

Research Article

Access to Informal Lending Networks and Its Impact on Household Consumption Expenditure: A Case of Marginalized Agropastoral Communities in Kenya

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Abstract

Informal lending networks play a vital role in marginalized communities by providing financial support where formal institutions are limited. These networks enable households to access credit for financing agricultural activities, smoothing consumption, and managing risks. This study examines the effects of informal credit access through lending networks on the consumption expenditure of agropastoral households in rural Kenya. Using a subgraph sampling methodology, 198 network nodes were analyzed, and an endogenous switching regression model was employed to identify key determinants and impacts of informal credit access. The findings reveal that households with higher incomes, greater social group memberships, and stronger network centrality are significantly more likely to access informal credit. Access to informal credit positively influences household consumption expenditure, with high-access households experiencing a 24.61% increase in consumption expenditure. Additionally, low-access households have the potential to increase their consumption expenditure by 31.49% if they achieve higher informal credit access. These results underscore the critical role of informal lending networks in improving economic welfare in marginalized communities. Strengthening informal lending networks through policy interventions such as fostering social capital, promoting social and welfare groups and promoting income diversification can enhance economic development and support sustainable livelihoods among marginalized agropastoral households in rural Kenya.

Keywords

Social Network, Informal Credit, Social Capital, Household Welfare, Consumption Expenditure, Kenya

1. Introduction

1.1. Background of the Study

Rural communities in developing countries continuously face poverty, with millions relying on smallholder farming and agropastoral systems that are primarily subsistent. These communities are particularly vulnerable to shocks and risks

that entrap them in perpetual poverty [8]. Credit access is crucial for escaping this poverty trap, serving as an engine for sustainable development and a key factor for household food security, welfare, and poverty reduction [5, 6, 21, 50]. It also influences technology adoption, asset formation, and coping with idiosyncratic shocks [4, 9, 21, 27, 31, 51].

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Received: 15 January 2025; **Accepted:** 1 February 2025; **Published:** 17 February 2025



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However, like many Sub-Saharan nations, Kenya has poor rural coverage of financial services. Formal financial institutions often avoid rural areas due to the high degree of risk and uncertainty associated with agriculture. Additionally, rural households frequently lack the collateral required for loans. This poor access to credit, exacerbated by rising living costs, expensive agricultural inputs, and frequent shocks, limits household consumption and investment, thereby increasing poverty levels among Kenya's marginalized communities [31, 32].

In response to these challenges, rural agropastoral households have continuously depended on moral economies, particularly social networks, to smooth consumption and investment [8, 14, 34, 35, 43]. A moral economy refers to an economic system where social norms, relationships, and moral values facilitate financial transactions and access to credit through the accumulation of social capital [48]. These social networks develop through interactions among individuals connected by family ties, neighbourhood proximity, or friendship.

Humans, being inherently social, impact and influence one another and their immediate environments thus facilitating access to resources. Social networks therefore act as the only source of affordable credit for economically marginalized communities in smoothing out their consumption in the event of a shock. The importance of social networks as conduits for resources that influence economic outcomes by enabling access to credit has been highlighted by various studies including [34, 37, 50], among others. Despite efforts to increase access to formal credit providers, the informal sector remains relevant, particularly, in rural areas of developing countries [22]. [18] argue that the persistence of informal credit is due to market imperfections and credit rationing among poor households.

Many studies conducted in developing nations have looked into the effects of informal credit on household welfare [3, 7, 24, 27, 31, 36, 44, 45, 49]. Notably, these studies often combine all forms of informal credit (friends, family, private money lenders, and microcredit from social groups) [3, 30, 31].

In addition, most of these studies do not account for the number of ties within the network nor the total credit received from the network thereby limiting the measurement of the extent of access to informal credit. This study adds to the literature by quantifying the impact of informal credit from lending social networks on household welfare.

This study further advances the existing body of knowledge by addressing methodological gaps in prior research on the relationship between social networks, social capital, and household consumption expenditure. Previous studies, such as those by [1, 4, 41], have predominantly employed random sampling techniques to collect social network data. While random sampling is widely used, it has significant limitations in this context, as it disregards the inherent interdependence between nodes in social networks. This paper therefore ap-

plies egocentric data to bridge that gap.

