



Group Willingness to Repay Credit under the Village Revolving Fund in the Refugee Communities in Uganda

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ABSTRACT

Willingness of borrowers to repay credit remains an enigmatic challenge in the tropics. Despite the efforts to improve financial inclusion among marginalized populations, loan repayment performance remains a major problem. This study attempted to assess the ability of refugees to manage and sustain group funds and examine their willingness to repay (WTP) the revolving loan fund in Uganda's refugee communities. Descriptive statistics showed that the average age of group members, the proportion of female members, group funding experience, weekly savings, and asset acquisition varied by region. Only 34.4% of the groups were willing to repay the total loan. The group's mean WTP price was statistically and significantly lower than the expected pay price for both traditional and non-traditional enterprises. The logistic regression results showed that the group registration and investment in farming positively and significantly influenced the groups' WTP credit. In contrast, the age of group members, funding experience, female group leader, number of audits per loan cycle, participation in social responsibilities, and number of group meetings negatively affected it. The study therefore recommends strengthening external social ties through group registration, support for group investments in farming enterprises, expenditure control for welfare activities, and balancing group meeting frequency to enhance loan repayment performance.

Keywords: Refugees, Revolving fund, Willingness to repay, Host Communities, Uganda.

JEL Codes: H31, I31, I38

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1. INTRODUCTION

There is growing knowledge of evidence, especially in the developing economies, on the nexus between access to credit and the willingness to repay the loan acquired. These nexuses relate to loan amount acquired, interest rates charged, loan repayment duration, as well as proximity to withdraw borrowed money, especially in rural communities (Sarfo et al., 2021). It is also evident that the willingness to repay loans in the developing countries is relatively low, and at the same time, potential borrowers are more credit-constrained, which is partly due to high transaction and administrative costs on the credit (Ojo & Baiyegunhi, 2020; Okonta et al., 2023). However, in most developing economies, the short to medium-term collateral-free loans are used as strategic interventions to advance financial inclusion for vulnerable communities, aiming to improve livelihoods through increased participation (López et al., 2022). It is also noted that the formal lending institutions, like commercial banks and credit institutions, have a limited outreach scope to serve the rural poor. In the circumstances, the self-help institutions such as the Village Savings and Loan Associations (VLSAs) and Rotating Savings and Credit Associations (ROSCAs) are often the alternative finance solutions for the vulnerable poor (López et al., 2022; Madestam, 2014). At the macro-level, there is a close relationship between financial access, inclusion of the vulnerable groups, and economic development and growth (Danquah et al., 2021; Deb & Kubzansky, 2012; Meniago et al., 2025).

Moreover, both the public and private sectors, through social protection initiatives, have promoted the informal solutions of saving groups to help improve the financial inclusion of the vulnerable and rural poor (Giné & Karlan, 2014; Kodongo & Kendi, 2013; Lubinga et al., 2026). Previous studies conclude that savings groups have a positive correlation to household savings, asset accumulation, consumption, and social capital, among others (Agyapong et al., 2024; Gash, 2017). Thus, when the saving group members demonstrate the capacity to repay their credit, then financial services can be accessible to them sustainably. Whereas the loan terms and conditions are clear and borrowers may understand their obligations, particularly on timely repayment of credit, it is not often the case due to several hindrances. Some of the obstructive factors include price of the credit, loan repayment period, risk tolerance, and social factors that may influence borrowing and willingness to repay the credit (Dalla Pellegrina et al., 2021; Endris, 2022). Public-funded social protection initiatives have only extended to a few poor, vulnerable, and marginalized populations in Uganda despite the constitutional mandate (Lubinga et al., 2026). Clearly, microfinance institutions (MFIs) still rarely lend to refugees despite the recognized value of microfinance in improving their livelihoods (Easton-Calabria & Hakiza, 2021). However, existing microfinance programs have traditionally had limited success in loan repayments in these refugee communities. Thus, there is a need to explore possible correlates of willingness to pay (WTP) for credit in refugee communities in Uganda.

Uganda hosts Africa's largest refugee population with nearly 2 million refugees settled in urban centers and 28 refugee settlements across the country (Reach Initiative, 2023). Most refugee-host communities are typically characterized by high levels of poverty with precarious livelihood conditions, low access to public services, and underdeveloped infrastructure (Walelign et al., 2022). While rebuilding livelihoods is increasingly promoted to achieve self-reliance and empowerment, access to financial services remains limited in Uganda's refugee and host communities (U-LEARN & Reach Initiative, 2023). The government of Uganda

(GoU) and several development partners have launched projects to improve access to financial services among refugees and their host communities in and around refugee settlements. Some of these include the Financial Inclusion for Refugees (FI4R) Project commissioned by the Financial Sector Deepening Uganda (FSDU) in collaboration with Financial Sector Deepening (FSD) Africa, and the Development Response to Displacement Impacts Project (DRDIP) led by the government through the Office of the Prime Minister. Under the DRDIP intervention, a Village Revolving Fund (VRF) of \$15,000 would be disbursed into an average of three graduated groups at the parish level, managed by the VRF Management Committee at a maximum interest rate of 5%. The beneficiary groups engaged in traditional (on-farm enterprises) would receive a loan duration of six months, while those engaged in non-traditional (off-farm enterprises) would receive a loan duration of four months. The loans would initially be accessed for group-level businesses only for two (2) loan cycles and later on, opened up for sub-groups and individual members through their self-help groups (SHGs).

Aligned with her agenda to integrate refugees into local systems and to achieve equitable development in rural communities, Uganda's microfinance industry facilitates financial inclusion among marginalized populations for business development and improvement of livelihoods. This is because microfinance has been successful in reaching financially excluded poor households through its group lending mechanisms with joint liability (Postelnicu et al., 2019). However, the issue of loan repayment performance remains a bottleneck in several credit markets, necessitating an investigation in the context of marginalized populations (Msuya, 2019). To inform effective and efficient operationalization of the village revolving fund (VRF) approach among refugees, this study set out to assess: 1) the ability of groups in refugee settlements to manage and sustain group funds, and 2) their willingness to repay revolving loan funds. Although still a relatively new phenomenon, revolving funds are financial instruments intended to close the existing financing gaps and increase the efficiency of public funding (Wasser et al., 2020).

2. THEORETICAL FRAMEWORK, METHODS AND DATA

2.1. Theoretical framework

The framework of willingness-to-pay (WTP) is derived from behavioral economics, which suggests that if people were motivated by the "warm glow" effect, then the provision of monetary incentives would reduce their motivation to contribute to public goods. The WTP estimation models have been widely used to estimate the benefits of policies by comparing the marginal benefits with the marginal costs, and where the optimal level of welfare benefit can be defined. The most common technique for estimating WTP is the critical valuation method (CVM) that employs the discrete behavioral outcomes (logit or probit) for specific scenarios. The outcome measure is usually presented as two or multiple dichotomous choice questions to a randomly selected WTP scenario (Štreimikiene & Mikalauskiene, 2023). In estimating the WTP using different approaches, systematic deviations between knowledge and attitudes, as well as the assumptions of rational choice and maximization of utility in classical economics, could be observed. In the absence of explicit markets for services, the more indirect means for assessing the WTP are preferred (Rogers et al., 2019; Yevdokimov & Getalo, 2019).

