximity was a factor that influenced people’s decisions to request loans from family members. Research participants preferred borrowing from family members in close spatial proximity and did not consider borrowing from those farther away. One participant from Tanzania explained that they could not borrow from their relatives “because [my relatives] do not live near me. So, it’s a little bit difficult to borrow money from them.” Along similar lines, a participant from Malawi did not request loans from relatives “because my relatives live far away” (Participant M11). Also, whether people requested loans from family members was based on their ability to access the loans easily and quickly, which also explains why spatial proximity was of particular importance. In several cases, speed was of particular importance, as people were dealing with an emergency. For instance, a participant in Malawi was in urgent need of a loan because their “daughter was admitted at the hospital, and I had no money to pay the hospital bills” (Participant M15).

4.2. Loans from friends

Our study also revealed that friends were another major source to obtain a loan. In Malawi, 45.6% of participants obtained loans from friends, against 68% for participants in Tanzania. In both countries, participants often requested loans from friends because they had a close, comfortable relationship with those individuals, who were trustworthy and able to understand and listen to their problems. Emphasising the trust in their relationship, one participant said, “I feel

comfortable to borrow from a friend because we trust one another” (Participant CD12), while another participant added that they would request loans from a friend “because a friend is someone whom I am close to, so I can share a lot with her, including my needs” (Participant CD12). Stressing the notion of closeness, another participant in Malawi said that they requested loans from friends “because they are my friends, so they always help, if they can” (Participant M004). Emphasising their close and comfortable relationship, a participant in Tanzania who regularly requested loans from a friend explained:

Because a friend is someone who knows me better and it is very easy for me to explain my problem or need [...] She may not give me the loan I request because sometimes she may also be in need of money, but at least I know that she can help me in any other way, for example, by providing some advice on what to do in order to get money (Participant SO9)

Additionally, participants requested loans from friends because the principle of reciprocity was embedded in their relationship. In other words, friends helped one another, which means that no one is a “permanent” borrower. On this point, one participant from Malawi said that they requested loans from a friend “because he is my friend, and we help one another” (Participant M16), while another participant in Tanzania noted, “a friend is someone whom I am close to, and there is normally a tendency of helping each other when he is in need, or I am in need. So, it is very easy for me to borrow money from him” (Participant SO14).

Also, friends were a preferred source for loans due to favourable factors such as negotiability and flexibility. Loans provided by friends were interest-free and there was flexibility in terms of a repayment timeframe. In other words, loans from friends were accompanied by flexible conditions that could be adjusted based on their situation. On this issue, one participant from Tanzania

explained that they borrowed money from a friend “because a friend listens to me and even when I fail to repay the loan on time, he gives me time to get the money and repay the loan” (Participant SO12), while another participant added that they borrowed money from a friend because they are “able to endure even if I am late in repaying [the loan]” (Participant ED7). Regarding another favourable aspect, a participant from Malawi borrowed money from a friend because “I didn’t want to pay interest on the loan, as is the case if I borrow from lending institutions” (Participant M002).

Our study revealed that not everyone who requested a loan from a friend received it, even when the friend (lender) was in a position to meet the loan request. Although a close relationship between a lender and borrower was potentially advantageous, it also enabled the former to assess the ability of the latter to repay the loan. For example, one participant from Malawi explained: “The last time I went to borrow money from a friend, I got the following response: [...] ‘How will you get the money to pay me back?’ I know your condition, so where will you get money to pay me back?’” (Participant SO2). On this point, one participant said, “As I am old, who can think of lending me money? They [friends] know that I don’t have a permanent job that can enable me to pay them back their money” (Participant SO19). In other words, people are aware that obtaining a loan from a friend is not a given; it is also based on an assessment of their ability to repay it.

4.3. Loans from neighbours

According to our study, a significant proportion of participants also obtained loans from neighbours to meet their everyday needs. In Tanzania, 34% of participants obtained loans from neighbours, against 45% for participants in Malawi.

Some participants frequently requested loans from neighbours due to the spatial proximity, availability, and speed in terms of receiving the loan. Spatial proximity between the participants

and their neighbours facilitated the development of a relationship which was vital for the provision of a loan. Spatial proximity meant that loans could quickly be provided, especially in times of emergency. For instance, one participant from Malawi who borrowed money from a neighbour explained, “He lives close to me, so when I have an urgent need, he is always there” (Participant M006), while another participant from Tanzania said, “Often, I borrow money from neighbours because I am able to get the loan faster” (Participant CD19).