1.2. Theoretical Framework

Access to informal lending networks is inherently tied to the concept of social capital, which is derived from the embedded resources within social networks. The foundation of this theoretical framework is the social resource theory advanced by [26]. This theory emphasizes the role of social resources such as social networks and social capital in reducing transaction costs and facilitating access to vital resources, including credit. Within this context, social capital is conceptualized as the resources available to individuals through their direct and indirect social ties. Social capital, as captured in social networks, encompasses various dimensions, including the size, density, cohesion, and closeness of networks, as well as the strength of ties and reciprocity. These elements influence the extent to which individuals can access social resources embedded within networks. According to [26], an individual's position and influence within a social structure are necessary conditions for accessing these embedded resources.

Informal lending networks rely heavily on social capital to reduce transaction costs and facilitate trust between lenders and borrowers. Social networks serve as conduits for information, enabling individuals to assess the trustworthiness and creditworthiness of potential borrowers [26]. [18] further argue that strong social networks reduce the risks and costs associated with lending by fostering trust and mutual accountability.

Studies conducted in various settings demonstrate the critical role of social capital in informal credit markets. For instance, [17, 20, 32, 39] find that individuals with strong ties to their neighbourhoods and kinship networks have greater access to informal credit due to higher levels of trust and social resources. Similarly, research by [9] in Nigeria reveals that loans within village or family groups constitute the majority of transactions, with social sanctions serving as an effective mechanism for enforcing contracts.

Access to informal lending networks significantly impacts household consumption expenditure among marginalized agropastoral communities. Informal credit provides households with financial flexibility, enabling them to smooth consumption during periods of economic hardship or income fluctuation. Strong social networks enhance access to such credit, mitigating the challenges associated with formal lending institutions, such as high transaction costs, lack of collateral, and bureaucratic hurdles.

Key exogenous factors influence access to informal lending networks, including socio-economic characteristics, cultural norms, and geographic proximity. These factors determine the strength and quality of social networks, which, in turn, shape the availability of social resources such as credit. Reciprocity and reputation also play vital roles within informal lending networks. Borrowers with strong social ties and a stake in

maintaining their community reputation are more likely to honour loan agreements, reducing the perceived risk for lenders. Expected returns of social capital include improved access to credit and improved consumption expenditure.

The questions that arise are; what are the factors that influence access to informal credit through lending networks among marginalized agropastoral communities in Northern Kenya? What is the resulting effect of informal credit from lending networks to household consumption expenditure?

The remaining part of this paper is organized into five sections. Section two describes the empirical strategy of the paper. Section three present data and descriptive statistics. Section four presents result of the econometric analysis while section five presents the conclusion and policy implications.