There could be more socio-economic, institutional group-specific attributes as well as loan management factors that may hinder the compliance to loan repayment, and yet it is a clear

fact that the capacity and willingness of the borrower to repay the loan obligations are essential and the first risk to the lender's financial sustainability. For instance, López et al. (2022), while assessing the savings group members' factors that have an impact on the default risk using the multivariate regression, found that the savings group experience, accumulated loan amount, and number of members in the savings groups are the significant determinants of default risk. Besides, the activeness of the group members through regular meetings improves their financial literacy and skills to manage loans for their better livelihoods (Armendáriz & Morduch, 2005). Further, repayment improves social ties, and group reputation is strengthened, which could ultimately affect individual credit ratings (Attanasio et al., 2013).

Elsewhere, Baland et al. (2017) conclude that group lending, where members have the collective obligation to repay the loan, is three times less likely to default than individual loans. The group lending approach helps to identify debtors within groups with progressive debt obligations. Even then, some borrowers would change character and behave in accordance with those around them against their own interest, thus some members within the group can influence others (Al-azzam et al., 2012; Karlan et al., 2017; Prina, 2015). The size of the savings group has characteristics of management of the credit and repayment mechanisms; in that large groups with strong social ties may be able to enforce the cooperative agreements with an intra-group monitoring role necessary for group loan repayment (Ahlin, 2015).

The duration of the savings group is also associated with experience and institutional memory of managing the loan affairs. A debtor with a long loan history is more responsible, disciplined, and reputable in meeting repayment obligations compared to the younger borrowers. The lack of experience in loan management and in business in general is highly correlated with the inability to repay the loans (López et al., 2022; Mokhtar et al., 2012).

The savings groups are encouraged to develop business plans to use in the investments of their loans. The good plans often encompass resource mobilization strategies, saving mechanisms, and strategies for business skills among members. Financial skills are one of the enablers for managing micro-businesses. Financial literacy improves microcredit outcomes. The impact of training in business skills also improves group feasibility, reputation, and instills confidence in the public (Alejandro et al., 2014; López et al., 2022). Some studies reveal that the interest paid on the loans is a deterrent to the willingness to repay credit and thus increases the default risks. As mentioned previously, the small-scale saving schemes serve the interests of the unbanked and protect the group members from the exploitative interest rates. Thus, low interest rates, especially charged through group lending, reduce default risk as opposed to high interest rates that increase chances of client delinquency (Kodongo & Kendi, 2013).

Some studies have highlighted other factors that affect willingness to repay, such as financial and health conditions (Ashraf, 2020); weather conditions (Golden et al., 2007); inflationary pressure arising from increases in food and non-food prices (López et al., 2022; Owusu-Manu et al., 2016). Such factors would be taken into account as determinants of willingness to repay the credit; however, due to the study scope focusing on group-level businesses, the macroeconomic indicators may not be suitable for the model structure.

2.2. Methods and Data

The willingness to repay credit is based on the stated preference technique, with contingent valuation methodology (CVM) as the most popular technique (Yevdokimov & Getalo, 2019). Thus, this study employs this technique using the highest customer-perceived value (CPV) and eventually maximizing total welfare. The approach ascertains the benefits, costs, and financial risks of borrowing as well as the willingness to pay and sustain community investments. A beneficiary group with full information on VRF would be willing to pay if the expected utility obtained is greater than the satisfaction derived from the use of other credit sources. WTP is therefore predicted by the amount of income a group will be willing to forego to obtain the fund without altering its level of utility. Thus;

$$\text{Mean WTP}_{y=1} = \frac{\sum_{i=0}^n X_i}{n} \quad (1)$$

Where is the stated WTP for credit by beneficiary group, y represents the group that was willing to pay, and n represents the sample size for those WTP. A t-test was used to determine the willingness to pay prices in different refugee host locations. To examine the pertinent factors that influence groups' willingness to repay, a logit model was estimated. Hosmer and Lemeshow (1989) indicated that the logistic distribution (logit) has an advantage over other models in the analysis of dichotomous outcome variables, namely, high flexibility and ease of use from a mathematical perspective, given its simplicity of calculation, as well as the probability estimates that lie between 0 and 1, resulting in meaningful interpretation. Therefore, the cumulative logistic probability model is econometrically defined as follows (Pindyck & Rubinfeld, 1981):

$$Y_i = \alpha + \sum_{i=1}^n \beta_i X_i + U_i \quad (2)$$

Where Y_i is the dependent variable that indicates the probability of the group's willingness to repay the loan, X_i is the vector of explanatory variables, β_i is a vector of unknown parameters, U_i denotes the disturbance or error term, which represents all factors that affect the probability of the group's willingness to repay the VRF loan or otherwise. The explanatory variables included in the model were based on previous literature on group characteristics that significantly influence the willingness to repay group loans, such as individual members' age, gender, education level, purpose of borrowing, business experience, and income (Abdi et al., 2023; Kassegn & Endris, 2021; Saparila, 2019; Syari'udin et al., 2023).

In terms of sampling and data, the study used a mixed research design to collect the required data using a concurrent approach. We purposively targeted existing groups in eleven (11) refugee settlements within the nine (9) refugee hosting districts in which previous livelihood support program (LSP) activities had been implemented in Uganda. A multi-stage sampling technique was used, where we purposively selected at least one watershed from each settlement, totaling 14 watersheds. At the watershed level, three existing groups were randomly sampled from villages previously supported by the livelihoods grants, and subsequently, 96 groups were sampled.

The data were collected from March 2022 to May 2022, using a structured questionnaire to understand the implementation arrangement of existing groups, willingness to repay loans, and predictors of loan repayment. Descriptive statistics in the form of frequencies, averages, and percentages were generated to characterize the nature of the existing groups, and marginal

effects from the logit analysis model were estimated to indicate the probability of willingness to repay funds under the VRF approach.

3. RESULTS AND DISCUSSION

3.1 Description of Groups in Refugee Settlements

Overall, the group comprised 25 members. The descriptive results indicated that group members had an average age of 37 years (**Table 1**), with the largest proportion being youths (54.2%). Group members had spent about five years in formal education, with men having higher education (seven years) than their female counterparts (four years). The majority group (71.5%) was comprised of female members with an average of 18 members, which is well above the membership of men. This was attributable to the large number of women and children who are disproportionately affected during insurgencies, riots, conflicts, persecution, or disasters, as men commonly lose their lives in the process (UNHCR, 2023). The proportion of female members was comparably higher, regardless of age, with 73.8% and 66.9% being women among the youth and adult members, respectively—most of the groups comprised of refugees (97.9%). In addition, the majority of group members were residents (99.5%) within settlements, with only a few members who had relocated to urban areas in search of employment, business opportunities, or returned to their homes. This partly explains the large composition of refugee members in existing groups compared to nationals, which attests to previous findings that refugees are less transitory than imagined (Hansen, 2017; UNHCR, 2023).