Like friends, some participants borrowed money from neighbours because the relationship with the latter was buttressed in the principle of reciprocity. Meeting everyday needs entails helping one another, which means that a lender will become a borrower in the near future; as one participant from Malawi framed it, “We are close to each other, and we depend on each other when in need” (Participant M002), while another participant from Tanzania noted that “we frequently borrow money from each another” (Participant CD14). A participant from Tanzania engaged with the concept of reciprocity as follows:

[...] a neighbour is someone who lives near me, so we help each other a lot, especially those of us living in the village. We ask each other things like salt, matches, it`s normal; and a neighbour is someone who knows me well, so if I am in a need, I can make known the need to her or him, since there is a tendency of helping each other in our culture. So, yes, I borrow money from the neighbours. (Participant SO1)

For people who operate according to the concept of reciprocity, it is normal to borrow money from a neighbour, and the notion of reciprocity is embedded in local culture.

Beyond the principle of reciprocity, some participants obtained loans from neighbours because of the favourable conditions associated with it. Specifically, loans from neighbours were interest-

free and had flexibility in terms of the deadline for repayment. This flexibility made it possible to reschedule repayment based on the condition of the borrower. Regarding this point, one participant noted that they borrowed money from a neighbour “because I am sure of getting a loan and it is with no interest, and my neighbour understands my situation if I fail to repay the money as planned” (Participant SO10).

However, some participants did not borrow money from neighbours, and provided various reasons to justify their decisions. Even when people had a good relationship with their neighbours, they assessed the financial situation of their neighbour before requesting a loan. For example, one participant from Tanzania said, “As you can see, the situation of my neighbours is worse than mine, so how can I borrow money from them? I could borrow small things like tomatoes and salt” (Participant ED11). Along similar lines, another participant who did not request loans from neighbours noted:

Because I know them [neighbours]. Nowadays the economic condition is very hard, for example, the money that we borrowed for the solar home system four years back, I could not ask them because they didn't have. So, with the neighbors I have around here, I know that I can't borrow money from them, due to their financial condition. (Participant SO13)

Some participants did not borrow money from their neighbours because they did not want their neighbours to divulge their economic situation or to inform others that they needed to borrow. Hence, for people in this category, shunning loans from neighbours was one way of ensuring privacy. Below are excerpts from a few participants regarding this issue:

“No, I don't borrow money from my neighbours. Because neighbours can talk and spread my secret information to other people. I can say that they are gossips” (Participant DL16).

“No, not my neighbours. I do not borrow money from them because they will let the whole street know” (Participant ED6).

“I cannot borrow from them. I fear that they will talk about me regarding the debt” (Participant DL3).

“My neighbors are gossips, they will inform others, so I fear them” (Participant DL2).

Regarding privacy, some people were ready to live with their unmet needs instead of borrowing money from a neighbour. When asked whether they borrowed money from neighbours, one participant replied, “No, no, no! I would stay in the dark until I get money” (Participant CD8). This participant had a rent-to-own agreement with a solar energy provider in Tanzania where the company could remotely stop users from using the SHS in the case of a default on the monthly payment. So, what Participant CD8 was saying was that if they could not make the required monthly payments for their SHS, they would prefer to go without electricity than borrow money from neighbours.

Also, some participants did not borrow money from neighbours because of an absence of social proximity. Put differently, spatial proximity alone does not make people eligible to borrow money from their neighbours; an established interpersonal relationship is also crucial. Thus, people without an established social relationship with their neighbours did not borrow money from them. One participant from Tanzania noted, “I do not spend much time at home; most of my neighbours do not know me, you [research assistant] are lucky to find me at home today. So, it’s not possible for me to borrow money from my neighbours” (Participant ED9). In a similar vein, another participant said, “Because I am not often at home, so I don’t have a close relationship with my neighbours, which makes it difficult to borrow money from them” (Participant CD18).

Moreover, some participants did not borrow money from neighbours because their social relationship might be affected if the loan was not repaid. So, to maintain a good social relationship, it was vital to avoid borrowing money from that source. On this point, one participant said that they did not borrow money from neighbours “because failure to repay can lead to misunderstanding and be a source of hostility between us” (Participant CD17).