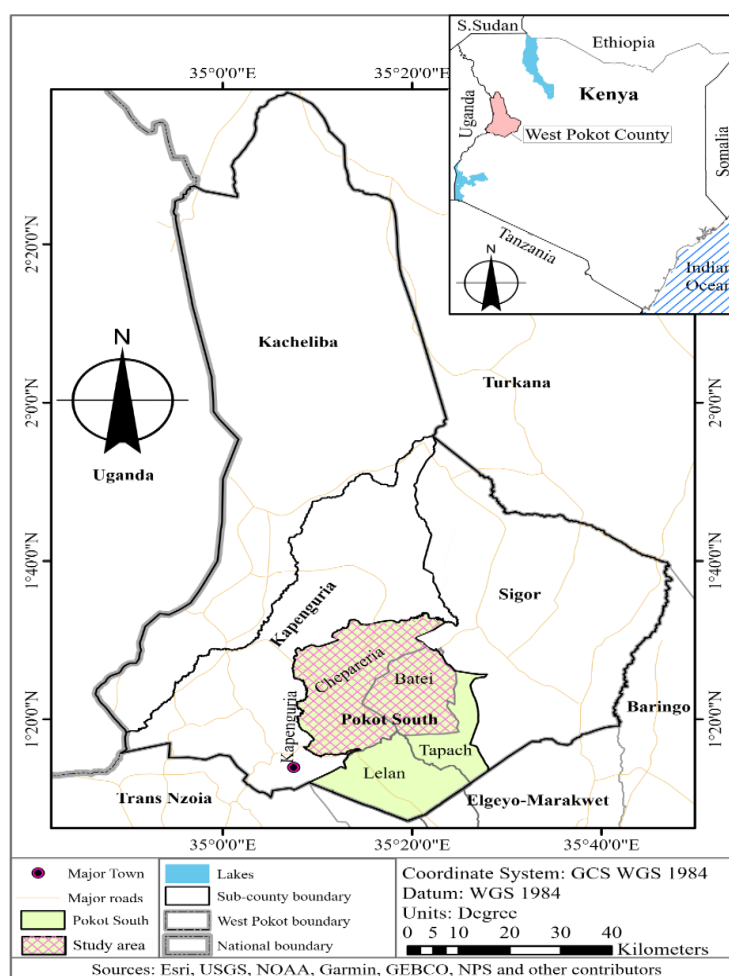
2. Methodology

2.1. The Study Area

The study was conducted in Pokot South Sub-County, located in West Pokot County, North-Western Kenya. This

region was selected due to its exclusion from formal financial sources, leading to a high reliance on social networks for accessing informal credit. Pokot South Sub-County spans an area of 536.7 km² and has a population of 80,661, with a population density of 150 individuals per square kilometre and an average household size of 5.8 [19]. The sub-county comprises four wards: Chepareria, Batei, Lelan, and Tapach. This study specifically focused on Chepareria and Batei wards due to their agro-pastoral nature, where social networks play a critical role in financial interactions.

West Pokot County faces significant economic challenges, with approximately 57.4% of its population living below the poverty line and only 16.3% being classified as financially healthy [11]. Despite the presence of three commercial banks in the county, only 8.3% of the population utilizes these institutions, primarily because the banks are concentrated in Makutano and Kapenguria townships, leaving other sub-counties underserved [46]. This financial exclusion underscores the importance of informal lending networks as a vital source of credit for local households. The map of the study area is shown in Figure 1 below.



Source: Surveys of Kenya (2020)

Figure 1. Map of West Pokot County.

2.2. Empirical Approach

Informal access to credit through lending networks is not a random process. It would be inappropriate to estimate consumption expenditure of households with low informal credit access as a control group with similar characteristics as consumption expenditure of households with high informal credit access. Therefore, sample selection problem has to be accounted for. We apply the endogenous switching regression (ESR) model because it allows for joint estimation of the determinants of access to informal credit and whether the household's welfare was affected by their access to credit or not.

This model has two advantages. It mitigates both observed and unobserved selection biases and also possesses the ability to estimate the selection equation and both the regime one and regime two outcome equations simultaneously using the maximum likelihood estimator method [16]. Furthermore, the ESR model provides additional information by facilitating the estimation of counterfactual outcomes. These counterfactuals are essential for calculating both the average treatment effect on the treated (ATET) and the treatment effect on the untreated (TET), metrics that other models like propensity score matching (PSM) struggle to estimate accurately. We account for sample selection by controlling for observable and unobservable characteristics of households. We achieve this by adopting an endogenous switching regression model [28]. In this model the switching equation divides households into two groups based on their level of access to informal credit. This model is chosen because of its capability to estimate the effects of informal credit access on consumption expenditure for both the actual and counterfactual (hypothetical) scenarios. The selection and outcome equations are provided as;

$$ATC_i^* = \delta'Z_i + n_i \quad (1)$$

$$ATC_i = \begin{cases} 1 & \text{if } ATC_i^* > 0 \\ 0 & \text{if } ATC_i^* \leq 0 \end{cases} \quad (2)$$

where, ATC_i^* is a continuous variable representing propensity of a household i to be of high access or low access to informal credit. Variable Z_i is a vector of factors affecting access to informal credit and n_i is an error term with mean of zero and variance σ_n^2 . ATC_i is a binary variable that takes value of one if ATC_i^* exceeds zero and takes value of zero if otherwise.