Table 1: Socio demographic characteristics of members among existing groups

Variable	Pooled (n=96)	Western (n=44)	Northern (n=20)	West Nile (n=32)	F- Value
Age of Group Members	36.50 (36.50)	38.08 (3.65)	36.71 (4.36)	34.20 (4.47)	8.40***
Group members' years of formal education	5.09 (2.41)	5.18 (2.41)	4.97 (2.07)	5.03 (2.65)	0.06
No. of Group Members	25.13 (6.90)	23.82 (7.23)	25.70 (5.62)	26.56 (7.03)	1.57
Years of Group Existence	3.19 (1.74)	3.44 (2.16)	3.27 (1.21)	2.80 (1.29)	1.28
% of Female members	71.53 (15.80)	66.52 (13.36)	73.06 (14.44)	77.47 (17.76)	4.95**
Annual number of Group meetings	30.54 (18.99)	35.00 (20.23)	26.00 (18.83)	27.25 (16.36)	2.33
No. of trainings related to financial management	1.08 (3.59)	1.70 (3.83)	1.30 (5.36)	0.09 (0.30)	1.94
Proportion of groups... (1=Yes)					χ^2
With Business Plan	43.75	45.24	23.81	30.95	0.45
With traditional (farming) as main economic enterprise	53.13	49.02	19.61	31.37	0.44
Funding experience	25.00	75.00	8.33	16.67	11.01***
Registration	81.25	44.87	24.36	30.77	3.39
Female Group Leader	47.13	39.02	29.27	31.71	3.05
That saves on weekly basis	77.00	45.95	25.68	28.38	6.01**
That acquired assets	41.67	60.00	12.50	27.50	5.99**

Note: Standard deviations in parentheses and levels of significance denoted as *p < 0.1, **p < 0.05, and ***p < 0.01.

Further, there was a significant association between regions and the proportion of groups with funding experience ($\chi^2=11.01$, $p\text{-value}=1\%$), proportion of groups that save on a weekly basis ($\chi^2=6.01$, $p\text{-value}=5\%$), as well as proportion of groups that acquired assets ($\chi^2=5.99$, $p\text{-value}=5\%$), respectively.

Only 20.8% of the sampled groups mentioned that they had some institutions, agents, or service providers that offered credit services in surrounding communities. Financial service providers in refugee settlements are dominated by microfinance institutions (MFIs), including FINCA (50%), followed by VSLAs (35%), SACCOs (15%), and private money lenders (10%), respectively. Financial products largely included issuance of short-term credits to individual borrowers (85.7%) at varying interest rates, ranging from about 2 to 20% per month, and handled deposits in savings accounts (42.9%). Only 11.5% of the sampled groups had obtained credit in the past 24 months, entirely accessed from microfinance institutions, ranging from UGX 1.5 to 22 million (USD 405 to 5,946) at varying costs of capital that ranged from 3% to over 30% per month. Groups borrowed funds mainly for investment in crop production activities (37%), inter-lending activities (36%), and expansion of group-level investments (27%). Notably, a few groups (25%) received livelihood grants worth UGX 2,105,083 (USD 569) as cash support intended for individual member loaning activities. Either way, the process of working with financial service providers and amongst themselves has gradually built governance structures, introduced operating procedures, and developed abilities, skills, and experience to manage and sustain funds at the group level in refugee communities.

3.2 Ability to manage and sustain group funds

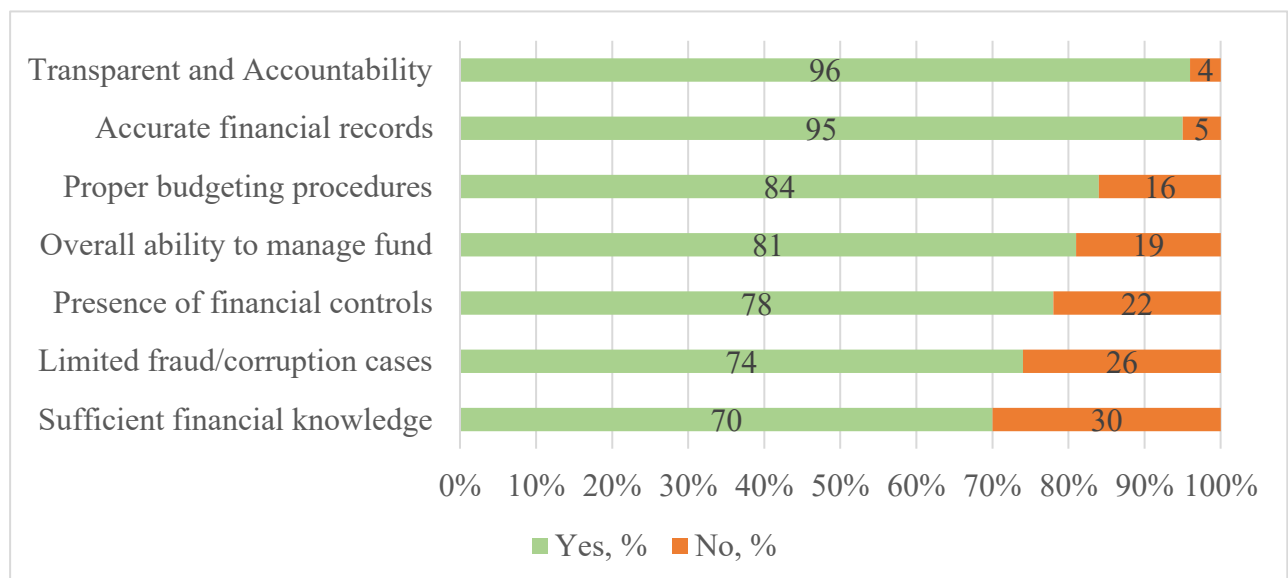
Refugee groups conduct inter-lending activities through the Village Savings Loans Associations approach to support individual investments in income-generating activities and make routine savings to achieve individual development plans from every savings cycle under the target savings strategy. Almost all the sampled groups had a routine practice of saving through the village savings loan association (VSLA) approach. The results revealed that most groups in refugee settlements made weekly savings, especially those located in the refugee-hosting districts of Kikuube, Madi-Okollo, and Kiryandongo. Only a few groups in the districts of Yumbe, Adjumani, and Kamwenge were saved monthly. This corroborates the findings of BFA Global (2020) that refugees do not solely depend on cash and in-kind transfers, but instead on a wide range of livelihoods. Driven by the desire to invest in income-generating activities, the groups' initial investment activities were worth UGX 1,377,164 (USD 372), which had grown to an average of UGX 3,191,260 (USD 863) over a period of three months, indicating a 10% growth in group funds. At the time of the study, groups had registered varying amounts of savings ranging from UGX 20,000 to 24,700,000 (USD 5.4 to 6,676) in a single savings cycle. Managing their own group fund has steadily developed their financial management skills and knowledge, including the minimization of credit risks with the use of strict financial control measures and morals proven to encourage savers and borrowers' solidarity. A few refugee group members saved on a monthly basis, depending on cash remittances periodically received from supporting individuals and partners (Venkatesan et al., 2021).