4.4. Loans from banks

In our study, participants received loans from banks, although very few did so. In Malawi, 16% of participants obtained loans from banks, against 17% for participants in Tanzania. The vast majority of participants did not consider borrowing from a bank. This was due to lack of information, the associated conditions and processes, inconvenience, and cost associated with getting a loan. A participant from Malawi said that they did not request a loan from a bank “because I get a loan from neighbours on time, and I don’t need transport fare, nor do I have to make a call before going to meet them” (Participant CD19), while another participant from Tanzania said that they had “never even seen what a bank looks like” (Participant CD18). Participants perceived that banks charge high interest rates on loans and had a lot of procedures and conditions to obtain the loan. A participant from Malawi said, “I don’t know the procedure to follow when borrowing money from the bank” (Participant M002), while another participant from Tanzania explained: “It is difficult to get a loan from a bank because of the long process. You have to go through different offices to get a license, which takes a long time. Also, the interest rate is so exploitative” (Participant DL2).

Participants also mentioned that they were unable to meet the collateral requirement to get a loan from a bank. For example, a participant who did not borrow money from a bank said, “To

borrow money from a bank, you must have an asset like a car or land, to be used as a bond. I don't have those” (Participant CD11).

Notably, participants also feared harsh consequences from the bank in case of a loan default. A participant from Tanzania claimed that: “there is no mercy at all [at the bank], they will just sell something from your family, either your house or anything worth their loan, which a friend can’t do” (Participant SO17), while another participant even claimed that banks “always confiscate all your property once you fail to repay their money” (Participant DL1).

However, a few participants from both countries actually preferred borrowing money from banks, especially because these institutions provided large loans. A participant from Malawi explained: “Because I need to borrow a large sum of money, so the bank is the only institution that can offer such amount of money at a reasonable interest rate” (Participant M006). Similarly, one participant from Tanzania said, “Because any entrepreneur like me must borrow money from a bank to boost his or her business when not going well” (Participant CD17). In other words, certain economic activities require a significant amount of funds which banks are well positioned to provide.

4.5. Loans from savings and credit groups

According to our findings, some people borrowed money from savings and credit groups. Various reasons explain why these participants used this source, including accessibility, reliability, speed, and convenience. When asked why they borrowed money from a savings and credit group, one participant said, “First, it was because we were sure of getting it [loan]. Second, the processes of getting a loan from a group are not difficult, and third, it was urgent [...]” (Participant SO13). Stressing the issue of reliability, another participant noted:

We normally borrow money from the group. We have a group which mainly focuses on helping each other especially during funerals and celebrations. So, the group allows any member who wants to borrow money from the group to do so. The reason why we choose to borrow from the group and not from other sources is because we are sure of getting the money any time (Participant SO5).

That said, the loans provided by savings and credit groups were not interest-free, and the assets of the borrower could be seized in case of default. When asked about the interest rate charged on loans provided by a savings and credit group, one participant said, “It depends on the amount you borrow. For example, if you borrow 200,000/Tsh, the interest rate is 20,000/Tsh” (Participant SO5). When asked what happened in case of a loan default, one participant replied: “they normally sell some of your things in the house like dishes, chairs or anything that is worth their debt” (Participant SO2). However, seizing a borrower’s assets is often done as a last resort, after several reschedulings of the loan repayment. For instance, a participant borrowed 120,000/Tsh from a group and was unable to repay the loan on time, but there was no seizure of their assets. However, their relationship with members of the group was strained: “I was in debt for the whole year. I have already repaid the loan. I felt so bad because I was unable to repay the loan on time [...] the SACCOS members were angry with me because of the delay in repaying the loan. I felt so bad” (Participant DL16).

5. Discussion

As we delve into a discussion of our findings, it is worth noting that although all our participants were SHS adopters, our analysis reflects broader socio-economic dynamics in the

various research sites. Put differently, the complex dynamics related to debt relations are not particular to SHS adopters.

Our study on the various loan sources used by participants showed the importance of strong ties. Although people might have social relationships with different potential loan sources, there was a tendency to borrow money from those with whom they had a strong relationship. This supports previous studies which argue that people seek support from those with whom they have a close relationship (Fischer, 1982; Wellman and Wortley, 1990). However, unlike studies which framed relationships with family members as strong ties (Coleman, 1990; Liu et al., 2015), our findings suggests that family ties may be strong or weak. People differentiated between strong and weak ties within families, and based on that differentiation, they borrowed money from those with whom they had a strong tie. Also, our findings indicate that it would be erroneous to always frame, on the one hand, parents and siblings as strong ties, and on the other hand, extended family members such as cousins, aunts, and uncles, as weak ties. In other words, there is heterogeneity regarding where people situate family members. While some people borrowed money from parents and siblings because they were strong ties, others borrowed money from cousins, aunts, and uncles precisely for the same reason. Additionally, our findings suggest that the notion of a strong tie is not the preserve of family members, as people equally had strong relationships with friends and neighbours, which explains why they also borrowed money from these sources. Such strong ties were defined by closeness and the principle of reciprocity, and previous studies have noted closeness and reciprocity as distinctive features of strong ties (Granovetter, 1973; Marsden and Campbell, 1984). “Strong ties belong to the realm of intimacy” (Felder, 2020: 681), and intimate relationships are not a given among members in a nuclear family,