Household consumption expenditure given a household's high or low access to informal credit is modelled as follows;

$$\begin{aligned} &\text{Regime 1 (high access to credit);} \\ Y_{1i} &= X_{1i}\beta_1 + \delta_{1i}\lambda_{1i} + \epsilon_{1i}, \text{ if } ATC = 1 \end{aligned} \quad (3)$$

Regime 2 (low access to credit);

$$Y_{2i} = X_{2i}\beta_2 + \delta_{2i}\lambda_{2i} + \epsilon_{2i}, \text{ if } ATC = 0 \quad (4)$$

where Y_{1i} and Y_{2i} represent the welfare status of the two regimes of access to credit; β_1 and β_2 are the vectors of exogenous covariates; and ϵ_{1i} and ϵ_{2i} are stochastic disturbance terms. The disturbance terms captured measurement errors and factors that were unobserved to researchers but known to the household. Variable X_i included all factors that influence access to credit comprising household and farm-level characteristics. The inverse mill's ratio (selectivity term) represented as λ is incorporated into the equations to account for selection bias.

In selecting households with low and high access to informal credit, the median of the total credit received from the entire network is used to divide the two regimes. Households with total credit received above the median are regarded to having high access to credit (1) while those with a total credit received below the median level are regarded to have low access to credit (0). The dependent variable in the ESR regression estimates is the logarithm of the household consumption expenditure.

3. Data and Descriptive Statistics

3.1. Data

A subgraph sampling methodology was employed to select the respondents. A forest fire (FF) with a medium burn probability of 50% was employed. In this method, a starting seed S was randomly selected. From S , a subset (50%) was randomly selected from its alters/neighbours and repeated the same for proceeding egos [23]. This is guided by the fact that simple random sampling may yield inadequate data because it ignores interdependence between households while snowballing oversamples households that have a high degree of connectivity thereby not being able to represent the true nature of the population [13]. A 50% burn probability was used because it allowed for balancing between the width and length of a network.

This study collected information on household and inter-household lending relationships. Information on household include basic demographics, marital status purpose of credit, monthly income, tropical livestock units, farm size owned, occupation, number of social organizations one belonged to, risk attitude and consumption expenditure. consumption expenditure included food purchases, non-food purchases and expenditures such as education, health, housing rent, consumer durables, water and power supply.

Interhousehold data collected included number of households one borrowed credit from in the past 12 months (indegree centrality), number of households credit was lent to in the past 12 months (outdegree centrality), amount of

credit received from network and amount of credit shared to the network.

We use total credit received by an individual household from its entire network to model the access to credit variable. In doing so, ties in degree centralities between households are taken care of and intensity of one's ability to attract enough credit is factored in. Following this, credit received by each household was aggregated by summing up informal credits from all incoming transactions for each household.

3.2. Descriptive Statistics

The descriptive statistics are presented in [table 1](#) and show the demographic characteristics by household's informal

credit access status (high access and low access). Average age of the household head is 44 years and 76% were male-headed. This high proportion of male-headed households in the network was attributed to men having more control over decision making, access and control of financial resources due to social and cultural norms that favour them [12]. Households with high access to informal credit had a significantly larger household size (7) compared to those with low access to credit (5). T-tests results indicated that the difference in household size between the two groups of households was significant at 1%. These results corroborate findings by [52] who argue that large households have higher access to informal credit as compared to small households.

Table 1. Descriptive statistics by households with high and low informal credit access.

Variable		Low credit access	High credit access	Aggregate	
Continuous variables		Mean		Mean	t-value
Age		44.26	45.66	44.94	0.88
Adult equivalent		3.4	4.1	3.7	3.17***
Hhsize		5.61	6.68	6.14	3.06***
Education		7.6	7.9	7.7	0.40
Income (KSH)		17,648	27,030	22,244	3.70***
Consumption expenditure (KSH)		5,713	8,524	7,090	4.98***
Farm size		2.98	4.48	3.71	3.04***
TLU		5.00	6.80	5.88	2.69***
Credit given out by lender (KSH)		5,157	13,102	9,049	4.68***
No. <i>chamas</i> (social groups)		1.77	2.13	1.95	2.11**
Indegree centrality		1.39	1.75	1.57	3.47***
Outdegree centrality		1.50	2.00	1.74	4.29***
Categorical variables		Percentage		Aggregate	χ^2 Value
Gender	Female	21.78	25.77	23.74	0.44
	Male	78.22	74.23	76.26	
Marital status	Married	85.13	83.51	84.34	0.54
	Single	5.94	7.22	6.57	
	Divorced	0.99	2.06	1.52	
	Widowed	7.92	7.22	7.58	
Main income source	Business	25.74	31.96	28.79	0.94
	Employment	27.72	25.77	26.77	
	Farming	46.53	42.27	44.44	