Most of the groups (94.8%) conducted individual loaning and borrowing at an average monthly interest rate of 7%. While groups, on average, had UGX 2,380,965 (USD 644) in debt, the expensive cost of capital partly explained the small loan amounts of about UGX 100,000

(USD 27) obtained by individual borrowers. Of the groups that performed inter-lending activities, 95.6% noted that members were creditworthy—fully paying back both the loan principal and interest charges within the agreed periods. Only 4% of the groups reported loan defaulting cases, with an average amount of UGX 125,000 (USD 34) already written off as bad debt. Groups that had not introduced inter-lending activities attributed the setback to the low capital reserves handled at the group level.

The majority of the members agreed that their groups maintained accurate records, utilized proper reporting mechanisms, followed proper budgeting procedures, and maintained transparency and accountability in financial management, among other prudent financial practices that reduced cases of fraud and mismanagement of group funds in the majority of the groups (**Figure 1**). In addition, the majority of group members perceived that their groups had sufficient knowledge, skills, and experience to support the proper execution of financial functions, with credible budgeting procedures based on group plans and policies.

Figure 1: Members' Rating performance level of existing groups in terms of financial management



3.3. Group willingness to repay the revolving fund loan

The majority of groups in refugee settlements were willing to obtain credit from financial service providers (95.8%). They had a greater preference for investing in crop production activities (34.8%), especially cassava growth, and the expanding group running investments mainly produced trading (31.5%), implying that the financial market segment remains huge in refugee communities. Thus, this illustrates the demand for, and the critical role of access to financial services in building resilience of refugees on refugee protection and resettlement (Venkatesan et al., 2021).

Based on the **assumption** that USD 15,000 benefits about three (3) groups in a targeted village at an interest rate of 5% from the VRF, results obtained from the contingent valuation method show that only 34.4% of the groups were willing to repay credit, both loan principal and interest, within the specified loan duration for traditional and non-traditional sub-projects. In consideration of the 5% cost of capital for the loan amount of UGX 18.5 million (USD 5,000), however, the group's mean Willingness to Pay (WTP) price was statistically and significantly lower than the expected pay price, as presented in **Table 2**. Overall, the groups' average WTP

price was UGX 18.7 million (USD 5,054) and UGX 18.8 million (USD 5,081), significantly lower than the expected pay price of UGX 18.8 million (USD 5,081) and UGX 19.0 million (USD 5,135) for traditional and non-traditional enterprises, respectively. This corresponds to the desired cost of capital, where only a few groups were willing to access credit at a five percent cost of capital. In contrast, the majority of the groups (66.7%) preferred relatively lower interest rates ranging from one to four percent.

Table 2: Groups' willingness to repay the loan disaggregated by district

	Mean Willingness to Pay (WTP)	
	Traditional enterprises	Non-traditional enterprises
Pooled Sample (n=96)	18,700,000*** (79,139)	18,800,000*** (118,708)

Note: Level of significance: *p<0.1, **p<0.05 and ***p<0.01. Mean WTP measured in Uganda shillings.

The results from the logit regression analysis are presented as logits in absolute and marginal effects or relative measures, respectively. In terms of model diagnostics, forecast power as measured by Pseudo R² reveals the model is predictive of 43.3% and 44.6%, respectively. Further, the significant probabilities of the chi-square indicate the models are correctly specified, and thus the robust estimates can be used to forecast and make inferences accordingly.

The results indicate the likelihood and the change in probability of a group's willingness to repay the VRF loan (**Table 3**). The results revealed that an increase in the average age of the group members reduces the likelihood of willingness to pay by 23.5% (column 2), resulting in a 2.8% decrease of 2.8% percentage points (column 2), at 5% level of significance. The effect size and marginal effects remain relatively similar after controlling for regional effects (columns 4 and 5). Further, even after controlling for regional differences, the odds of being willing to repay are approximately 5.73 times higher for groups undertaking the farming enterprise as the use of the credit significant at 5% compared to groups investing in non-farming enterprises (column 4), positing a marginal effect of 20.3% percentage points (column 5), respectively. This could be attributable to the fact that agricultural investments often allow for loan repayment to be directly tied to the harvest, creating a more reliable, tangible cash flow to service debt (Villalba et al., 2023).

The use of credit, in a sense, is critical in that borrowers with a common character and interest invest in a productive activity and progressively work to meet the debt obligations (Prina, 2015). However, groups with funding experience significantly reduced the probability willingness to repay credit by 29% percentage points, and after controlling for regions (by 31.6% percentage points) at the 1% level of significance, which is surprising and contrary to the findings that a group with long loan history is more responsible, disciplined and reputable to meet repayment obligations compared to the younger ones (López et al., 2022; Mokhtar et al., 2012). This implies that the probability of paying back the group loan would be reduced for groups that had experience with group funds. The observed paradox is attributable to moral hazard, rooted in asymmetric information, where groups with stellar repayment histories perceive a reduced probability of punitive sanctions, hence the reduced repayment discipline and increased risk-taking behavior (Cornée & Masclet, 2022; Mukherjee & Kundu, 2014).

Table 3: Logit model estimates and marginal effects for factors influencing groups' willingness to repay credit