Furthermore, the finding that people borrowed money from those with whom they had a reciprocal relationship, which entailed helping one another in times of need, suggests that where possible, people want relationships where no one is a permanent lender or borrower, as this has implications in terms of creating social or moral hierarchies. Studies have shown that debt can create hierarchies (Malamoud, 1980; Mauss, 1990), and note that social hierarchies are also based on dependency on credit (Guerin, 2014). Arguably, by borrowing money from those with whom they have a reciprocal relationship, people are signalling their dislike for a hierarchical relationship in favour of one where equality is a distinctive feature. Said differently, people prefer an interdependent relationship over one based on dependency.

Moreover, our study showed that both social considerations (such as social relationship, trust, dignity, and social worth) and economic considerations (such as interest rates and the cost of loan default) shape people's decisions regarding where they obtain and how they repay loans, suggesting that social considerations cannot be ignored when examining factors that hinder people from requesting loans or using other financial services. People avoided loans from sources which could lead to humiliation and hence negatively affect their dignity and social worth in their local communities. That people avoided loans from neighbours because they might divulge their financial situation has nothing to do with economic considerations; it relates to the social significance of being a debtor, including the shame of being unable to meet certain everyday needs.

Notably, our findings show that spatial and social proximity are intimately intertwined, and that both play an important role in determining where people turn to when in need of a loan. Spatial proximity was of particular importance when people needed loans to deal with emergencies, but spatial proximity alone does not guarantee the provision of a loan; it has to be complemented by social proximity. Arguably, it is because of the absence of social proximity that some people were

unable to borrow money from neighbours with whom they enjoyed spatial proximity, as those who desired a loan from neighbours were also required to have an interpersonal relationship with them. Then, the socially embedded relationship between both parties facilitates the provision of a loan. Thus, depending on the context, spatial proximity can facilitate the development of social proximity. Social proximity is developed between neighbours by sharing meals, chatting on a regular basis, and attending various events (Felder, 2020; Ojong, 2020). In other cases, social proximity alone could not ensure the provision of a loan. As shown in the previous section, some participants could not borrow money from family members with whom they enjoyed social proximity because of spatial distance, and for such individuals, social proximity had to be complemented by spatial proximity in order to borrow money from family members.

6. Conclusions

This paper examined the loan sources used by rural residents to meet their everyday needs, as well as the motivations for using these loan sources. According to our findings, people take into account social and economic considerations when deciding where to borrow money. Also, the strength of their ties determined where people borrowed money. Within the family, people borrowed money from those with whom they had strong ties, and such people could be parents, siblings, cousins, uncles, and aunts. The decision to borrow money from friends and neighbours was also influenced by the strength of the ties, and furthermore, when requesting a loan, people often turned to individuals with whom they had a reciprocal relationship, suggesting their preference to avoid dependency in favour of equality. Additionally, spatial and social proximity play important and complementary roles in loan provision, as in several cases, both dimensions of proximity were required for the provision of a loan.

Our results have implications for energy policy. Our findings bring to the fore the financial precarity in rural Malawian and Tanzanian contexts. This has implications for energy policy that increasingly requires households to purchase their own means of energy production. The increasingly market-led approach to access to basic energy services does not take into account the financial precarity of low-income rural residents in Africa. The point often made in policy circles especially as it relates to promoting the use of renewable energy technologies such as SHSs, is that low-income rural residents often spend money purchasing other sources of energy such as wood, charcoal, candles, and thus, should find basic renewable energy services affordable. In practice, energy policy which requires rural residents to purchase their own means of energy production is leading to the reproduction of their financial precarity. The financial precarity of low-income rural residents is made worse, as they tend to purchase cheaper and low-quality SHSs which have a relatively shorter lifespan. Regular break down of these systems requires funds to get them repaired or purchase new components of the SHS. Such regular repairs or the purchase of new components affects the financial health of low-income rural residents. One cannot make claims of improving their wellbeing by downloading the financial demands of access to basic energy services, as doing so entrenches their financial precarity.

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