*, **, *** denote significant level at 10%, 5% and 1% level respectively

χ^2 Chi Square

KSH refers to Kenyan shilling (Official Kenyan currency) Exchange rate was 1 \$US = KSH 158.45 at the time of survey

Majority of households are agro-pastoralists, with close to 44% of the sampled households identifying farming as their primary source of income. Meanwhile, 29% of households report business as their main source of income, and 27% rely primarily on employment. Tropical Livestock Unit (TLU) is a standardized measure used to express the aggregate of different livestock types. On average, households own 5 Tropical Livestock Units (TLUs). Households with high access to credit own significantly more livestock, averaging 6 TLUs, compared to those with low access to credit, which averaged 5 TLUs.

Aside from livestock ownership, household income is another wealth indicator considered in the study. Mean monthly income in the study area is Ksh 22,244. Households with high access to informal credit have significantly higher monthly income (Ksh 27,030) compared to those with low access to informal credit (17,648). Higher income households are more likely to have greater access to informal credit due to their ability to repay loans and invest in social capital [52].

Mean credit given out by an individual household to all its debtors is KSH 9,049. Households with high access to informal credit have significantly higher credit given out (KSH 13,102) compared to those with low access (KSH 5,157). T-test results indicated that the difference in mean credit given out between households with high access to informal credit and those with low access is significant at the 1% level. Mean outdegree centrality is 1.74 while households with higher informal credit access had a significantly higher outdegree centrality (2.00) compared to those with low access (1.50). This indicates a reciprocity in the informal lending network, where households that give out more credit are also more likely to receive higher amounts of credit when needed.

Mean indegree centrality is 1.57. Households with high access to informal credit had a significantly higher indegree centrality (1.75) compared to those with low access (1.39). Results suggest that households with strong networks within their community have higher access to informal credit as compared with those who are less connected.

4. Results

4.1. Exclusion Restriction

The endogenous switching regression (ESR) model is used in estimating the impact of informal credit from social networks on household welfare. An exclusion restriction is used to enhance the identification of the model. This study adopts three exclusion restrictions which include, number of *chamas* (social groups), outdegree centrality, and total credit given

out by a household.

The choice of these instruments as indicated in table 2 is justified as follows; first, outdegree centrality measure and number of *chamas* (social groups) one belongs to are used as proxies of building social capital such that, individuals with higher centrality measures and those who were members to many social groups are well connected within their social networks. The number of people one is connected with is closely related to amount of credit one can access but not directly related to their consumption expenditure. Second, credit given out is used because of its high correlation with the credit access and low correlation with consumption expenditure. Because of high reciprocity in credit transactions in the network, it is expected that those who give out more credit within their network are more likely to have high access to credit but not necessarily correlate with their consumption expenditure. Table 2 shows the tests which indicates the validity of the selected instruments.

Table 2. Validity of selected instruments.

Variable	Access to informal credit	
	Coeff	Std error
Number of chamas	0.2133*	0.1144
Outdegree centrality	0.7987***	0.2248
Credit given out	0.0001***	0.0000
Wald test	147.29***	

*, **, *** denote significance levels at 10%, 5% and 1%, respectively

The Wald test is significant at 1% indicating the goodness of fit of the ESR model used. This implied that endogeneity problem exists which necessitates the use of the ESR model. The likelihood ratio test of independence of the selection and outcome equations show that there exists correlation between access to credit and consumption expenditure ($\chi^2(2) = 5.12$, $Pr > \chi^2 = 0.0773$). Sargan's test shows that the correlation between the instruments excluded and error terms. Sargan test was $Pr > \chi^2(2) = 0.1959$ which shows that the excluded instruments are not correlated with error terms.

The endogenous switching regression model results for estimating the impact of access to informal credit on household consumption expenditure are presented in table 3.

Table 3. Maximum likelihood estimates of the endogenous switching regression model.