Column 1 DV: Willingness to Pay	Column 2 Logit estimates	Column 3 Marginal effects	Column 4 Logit estimates	Column 5 Marginal effects
Age of Group Members	-0.235** (0.10)	-0.028** (0.01)	-0.237** (0.09)	-0.028*** (0.01)
Group members' years of formal education	-0.044 (0.20)	-0.005 (0.02)	-0.066 (0.21)	-0.008 (0.02)
Number of Group Members	0.000 (0.06)	0.000 (0.00)	0.004 (0.06)	0.000 (0.01)
Years of Group Existence	-0.115 (0.31)	-0.014 (0.03)	-0.099 (0.33)	-0.011 (0.03)
Group with Business Plan (1=Yes)	1.191 (1.12)	0.143 (0.13)	1.367 (1.26)	0.159 (0.14)
Proportion of Female members	0.008 (0.03)	0.001 (0.01)	0.001 (0.04)	0.000 (0.01)
Traditional (farming) enterprise (1=Yes)	1.621** (0.76)	0.195** (0.097)	1.745** (0.79)	0.203** (0.10)
Group with funding experience (1=Yes)	-2.413*** (0.92)	-0.290*** (0.10)	-2.714** (1.09)	-0.316*** (0.11)
Registered Group (1=Yes)	2.125** (0.97)	0.256** (0.10)	2.267** (0.96)	0.264*** (0.09)
Female Group Leader (1=Yes)	-1.870** (0.89)	-0.225** (0.10)	-1.567** (0.82)	-0.183** (0.09)
Group saves on weekly basis (1=Yes)	-0.718 (0.97)	-0.086 (0.12)	-0.292 (1.05)	-0.034 (0.12)
Preferred loan amount (UGX)	0.363 (0.34)	0.044 (0.04)	0.307 (0.31)	0.036 (0.03)
Current financial worth (UGX)	0.446 (0.41)	0.054 (0.04)	0.411 (0.457)	0.048 (0.05)
Number of audits per loan cycle	-0.458** (0.23)	-0.055** (0.02)	-0.451 (0.22)	-0.053** (0.02)
Group acquired assets (1=Yes)	-0.186 (0.80)	-0.022 (0.09)	-0.350 (0.82)	-0.041 (0.09)
Group with Social Corporate Responsibility (1=Yes)	-1.633* (0.88)	-0.196* (0.11)	-1.591* (0.95)	-0.185 (0.11)
Annual number of Group meetings	-0.082*** (0.02)	-0.010*** (0.00)	-0.086*** (0.02)	-0.010*** (0.00)
Number of trainings related to financial management	-0.098 (0.07)	-0.012 (0.01)	-0.081 (0.08)	-0.009 (0.01)
Members satisfied with group's ability to effectively manage group funds (1=Yes)	-2.697 (1.77)	-0.324 (0.21)	-2.907 (2.02)	-0.339 (0.21)
Member satisfied with group's ability to maintain proper records (1=Yes)	0.026 (3.13)	0.003 (0.37)	0.438 (3.62)	0.051 (0.42)
Region				
Northern			-0.855 (1.01)	-0.093 (0.10)
West Nile			0.444 (0.98)	0.053 (0.11)

_cons	1.842 (7.52)	3.117 (7.87)
Number of obs	82	82
Prob > chi2	0.007	0.004
Pseudo R2	0.433	0.446
AIC	103.11	105.62
BIC	153.69	160.97

Note: Standard errors in parentheses and levels of significance denoted as *p < 0.1, **p < 0.05, and ***p < 0.01.

Formally, registered groups within government structures provide opportunities for technical and value chain support for their services and products. Thus, group registration significantly (at 5%) increases their willingness to repay credit by 25.6 percentage points (column 3) and 26.4% percentage points (column 5), respectively, after controlling for regional effects. The risk of losing such external ties that are regarded as a form of collateral stimulates the groups' willingness to repay credit (Postelnicu et al., 2019).

Moreover, the willingness to pay seemed to vary with the gender of the leadership of the group, in that a female-led leadership of the group significantly (5%) reduced the willingness to repay credit. That means, female-headed groups had a 22.5 percentage point decrease in willingness to pay compared to male-headed groups. This is because female leaders tend to exhibit communion-striving motivation and empathic leadership as a result of financial stress (Spoelma & Fletcher, 2024). These results are aligned with the findings that male-headed leadership and the activeness of the group members improve social ties and reputation, which could ultimately raise credit ratings (Attanasio et al., 2013).

The operational arrangements of the groups are partly their undertaking to contribute back to the communities or their environment in the form of corporate social responsibility (CSR). The results largely reveal that undertaking social responsibilities reduces the groups' willingness to repay by 18.5 percentage points, increasing the possibility of the default risk (column 5), irrespective of the regional differences. This result could be attributed to the over-investment theory, rooted in shareholder and agency theory, where the groups' CSR activities divert crucial resources to initiatives unrelated to operational activities, and managerial interests take precedence over shareholders (Wang & Yang, 2024). Moreover, the meetings held within a much shorter period of time or frequently seem suitable as they may catalyze repayment attributable to accumulated social capital among members. However, group meetings often represent a burden for customers, in terms of both the actual costs incurred, such as transport and penalties as a result of absences, and the opportunity costs in the form of lost earnings due to the time spent participating in the meetings (Dalla Pellegrina et al., 2021; Dehem & Hudon, 2013). Although not significant, other variables, including availability of the business plan in the group, preferred loan amount, group savings, number of group members, and investment purpose for borrowing, indicate a logical relationship with willingness to repay group loans.

The results in **Table 4** provide a deeper undertaking of the possible correlates of willingness to repay by incorporating the interactions between covariates and suitable categorical variables. In addition to the variables considered in Table 3, the interactions between 'group with funding experience' and 'registered group', 'financial literacy trainings' and 'group saves weekly', 'proportion of female members' and 'female group leader', 'years of group

existence' and 'group with social corporate responsibility' as well as 'financial literacy trainings' and 'annual number of group meetings' have been incorporated in the analysis for deeper understanding of the casual effects. The model predictive power, as measured by pseudo R², increased to 65.4% (Table 4) from 44.6% in Table 3. The Akaike Information Criteria (AIC) and Bayesian Information Criteria (BIC) also improved, respectively. The results largely reveal that the variables such as 'age of group members', 'traditional (farming) enterprise', 'group with funding experience', 'registered group', 'female group leader', as well as 'annual number of group meetings' maintained their significant effect sizes and signs. However, variables such as 'years of group existence', 'group with business plan', 'current financial worth of the group', as well as the 'number of trainings related to financial management' became significant, and ultimately improved the forecast power. Thus, the savings group with a business plan increases the likelihood of the willingness to pay for credit by 61.8 percentage points (Column 5) after controlling for interactions and regional differences.

The results from the logit regression indicate that having written business plans increases the group's willingness to repay the revolving fund. This could be because writing a business plan is the sole business planning activity that correlates with performance (Welter et al., 2021; Drexler et al., 2014). Groups with well-structured business plans can demonstrate financial viability and indicate financial projections with clear income sources that support the group's repayment obligations. On the other hand, having experience in managing group funds reduces a group's willingness to repay credit. This could be attributed to the shared responsibility typical of group lending models in settlements where the entire group is responsible for repaying the loan of any member who is unable or fails to pay, thus amplifying the free-riding problems at the group level (Cornée & Masclet, 2022).

The current financial worth of the group was positively correlated with the outcome, in that there is a 15.9 percentage point change in willingness to repay credit for groups with financial worth. Accordingly, refugee groups also conduct inter-lending activities to increase access to affordable finance in their communities. However, they equally advance short-term loans because of the low group fund portfolio vis-à-vis the high number of members willing to obtain credit in a group (Easton-Calabria & Hakiza, 2021; Baland et al., 2017). The training in financial management empowers the members of the group with skills and knowledge to manage resources to improve their livelihood and finally repay the credit obligations. Ultimately, the number of trainings related to financial management significantly increased the willingness to repay credit of the group by 163 percentage points, largely justifying the relative importance of knowledge and skills of the group members to manage credit and repay the loan.

Table 4: Logit model estimates and marginal effects with interactions for factors influencing groups' willingness to repay credit

Column 1 DV: Willingness to Pay	Column 2 Logit estimates	Column 3 Marginal effects	Column 4 Logit estimates	Column 5 Marginal effects
Age of Group Members	-0.552*** (0.20)	-0.043*** (0.01)	-0.739** (0.28)	-0.055*** (0.01)
Group members' years of formal education	-0.531 (0.44)	-0.041 (0.03)	-0.675 (0.46)	-0.050 (0.03)
Number of Group Members	0.134 (0.08)	0.010 (0.01)	0.224* (0.12)	0.017* (0.01)
Years of Group Existence	-1.163** (0.52)	-0.090*** (0.03)	-1.721* (0.88)	-0.128** (0.06)
Group with Business Plan (1=Yes)	5.488*** (2.06)	0.423*** (0.14)	8.289*** (2.41)	0.618*** (0.16)
Proportion of Female members	-0.127 (0.08)	-0.010* (0.01)	-0.125 (0.10)	-0.009 (0.01)
Traditional (farming) enterprise (1=Yes)	2.370* (1.21)	0.182** (0.08)	2.497** (1.24)	0.186** (0.08)
Group with funding experience (1=Yes)	-23.32*** (4.30)	-1.796*** (0.43)	-25.83*** (3.37)	-1.926*** (0.42)
Registered Group (1=Yes)	3.872*** (1.36)	0.298*** (0.08)	5.306*** (1.81)	0.396*** (0.10)
Female Group Leader (1=Yes)	-25.57*** (7.13)	-1.969*** (0.32)	-31.73*** (10.64)	-2.365*** (0.55)
Group saves on weekly basis (1=Yes)	-0.507 (2.01)	-0.039 (0.15)	0.906 (2.19)	0.068 (0.15)
Preferred loan amount (UGX)	0.504 (0.41)	0.039 (0.03)	0.310 (0.60)	0.023 (0.04)
Current financial worth (UGX)	1.639* (0.85)	0.126** (0.05)	2.127** (0.82)	0.159*** (0.05)
Number of audits per loan cycle	-0.397 (0.26)	-0.031 (0.02)	-0.716* (0.38)	-0.053* (0.03)
Group acquired assets (1=Yes)	-1.488 (2.02)	-0.115 (0.14)	-1.551 (1.68)	-0.116 (0.12)
Group with Social Corporate Responsibility (1=Yes)	-2.777 (9.99)	-0.214 (0.77)	-3.120* (1.76)	-0.233** (0.11)
Annual number of Group meetings	-0.136*** (0.05)	-0.010*** (0.00)	-0.160*** (0.04)	-0.012*** (0.00)
Number of trainings related to financial management	26.37** (11.60)	2.031*** (0.75)	35.28*** (10.35)	2.630*** (0.64)
Members satisfied with group's ability to effectively manage group funds (1=Yes)	-2.662 (2.39)	-0.205 (0.18)		
Member satisfied with group's ability to maintain proper records (1=Yes)	1.235 (2.95)	0.095 (0.22)		
Group with funding experience*Registered Group	23.82*** (4.32)	1.835*** (0.41)	26.48*** (3.51)	1.974*** (0.43)

Financial Literacy Trainings*Group saves weekly	3.511** (1.37)	0.270*** (0.09)	4.612*** (1.23)	0.344*** (0.08)
Proportion of Female members*Female Group Leader	0.289*** (0.09)	0.022*** (0.01)	0.358*** (0.13)	0.027*** (0.01)
Years of Group Existence*Group with Social Corporate Responsibility	0.021 (0.28)	0.002 (0.02)		
Financial Literacy Trainings*Annual number of Group meetings	-2.525** (1.06)	-0.194*** (0.06)	-3.34*** (0.94)	-0.250*** (0.05)
Region				
Northern			-2.873* (1.57)	-0.178** (0.07)
West Nile			-2.158 (1.64)	-0.135 (0.08)
_Cons	4.633 (10.23)		6.901 (15.19)	
Number of Obs.	82		82	
Wald chi2(24)	280.92		314.29	
Prob > chi2	0.000		0.000	
Pseudo R2	0.634		0.654	
AIC	91.44		87.29	
BIC	154.01		147.46	

Note: Standard errors in parentheses and levels of significance denoted as *p < 0.1, **p < 0.05, and ***p < 0.01.

Moreover, several interactions posited the results that are logical and aligned with the literature and practice. For instance, the effect of interaction between 'group with funding experience' and 'registered group' on willingness to pay reveals a significant (at 1%) increase of 97.4 percentage points (column 5), implying that a registered group with funding experience is capable of repaying the credit more than otherwise. Besides, the group that is trained in financial literacy and saves weekly significantly (1%) increases the willingness to pay by 34.4 percentage points more than otherwise. It can also be observed from the results that a female group leader for a proportion of female members increases the willingness to repay credit by 2.7 percentage points. The implication is that given the majority of group members are women among youths and adults, and accordingly, the composition of groups is largely and, in some instances, entirely made up of women for business development in refugee settlements. By and large, these women-based group compositions primarily enable women to engage in income-generating activities rather than forcefully getting engrossed in abusive activities, as they increasingly take on roles to meet daily household needs in their new residences.

4. CONCLUSION

In conclusion, the study posits interesting findings in that the majority of the groups in refugee communities were willing to obtain credit, even under the revolving fund financing approach. Further, the majority of these groups preferred slightly cheaper funds that would cost lower rates than 5%. This explains the slightly lower average WTP price than the expected pay price among sample groups. Most refugees were willing to obtain credit to make business investments, and this could be explained by the diverse, expanding, and often seasonal economic opportunities among the refugee populations. Within the context of the refugee-host community

nexus, the investment, particularly in farming, proved to increase groups' willingness to repay credit as compared to investments in non-traditional enterprises, attributed to the fact that agricultural investments often allow for loan repayment to be directly tied to the harvest, creating a more reliable, tangible cash flow to service debt.

Further, the results revealed that savings groups with well-structured business plans could demonstrate financial viability and indicate financial projections with clear income sources that support the group's repayment obligations. Besides, having experience in managing group funds reduces a group's willingness to repay credit, which was attributed to the shared responsibility typical of group lending models in settlements where the entire group is responsible for repaying the loan of any member who is unable or fails to pay.

The training in financial management empowers the members of the group with skills and knowledge to manage resources to improve their livelihood and finally repay the credit obligations. Ultimately, the number of trainings related to financial management significantly increased the willingness to repay credit of the group by 163 percentage points, largely justifying the relative importance of knowledge and skills of the group members to manage credit and repay the loan.

Thus, funding partners in the livelihood support program should consider improving the functionality of managing saving group funds with full involvement of the existing refugee governance structures to help with the screening, monitoring, and enforcement tasks. In addition, the eligibility criteria for the revolving fund should prioritize the writing of business plans to enhance group performance in managing loans.