Access to informal credit			Household consumption expenditure			
Variable	Coef.	Std. Error.	High credit access		Low credit access	
			Coef.	Std. Error.	Coef.	Std. Error.
Age	-0.0106	0.0120	0.0052	0.0041	0.0019	0.0045
Gender	-0.2255	0.2710	-0.0624	0.0845	-0.0819	0.1151
Educ	-0.0096	0.0241	-0.0024	0.0072	0.0025	0.0093
Marital	0.2208	0.1571	-0.0102	0.0448	-0.1171*	0.0644
Adulthequivalent	0.0071	0.0910	-0.0206	0.0285	0.0040	0.0404
Income	0.5272***	0.1907	0.4711***	0.0587	0.6456***	0.0755
TLU	-0.0000	0.0002	0.0000	0.0000	-0.0003	0.0000
Farmsize	0.1027**	0.0494	0.0076	0.0088	-0.0020	0.0245
Credit purpose	0.0187	0.1255	0.0021	0.0423	0.0379	0.0469
Main income source	-0.0340	0.1353	-0.0383	0.0427	0.0362	0.0565
Risk attitude	-0.8535**	0.3903	-0.0162	0.1004	-0.0828	0.1635
No. chamas	0.2133*	0.1144				
Outdegree centrality	0.7987***	0.2248				
Credit given out	0.0001***	0.0000				
Cons	-5.4899***	1.9649	4.2656***	0.6364	2.1464***	0.7801
/lns0	-0.8248***	0.1101				
/lns1	-1.1436***	0.0786				
/r0	-0.9506**	0.4096				
/r1	-0.3164	0.2445				
sigma0	0.4383	0.0483				
sigma1	0.3187	0.0250				
rho0	-0.7401	0.1853				
rho1	-0.3062	0.2215				
Wald χ^2 (11) = 147.29						
Log likelihood = -166.38974						
Likelihood Ratio of independent. equations χ^2 (2) = 5.12,						
Prob> χ^2 =0.0773** χ^2 Chi square						

*, **, *** denote significance levels at 10%, 5% and 1%, respectively

4.2. Determinant of Access to Informal Credit

Household income has significant positive influence on a household access to informal credit at 1% level of significance. This is attributed to the fact that higher income households are eligible for larger amounts of credit due to their strong collateral options and ability to pay back. Such

households are more likely to invest in social capital within their networks thus facilitating easier and stronger access to informal credit [10, 17, 52].

The number of *chamas* (social groups) a household head is a member in has a positive influence in access to credit at 10% significance level. The findings of this study concur with [10] who report that an increase by one in membership into social

groups is associated with 37.6% increase in obtaining informal credit. This finding also corroborates with previous studies that suggest that social networks at the community level act as social collateral that enhances informal credit markets [10, 25].

Risk attitude has a negative influence to access to informal credit and is statistically significant at 5%. A plausible reason to this is that households with a risk-averse attitude may be more cautious when it came to borrowing from their networks. Borrowing may be risky, potentially leading to debt burdens. As a result, these households may hold back in seeking informal credit, preferring to rely on their existing resources or alternative financial strategies rather than taking on additional debt from their networks. These finding contradict work done by [38].

The positive coefficient for outdegree centrality underscores the importance of social networks in facilitating access to credit among agro-pastoralists. This suggests that social capital within a community enhanced access to informal credit. A higher outdegree centrality indicates that a household is more centrally positioned within its network and has higher social capital thus pooling more influence and access to credit. Similarly, the positive relationship between access to credit and credit given out implies a reciprocal relationship. This suggests that households that have a track record of lending outside also have a high likelihood of accessing higher credit because of the established trust. These findings are consistent with previous research by [40, 42, 47].

4.3. Results of the Consumption Expenditure Equations

Regardless of a household's level of access to credit, the level of income of the household head has a significant positive influence on their consumption expenditure at 1% level. An increase in the income of a household head probably increases their purchasing power, which enabled them to afford wider range of goods and services needed by their household. This underscores the primary role of income in enabling improvement in household welfare. These findings agree with previous studies done by [2, 33].

Among households with low informal credit access, the marital status of the household head has significant adverse effect on their consumption expenditure at 10%. This can be attributed to the fact that widowed and divorced household heads find it hard to network within the community thus having lower consumption expenditure [2, 15]. Being in a marriage set up probably enlarges one's social network because one is accorded more trust and access to informal credit thereby resulting into higher consumption expenditure levels [2, 32].

4.4. Mean Treatment Effects on Household Consumption Expenditure

The results in table 4 indicate the effects of informal credit access on household consumption expenditure. This was estimated as demonstrated by [29].