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Declaration on ethical issues: The authors declare that the study focused on saving groups (and not humans), and thus did not pose ethical concerns that require approval of a review board.

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REFERENCES

- Abdi, A. A., Mohamud, I. A., & Hussein, F. M. (2023). Borrower's Characteristics and Loan Repayment Performance Among Small and Medium Enterprises in Mogadishu, Somalia. *Journal of Asian and African Social Science and Humanities*, 9(2), 87–95. <https://doi.org/10.55327/jaash.v9i2.306>
- Agyapong, S., Oppong, N., Afotey, S., Nakuja, T., & Osei, F. (2024). Impact of village savings and loans associations participation on cocoa farmers' livelihood in the Western North Region, Ghana. 18(July).
- Ahlin, C. (2015). The role of group size in group lending. *Journal of Development Economics*, 115, 140–155. <https://doi.org/10.1016/j.jdeveco.2015.03.001>
- Al-azzam, M., Hill, R. C., & Sarangi, S. (2012). Repayment performance in group lending : Evidence from Jordan. *Journal of Development Economics*, 97(2), 404–414. <https://doi.org/10.1016/j.jdeveco.2011.06.006>
- Alejandro, D., Fischer, G., & Schoar, A. (2014). Keeping It Simple : Financial Literacy and Rules of Thumb. *American Economic Journal: Applied Economics*, 6(2), 1–31.
- Ashraf, B. N. (2020). Research in International Business and Finance: Stock markets' reaction to COVID-19: Cases or fatalities ? *Research in International Business and Finance*, 54(May), 101249. <https://doi.org/10.1016/j.ribaf.2020.101249>
- Attanasio, O., Augsburg, B., Haas, R. De, & Harmgart, H. (2013). Group Lending or Individual Lending? Evidence From a Randomized Field Experiment in Rural Mongolia (2013–074).
- Baland, J., Gangadharan, L., & Maitra, P. (2017). Journal of Economic Behavior & Organization Repayment and exclusion in a microfinance experiment &. *Journal of Economic Behavior and Organization*, 137, 176–190. <https://doi.org/10.1016/j.jebo.2017.02.007>
- BFA Global. (2020). Grit, Skills, and Luck: Examining the Financial Lives of Refugees in Uganda. https://www.fsdafrica.org/wp-content/uploads/2020/08/FI4R-Baseline-13072020ii_FINAL.pdf
- Cornée, S., & Masclet, D. (2022). Long-term relationships, group lending, and peer monitoring in microfinance: Experimental evidence. *Journal of Behavioral and Experimental Economics*, 100. <https://doi.org/10.1016/j.socec.2022.101921>
- Dalla Pellegrina, L., De Michele, A., Di Maio, G., Landoni, P., & Parravicini, S. (2021). Group Meeting Frequency and Borrowers' Repayment Performance in Microfinance : Evidence from a Quasi-natural Experiment in South Africa. 30(5), 447–477. <https://doi.org/10.1093/jae/ejab004>
- Danquah, M., Malik, A., Ohemeng, W., & Barimah, A. (2021). Rural financial intermediation and poverty reduction in Ghana : A micro-level analysis. August, 316–334. <https://doi.org/10.1002/pop4.324>
- Deb, A., & Kubzansky, M. (2012). | Bridging the Gap: THE BUSINESS CASE FOR FINANCIAL CAPABILITY.
- Dehem, T., & Hudon, M. (2013). Microfinance from the Clients' Perspective : An Empirical Inquiry into Transaction Costs in Urban and Rural India. *Oxford Development Studies*, 41(Supplement), S117–S132. <https://doi.org/10.1080/13600818.2013.787057>

- Easton-Calabria, E., & Hakiza, R. (2021). In the interest of saving: Refugee-led microfinance in Kampala, Uganda. *Development Policy Review*, 39(1), 22–38. <https://doi.org/10.1111/dpr.12500>
- Endris, E. (2022). Loan repayment performance of micro and small-scale enterprises : evidence from North Wollo Zone, Ethiopia. *Heliyon*, 8(12), e12085. <https://doi.org/10.1016/j.heliyon.2022.e12085>
- Gash, M. (2017). Understanding the Impact of Savings Groups.
- Giné, X., & Karlan, D. S. (2014). Group versus individual liability : Short and long term evidence from Philippine microcredit lending groups ☆. *Journal of Development Economics*, 107, 65–83. <https://doi.org/10.1016/j.jdeveco.2013.11.003>
- Golden, L. L., Wang, M., Yang, C., & Yang, C. (2007). Handling Weather-Related Risks through the Financial Markets: Considerations of Credit Risk, Basis Risk, and Hedging. *The Journal of Risk and Insurance*, 74(2), 319–346.
- Hansen, L. M. (2017). Serving Refugee Populations: The Next Financial Inclusion Frontier (Issue March). <https://sptf.info/images/Guidelines-for-FSPs-on-serving-refugee-populations-March2017.pdf>
- Hosmer, D. W., & Lemeshow, S. (1989). Applied Logistic Regression. In Wiley. <https://doi.org/10.1016/j.mpaic.2021.05.009>
- Karlan, D., Savonitto, B., Thuysbaert, B., & Udry, C. (2017). Impact of savings groups on the lives of the poor. *PNAS*, 114(12), 3079–3084. <https://doi.org/10.1073/pnas.1611520114>
- Kassegn, A., & Endris, E. (2021). Factors affecting loan repayment rate among smallholder farmers got loans from the Amhara Credit and Saving Institution: In the case of Habru District, Amhara Regional State, Ethiopia. *International Area Studies Review*, 25(1), 73–96. <https://doi.org/10.15388/sv.2000.23121>
- Kodongo, O., & Kendi, L. G. (2013). Individual lending versus group lending : An evaluation with Kenya's microfinance data. *Journal of Advanced Research*, 3(2), 99–108. <https://doi.org/10.1016/j.rdf.2013.05.001>
- López, P., Elena, S., & Grande, U. (2022). Delving into the Determinants of Default Risk in Savings Groups : Empirical Evidence from Ecuador. *The European Journal of Development Research*, 34(6), 2625–2650. <https://doi.org/10.1057/s41287-021-00480-3>
- Lubinga, S., Lubinga, M. H., Masiya, T., & Namboozee, F. (2026). Barriers to informal social protection in Uganda : Insights from beneficiaries of Village Savings and Loan Associations. *International Journal of Social Economics*, 53(5), 769–784. <https://doi.org/https://doi.org/10.1108/IJSE-08-2024-0639>
- Madestam, A. (2014). Informal finance : A theory of moneylenders. *Journal of Development Economics*, 107, 157–174. <https://doi.org/10.1016/j.jdeveco.2013.11.001>
- Meniago, C., Mazorodze, B. T., & Mah, G. (2025). Linking financial development and economic growth : do we have new evidence of the role of institutions in CFA countries ? *Cogent Economics & Finance*, 13(1). <https://doi.org/10.1080/23322039.2025.2460067>
- Mokhtar, S. H., Nartea, G., Zealand, N., & Gan, C. (2012). Determinants of microcredit loans repayment problem among microfinance borrowers in Malaysia. *International Journal of Business and Social Research*, 2(7), 33–45.