Table 4. Mean treatment effects on household consumption expenditure.

Treatment effects	Decision stage		
	High credit access	Low credit access	Average treatment effects (ATE)
ATT: (High credit access)	a) 8.9298 (0.0391)	b) 8.6837 (0.0372)	0.2461***
ATU: (Low credit access)	c) 8.7805 (0.0557)	d) 8.4657 (0.0552)	0.3149***
Heterogeneity effects	0.1493	0.218	-0.0688

*, **, *** denote significance levels at 10%, 5% and 1%, respectively

The entries in cells (a) and (d) indicate the mean values of household consumption expenditure for households with high credit access and low credit access. On the other hand, cells (b) and (c) represent the counterfactual outcomes. The figures in brackets within the cells (a), (b), (c), and (d) represent the respective standard errors.

The average treatment effects on the treated (ATT) is 0.2461. This value represented the actual effect on household consumption expenditure among those households with high informal credit access. This implies that high access to informal credit from social networks increases the likelihood

of having higher consumption expenditure by 24.61% as compare to the counterfactual outcome of having low informal credit access. Therefore, high access to informal credit improves household consumption expenditure among agropastoral households with high credit access.

Findings on the average treatment effects on the untreated (ATU) show that for households with low access to informal credit, their consumption expenditure is expected to increase by 31.49% if they were to experience high access to informal credit. The results indicate that households with initially low access to informal credit, if

they were to experience a significant increase in credit access, they would see a rise in their consumption expenditure. This is because the credit would be used to purchase household needs thereby improving their welfare. The interest of policy makers and development organizations is to understand the ATU effects. Therefore, this study reveal how impactful informal credit access is to agropastoral household welfare in Pokot South Sub-County.

4.5. Robustness Checks

To confirm the consistency and reliability of our results to the application of the endogenous switching regression (ESR) model, we run the estimations using propensity score matching (PSM). The results obtained from the PSM are presented in [table 5](#). We confirm that the estimated ATET and ATU are qualitatively alike to the ones obtained from the ESR model thus proving the reliability of the ESR model.

Table 5. Propensity Score Matching (PSM) results. (Robustness checks).

Treatment-effects estimation			number of observations = 198			
Estimator: Propensity-score matching			matches: Requested = 1			
Treatment model: Logit						
Outcome Variable	Treatment Effect	Coefficient	Std. Error	z-value	p-value	95% Confidence Interval
Log_Consumption Expenditure	ATE	0.2099***	0.0673	3.12	0.002	[0.0779, 0.3419]
Log_Consumption Expenditure	ATET	0.2303**	0.0736	3.13	0.020	[0.0859, 0.3746]

5. Conclusion and Policy Implications

This paper looks into the impact of access to informal credit through social networks on agropastoral households' consumption expenditure. we collected and utilised both dyadic and monoadic data from a network of agropastoral households in North-Western Kenya. Empirical estimates from endogenous switching regression model reveal that informal credit access significantly improve household consumption expenditure by 25% among those with high credit access. Furthermore, households with low informal credit access have the potential to increase their consumption expenditure by 31%. These results show that informal credit through lending networks positively influence the wellbeing of financially marginalized communities.

These findings have important policy implications. There is need for promotion of social capital building among communities through encouraging participation in welfare groups and Rotating Saving and Credit Associations (ROSCAs). This will foster mutual trust and enhance individual social capital thus enabling higher access to informal credit. Second, governments should promote initiatives that enhance household wealth such as crop and livestock diversification, training on modern and climate smart agricultural practises and promotion of income diversification.

Abbreviations

ATE	Average Treatment Effects
ATET	Average Treatment Effect on Treated
ATU	Average Treatment Effect on Untreated
ESR	Endogenous Switching Regression
PSM	Propensity Score Matching
ROSCAs	Rotating Savings and Credit Associations
TLU	Tropical Livestock Unit

Acknowledgments

We would like to extend our gratitude to all individuals and institutions who contributed to the success of this research. Additionally, we acknowledge the agropastoral households in West-Pokot County, in Northern Kenya for their participation and willingness to share their experiences.

Availability of Data and Materials

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare that there are no competing interests regarding the publication of this manuscript.

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