- Msuya, R. K. (2019). Repayment Performance in Group Lending: The Case of BRAC in Tanzania YOICHI IZUMIDA. *IJERD-International Journal of Environmental and Rural Development*, 10–11.
- Mukherjee, A. K., & Kundu, A. (2014). Government-sponsored microfinance program : Joint liability vs . individual liability Government-sponsored microfinance program : Joint liability vs . individual liability. *Cogent Economics & Finance*, 46(1). <https://doi.org/10.1080/23322039.2014.939768>
- Ojo, T. O., & Baiyegunhi, L. J. S. (2020). Determinants of credit constraints and its impact on the adoption of climate change adaptation strategies among rice farmers in South - West Nigeria. *Journal of Economic Structures*. <https://doi.org/10.1186/s40008-020-00204-6>
- Okonta, N. P., Achoja, F. O., & Okuma, L. O. (2023). Willingness and capacity of borrowers for loan repayment among farmers in Delta State, Nigeria. 17(02), 112–125.
- Owusu-Manu, D., Pärn, E. A., Donkor-Hyiaman, K., Edwards, D. J., & Blackhurst, K. (2016). The Relative Importance of Mortgage Pricing Determinants in Mortgage Affordability in Ghana: An Ex Post Attribution D. Owusu-Manu. *Journal of Engineering Design and Technology*, 14(3), 563–579. <https://doi.org/doi: 10.1108/JEDT-06-2014-0040>
- Pindyck, R. S., & Rubinfeld, D. L. (1981). *ECONOMETRIC MODELS AND ECONOMIC FORECASTS* (Third edition). McGraw-Hill.
- Postelnicu, L., Hermes, N., & Servin, R. (2019). External Social Ties and Loan Repayment of Group Lending Members: A Case Study of Pro Mujer Mexico. *Journal of Development Studies*, 55(8), 1784–1798. <https://doi.org/10.1080/00220388.2018.1464148>
- Prina, S. (2015). Banking the poor via savings accounts : Evidence from a field experiment ☆. *Journal of Development Economics*, 115, 16–31. <https://doi.org/10.1016/j.jdeveco.2015.01.004>
- Reach Initiative. (2023). Access to Land among Refugees and Host Communities in Uganda UGA2306 Uganda (Issue August 2023). www.reach-initiative.org
- Rogers, A. A., Dempster, F. L., Hawkins, J. I., Johnston, R. J., Boxall, P. C., Rolfe, J., Kragt, M. E., Burton, M. P., & Pannell, D. J. (2019). Valuing non-market economic impacts from natural hazards. In *Natural Hazards* (Vol. 99, Issue 2). Springer Netherlands. <https://doi.org/10.1007/s11069-019-03761-7>
- Saparila, W. (2019). Personal Characteristics, Business Characteristics, and Lender-Borrower Relationship - A Study on Micro Finance Institutions of East Java, Indonesia: Does it Matter in Repayment Performance? *Eurasia Economics & Business*, 20(2), 74–81. <https://doi.org/10.18551/econeurasia.2019-02.08>
- Sarfo, Y., Musshoff, O., Weber, R., & Danne, M. (2021). Farmers' willingness to pay for digital and conventional credit: Insight from a discrete choice experiment in Madagascar. *PLoS ONE*, 16(11), 1–23. <https://doi.org/10.1371/journal.pone.0257909>
- Spoelma, T. M., & Fletcher, K. A. (2024). Financial stress and leadership behavior: The role of leader gender. *Journal of Occupational Health Psychology*, 29(5), 317–341. <https://doi.org/https://doi.org/10.1037/ocp000038>
- Streimikiene, D., & Mikalauskiene, A. (2023). *Willingness to Pay Framework Climate Change Mitigation in Households* (1st ed.). New York: CRC Press.

- Syari'udin, A., Astuti, R. D., Dwi, S., Ambarwati, A., & Irawati, D. A. (2023). Shared Responsibility System Fails : Group Loans Have Higher Credit Risk in Microfinance (pp. 196–202). Atlantis Press SARL. <https://doi.org/10.2991/978-2-38476-048-0>
- U-LEARN & Reach Initiative. (2023). The Realities of Self-reliance within the Ugandan Refugee Context (Issue April).
- UNHCR. (2023). Annual Results Report: Uganda Operational Achievements 2023 (pp. 1–3). Retrieved from The UN Refugee Agency website: <https://data.unhcr.org/en/documents/details/107631>
- Venkatesan, J., Gatlin, J., & Wilson, K. (2021). Financial Inclusion for Refugees: Learning from Financial Sector Deepening Uganda. In Leir Policy Papers Series (Vol. 1, Issue 1).
- Villalba, R., Venus, T. E., & Sauer, J. (2023). The ecosystem approach to agricultural value chain finance : A framework for rural credit. *World Development*, 164, 106177. <https://doi.org/10.1016/j.worlddev.2022.106177>
- Waleign, S. Z., Sonne, S. E. W., & Sashan, G. (2022). Livelihood Impacts of Refugees on Host Communities: Evidence from Ethiopia. *Policy Research Working Paper* 10044, 5(1), 1689–1699. <https://revistas.ufjf.br/index.php/rce/article/download/1659/1508%0Ahttp://hipatiapress.com/hpjournals/index.php/qre/article/view/1348%5Cnhttp://www.tandfonline.com/doi/abs/10.1080/09500799708666915%5Cnhttps://mckinseysociety.com/downloads/report/s/Educa>
- Wang, W., & Yang, J. (2024). The inverted U-shaped relationship between corporate social responsibility and default risk: The role of financing constraints. *Heliyon*, 10(14), e34304. <https://doi.org/10.1016/j.heliyon.2024.e34304>
- Wasser, N. M., Ruhstorfer, P., & Kurzrock, B. M. (2020). Advancing revolving funds for the sustainable development of rural regions. *Sustainability (Switzerland)*, 12(20), 1–20. <https://doi.org/10.3390/su12208455>
- Welter, C., Scrimshire, A., Tolonen, D., & Obrimah, E. (2021). The road to entrepreneurial success: business plans, lean startup, or both? *New England Journal of Entrepreneurship*, 24(1), 21–42. <https://doi.org/10.1108/NEJE-08-2020-0031>
- Yevdokimov, Y., & Getalo, V. (2019). Measuring willingness to pay for electricity Measuring willingness to pay for electricity : The case of New Brunswick in Atlantic Canada. 30(2), 292–303. <https://doi.org/10.1177/0958305X18790954>